THE METROPOLITAN PROJECT
Sacramento, California

Draft
Environmental Impact Report
Volume II

Prepared for:
The City of Sacramento

Prepared by:
GAIL ERVIN CONSULTING

July 11, 2006

THE METROPOLITAN PROJECT

Sacramento, California

Draft
Environmental Impact Report
Volume II

Prepared for:

The City of Sacramento
Contact: Dana Allen, Senior Planner
Phone: (916) 808-2762 *Fax:* (916) 566-3968
E-MAIL: DAllen@cityofsacramento.org

Prepared by:

GAIL ERVIN CONSULTING
8561 Almond Bluff Court
Orangevale, CA 95662-4419
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In coordination with
The City of Sacramento

July 11, 2006

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APPENDIX A

NOTICE OF PREPARATION (NOP) AND NOP RESPONSES

DEVELOPMENT SERVICES
DEPARTMENT

CITY OF SACRAMENTO
CALIFORNIA

2101 ARENA BLVD.
STE. 200
SACRAMENTO, CA
95834

ENVIRONMETNAL
PLANNING SERVICES
916-808-2762
FAX - 916-566-3968

DATE: April 28, 2006

TO: Interested Persons

FROM: Dana Allen, Senior Planner

SUBJECT: **NOTICE OF PREPARATION FOR AN ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE METROPOLITAN PROJECT (P05-205).**

Introduction: The City of Sacramento, Environmental Planning Services Department, will be the Lead Agency for the preparation of an Environmental Impact Report (EIR) for The Metropolitan Project (proposed project, P05-205). The California Environmental Quality Act (CEQA), Section 15082, states that once a decision is made to prepare an EIR, the lead agency must prepare a Notice of Preparation (NOP) to inform all responsible agencies of that decision. The purpose of the NOP is to provide responsible agencies and interested persons with sufficient information describing the proposed project and its potential environmental effects to enable them to make a meaningful response as to the scope and content of the information to be included in the EIR. The responses to this NOP will help the City of Sacramento determine the scope of the EIR and ensure an appropriate level of environmental review. The EIR will evaluate the potential environmental impacts of the proposed project and recommend mitigation measures, as required. The EIR will provide a project-specific evaluation of the environmental effects of the proposed project, pursuant to Section 15161 of the CEQA Guidelines. The NOP is being circulated/distributed for a 30-day public review period commencing on April 28, 2006 and ending May 30, 2006. Written comments regarding the Notice of Preparation must be submitted **NO LATER THAN 5:00 p.m. May 30, 2006** to: Dana Allen, City of Sacramento, Development Services Department, 2101 Arena Blvd., Second Floor, Sacramento, CA 95834.

Project Description: The proposed project site is located in the Central Business District in Downtown Sacramento, as shown in Figure 1. The proposed project includes development of five parcels (APN 006-0044-012, 011, 010, 009, 013) on the southwest corner of the half block bounded by the alley to the north between I and J Streets, J Street to the south, 10th Street on the west, and 11th Street on the east (excluding the building at the corner of 11th and J Streets). The project site is located in the Central Business District Zone - Special Planning District (C-3 SPD) on a 41,600 sf (.955 ac) site, as shown in Figure 1. The project is located in the Capitol View Protection Corridor and has been designed to be consistent with those standards. Existing vacant hotel and commercial buildings are currently located on the project site. These buildings would be removed prior to project construction. A City-owned parking structure, with ground floor restaurant and retail, and a City department, is located north of the project site. A neighborhood park, Cesar Chavez, is located west of the project site between 10th and 9th Streets and I and J Streets. The Metropolitan project would include the construction of a 430,500 sf, 39-story (420' high), residential mixed-use building that would include 320 residential condominium units, commercial/retail spaces at the ground floor on 10th and J Streets, 514 off-street parking spaces, and an amenity level which would include a pool, fitness and recreation rooms, landscape and open space terrace areas, as shown in Figure 2. The building's loading zone would be located off the alley on the north side of the building. Pedestrian access to the building would be from 10th and J Streets while vehicular access would be from the north (the public alleyway). A lobby and a reception area would be located on the ground floor for the residents. An artist rendering of the proposed project is provided in Figure 3. Project design would be submitted to the Design Review and Preservation Board for approval prior to Planning Commission approval.

Probable Environmental Effects The technical sections of the Draft EIR will describe the existing conditions in the proposed project area and surrounding lands. It is anticipated that the following issue areas will be addressed in the EIR: a cultural resources study would be prepared and included in the environmental analysis and technical studies such as air quality, traffic, and noise modeling would be done to identify potential project related impacts. Those technical discussions would be included in an Initial Study, which would be appended to the Draft EIR.

Project Materials for The Metropolitan Project (P05-205) are available for review at Environmental Planning Services, North Permit Center, 2101 Arena Boulevard, Second Floor, Sacramento, CA, 95834.

Figure 1 - Site Plan

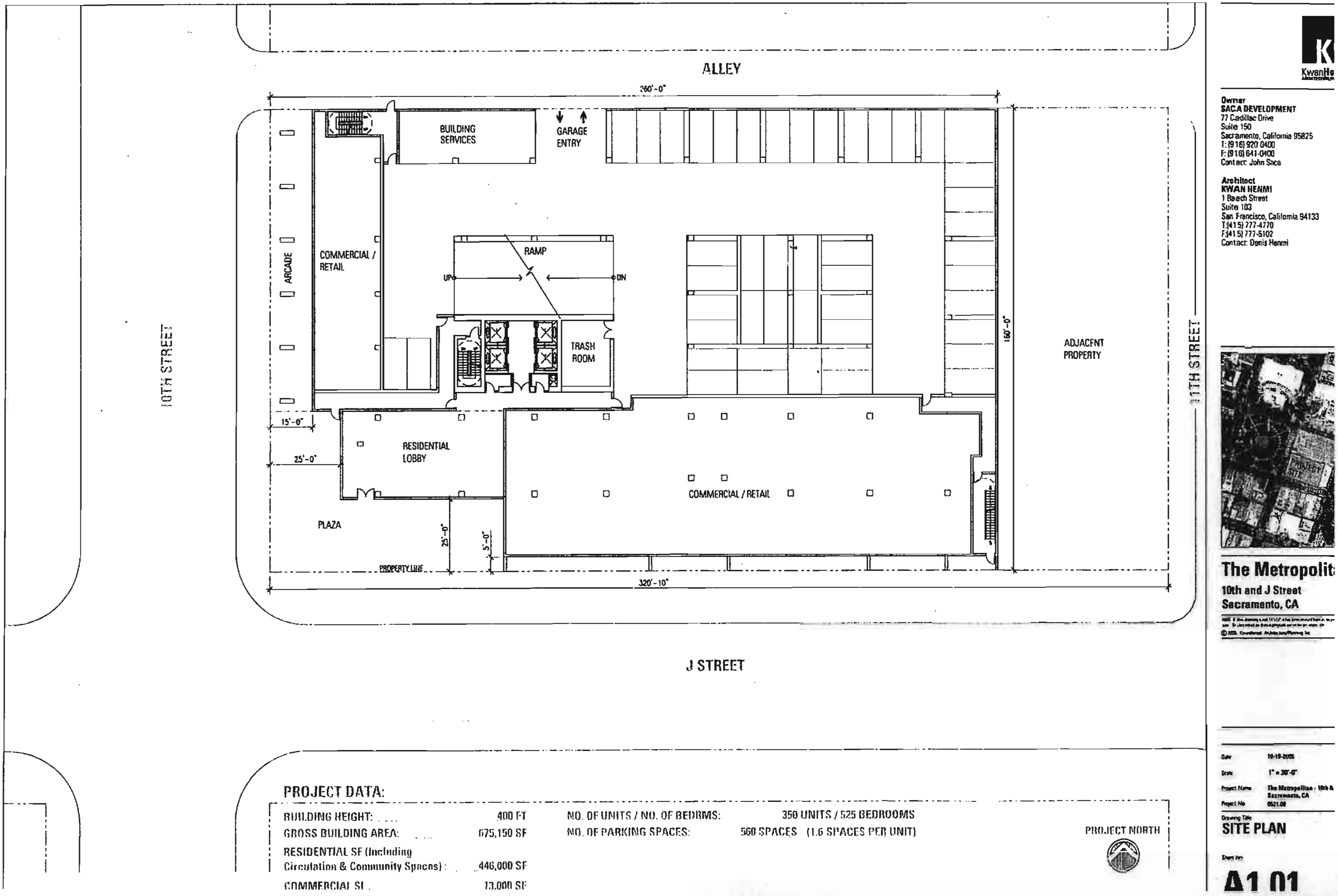
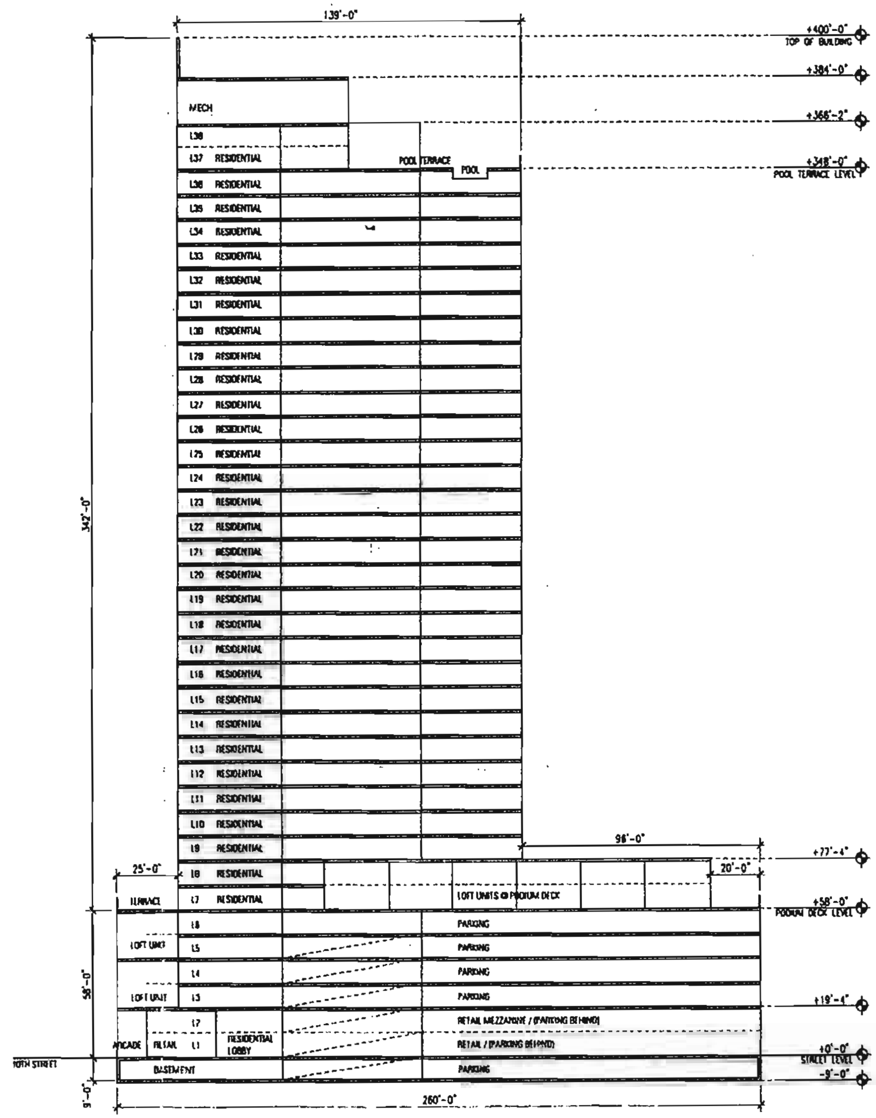


Figure 2 – Building Section



KwanHenmi

Owner
SACA DEVELOPMENT
77 Cadillac Drive
Suite 150
Sacramento, California 95825
T: (916) 920-0400
F: (916) 641-0400
Contact: John Saca

Architect
KWAN HENMI
1 Beach Street
Suite 103
San Francisco, California 94133
T:(415) 777-4770
F:(415) 777-5102
Contact: Denis Henmi

The Metropolita
10th and J Street
Sacramento, CA

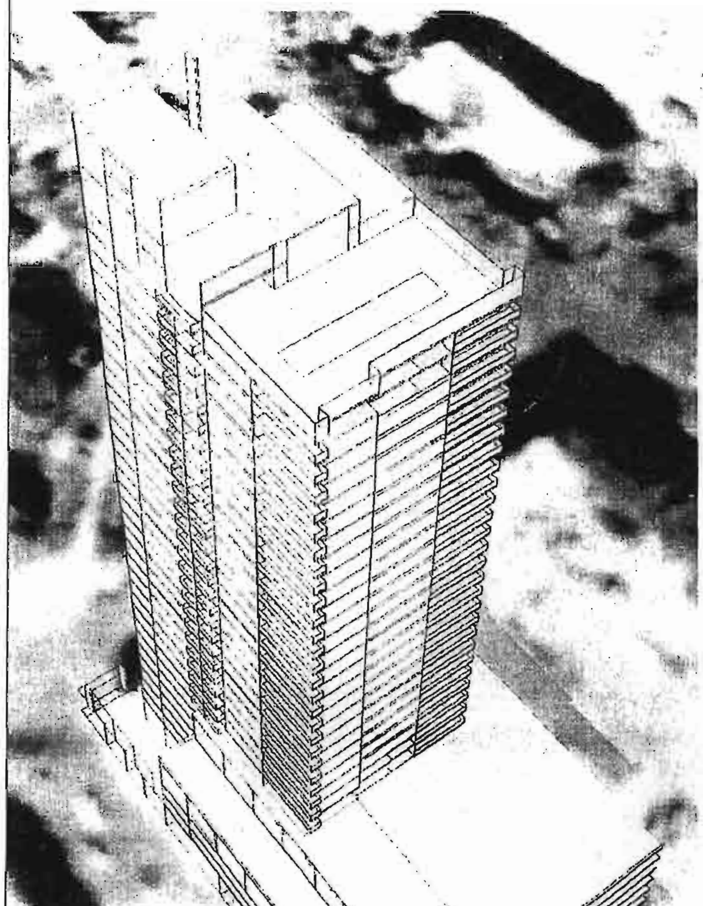
© 2005

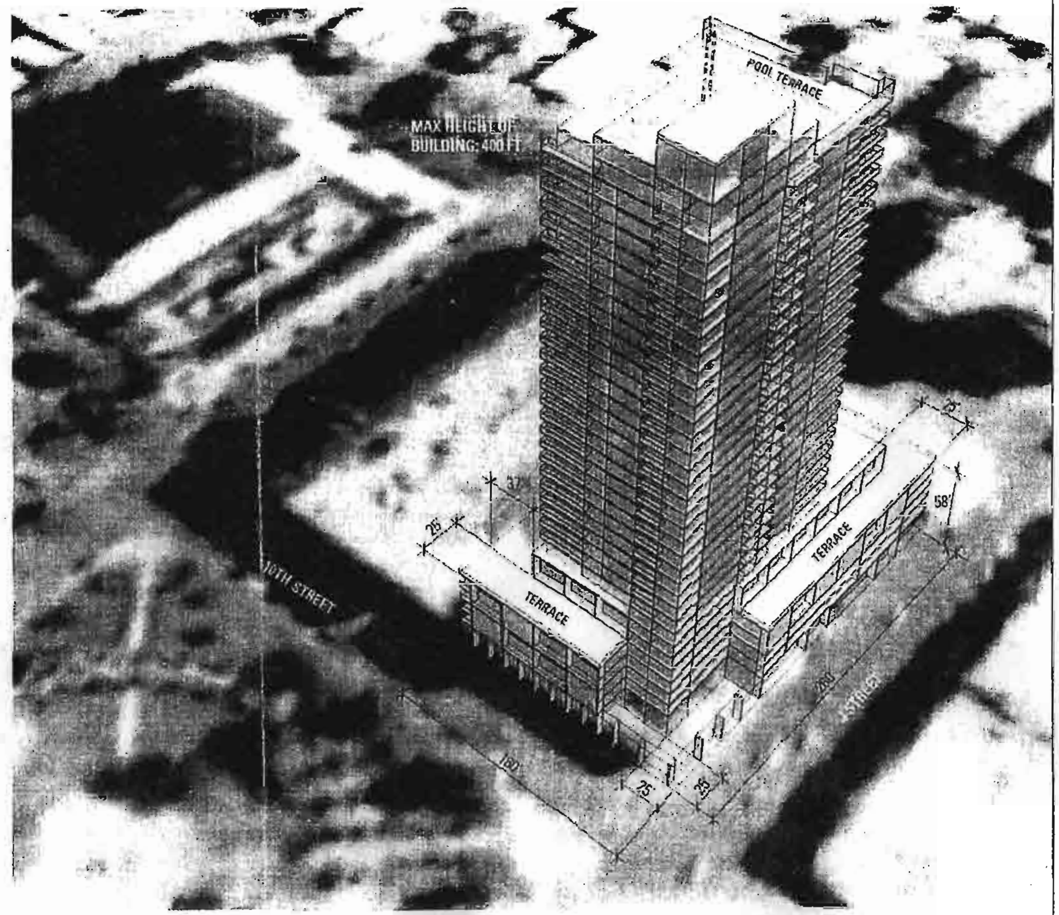
Date	10-19-2005
Scale	1" = 50'-0"
Project Name	The Metropolitan - 10th & J S Sacramento, CA
Project No	0521.00

Drawing Title
BUILDING SECTION

Sheet No

Figure 3 – Artist's Rendering





KwanHenmi

Owner
SACA DEVELOPMENT
77 Cadillac Drive
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T (916) 920-0400
F (916) 641-0400
Contact: John Saca

Architect
KWAN HENMI
1 Beach Street
Suite 103
San Francisco, California 94133
T (415) 777-4770
F (415) 777-5102
Contact: Denis Henmi

The Metropolit
10th and J Street
Sacramento, CA

Date	10-19-2005
Scale	NOT TO SCALE
Project Name	The Metropolitan - 10th & Sacramento, CA
Project No	9521.00

Drawing Title
MASSING PERSPECTIVES
Sheet No
A3.02

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

Arnold Schwarzenegger
Governor

Sean Walsh
Director

RECEIVED
MAY - 4 2006

Notice of Preparation

April 28, 2006

To: Reviewing Agencies

Re: The Metropolitan (P05-205)
SCH# 2006042161

Attached for your review and comment is the Notice of Preparation (NOP) for the The Metropolitan (P05-205) draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Dana Allen
City of Sacramento
2101 Arena Boulevard, Suite 200
Sacramento, CA 95834

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Project Analyst, State Clearinghouse

Attachments
cc: Lead Agency

Document Details Report
State Clearinghouse Data Base

SCH# **2006042161**
Project Title The Metropolitan (P05-205)
Lead Agency Sacramento, City of

Type **NOP** Notice of Preparation

Description The proposed project site is located in the central business district in Downtown Sacramento. The proposed project includes development of five parcels on the southwest corner of the half block bounded by the alley to the north between 11th and J Streets. The Metropolitan project would include the construction of a 430,500 sf, 39-story (420' high) residential mixed-use building that would include 320 residential condominium units, commercial/retail spaces at the ground floor of 10th street, 514 off-street parking spaces, and an amenity level which would include a pool, fitness and recreation rooms, landscape and open space terrace areas. The building's loading zone would be located off the alley on the north side of the building. Pedestrian access to the building would be from 10th and J Streets while vehicular access would be from the north (public alleyway). A lobby and reception area would be located on the ground floor for the residents.

Lead Agency Contact

Name Dana Allen
Agency City of Sacramento
Phone (916) 808-2762 ***Fax***
email
Address 2101 Arena Boulevard, Suite 200
City Sacramento ***State*** CA ***Zip*** 95834

Project Location

County Sacramento
City Sacramento
Region
Cross Streets 10th and J Streets
Parcel No. 006-0044-010-013
Township ***Range*** ***Section*** ***Base***

Proximity to:

Highways 5/99/80/50
Airports
Railways Amtrak
Waterways Sacramento River, American River
Schools
Land Use The project site is located in the Central Business District of Downtown Sacramento-Special planning district (C-3 SPD) on a 41,600 sf (.955ac) site.

Project Issues

Reviewing Agencies Resources Agency; Office of Historic Preservation; Department of Parks and Recreation; Reclamation Board; Department of Water Resources; Department of Fish and Game, Region 2; Department of Health Services; Office of Emergency Services; Native American Heritage Commission; Public Utilities Commission; Caltrans, Division of Transportation Planning; Department of Housing and Community Development; Caltrans, District 3; Regional Water Quality Control Bd., Region 5 (Sacramento)

Date Received 04/28/2006 ***Start of Review*** 04/28/2006 ***End of Review*** 05/30/2006

Note: Blanks in data fields result from insufficient information provided by lead agency.

Distribution List

County: Sacramento

SCH# [illegible]

Resources Agency

- Resources Agency
  Nadell Gayou
- Dept. of Boating & Waterways
  David Johnson
- California Coastal Commission
  Elizabeth A. Fuchs
- Colorado River Board
  Gerald R. Zimmerman
- Dept. of Conservation
  Roseanne Taylor
- California Energy Commission
  Paul Richins
- Dept. of Forestry & Fire Protection
  Allen Robertson
- Office of Historic Preservation
  Wayne Donaldson
- Dept of Parks & Recreation
  Environmental Stewardship Section
- Reclamation Board
  DeeDee Jones
- S.F. Bay Conservation & Dev't. Comm.
  Steve McAdam
- Dept. of Water Resources
  Resources Agency
  Nadell Gayou

_______________ Conservancy

Fish and Game

- Depart. of Fish & Game
  Scott Flint
  Environmental Services Division
- Fish & Game Region 1
  Donald Koch
- Fish & Game Region 2
  Banky Curtis
- [ ] **Fish & Game Region 3**
  Robert Floerke
- [ ] **Fish & Game Region 4**
  Julie Vance
- [ ] **Fish & Game Region 5**
  Don Chadwick
  Habitat Conservation Program
- [ ] **Fish & Game Region 6**
  Gabrina Gatchel
  Habitat Conservation Program
- [ ] **Fish & Game Region 6 I/M**
  Tammy Allen
  Inyo/Mono, Habitat Conservation Program
- [ ] **Dept. of Fish & Game M**
  George Isaac
  Marine Region

Other Departments

- [ ] **Food & Agriculture**
  Steve Shaffer
  Dept. of Food and Agriculture
- [ ] **Depart. of General Services**
  Public School Construction
- [ ] **Dept. of General Services**
  Robert Sleppy
  Environmental Services Section
- [x] **Dept. of Health Services**
  Veronica Malloy
  Dept. of Health/Drinking Water

Independent Commissions, Boards

- [ ] **Delta Protection Commission**
  Debby Eddy
- [x] **Office of Emergency Services**
  Dennis Castrillo
- [ ] **Governor's Office of Planning & Research**
  State Clearinghouse
- [x] **Native American Heritage Comm.**
  Debbie Treadway
- [x] **Public Utilities Commission**
  Ken Lewis
- [ ] **State Lands Commission**
  Jean Sarino
- [ ] **Tahoe Regional Planning Agency (TRPA)**
  Cherry Jacques

Business, Trans & Housing

- [ ] **Caltrans - Division of Aeronautics**
  Sandy Hesnard
- [x] **Caltrans - Planning**
  Terri Pencovic
- [ ] **California Highway Patrol**
  Shirley Kelly
  Office of Special Projects
- [x] **Housing & Community Development**
  Lisa Nichols
  Housing Policy Division

Dept. of Transportation

- [ ] **Caltrans, District 1**
  Rex Jackman
- [ ] **Caltrans, District 2**
  Marcelino Gonzalez
- [x] **Caltrans, District 3**
  Jeff Pulverman
- [ ] **Caltrans, District 4**
  Tim Sable
- [ ] **Caltrans, District 5**
  David Murray
- [ ] **Caltrans, District 6**
  Marc Birnbaum
- [ ] **Caltrans, District 7**
  Cheryl J. Powell
- [ ] **Caltrans, District 8**
  Dan Kopulsky
- [ ] **Caltrans, District 9**
  Gayle Rosander
- [ ] **Caltrans, Di strict 10**
  Tom Dumas
- [ ] **Caltrans, District 11**
  Mario Orso
- [ ] **Caltrans, District 12**
  Bob Joseph

Cal EPA

Air Resources Board

- [ ] Airport Projects
  Jim Lerner
  - [ ] Transportation Projects
    Kurt Karperos
  - [ ] Industrial Projects
    Mike Tollstrup
- [ ] **California Integrated Waste Management Board**
  Sue O'Leary
- [ ] **State Water Resources Control Board**
  Jim Hockenberry
  Division of Financial Assistance
- [ ] **State Water Resources Control Board**
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- [ ] **State Water Resouces Control Board**
  Steven Herrera
  Division of Water Rights
- [ ] **Dept. of Toxic Substances Control**
  CEQA Tracking Center
- [ ] **Department of Pesticide Regulation**

Regional Water Quality Control Board (RWQCB)

- [ ] **RWQCB 1**
  Cathleen Hudson
  North Coast Region (1)
- [ ] **RWQCB 2**
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- [ ] **RWQCB 3**
  Central Coast Region (3)
- [ ] **RWQCB 4**
  Teresa Rodgers
  Los Angeles Region (4)
- [x] **RWQCB 5S**
  Central Valley Region (5)
  - [ ] **RWQCB 5F**
    Central Valley Region (5)
    Fresno Branch Office
  - [ ] **RWQCB 5R**
    Central Valley Region (5)
    Redding Branch Office
- [ ] **RWQCB 6**
  Lahontan Region (6)
  - [ ] **RWQCB 6V**
    Lahontan Region (6)
    Victorville Branch Office
- [ ] **RWQCB 7**
  Colorado River Basin Region (7)
- [ ] **RWQCB 8**
  Santa Ana Region (8)
- [ ] **RWQCB 9**
  San Diego Region (9)
- [ ] **Other** _______________

Last Updated on 04/25/06

CIP

CLIPPINGER INVESTMENT PROPERTIES, INC.

30012 Ivy Glenn Drive, Suite 200 • Laguna Niguel, CA 92677
949.363.7676 • FAX 949.363.7059

May 3, 2006

VIA FACSIMILE 916.566.3968

Dana Allen
Senior Planner
City of Sacramento
2101 Arena Boulevard, Ste, 200
Sacramento, CA 95834

Re: NOTICE OF PREPARATION FOR AN ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE METROPOLITAN PROJECT (P05-205)

Dear Dana Allen:

We hereby kindly request that we stay on your mailing list for future updates and notices regarding the above mentioned Metropolitan Project (PO5-205).

Our contact information is as follows:

Bob Clippinger
12th & K Street Mall Partners
c/o Clippinger Investment Properties, Inc.
30012 Ivy Glenn Drive, Ste. 200
Laguna Niguel, CA 92677

Should you have any questions or require additional information, please contact me at 949.528.6323.

Sincerely,

FZieleman

Froukje Zieleman
Executive Assistant

William D. Kopper
Attorney at Law
417 E Street
Davis, CA 95616
(530) 758-0757
Fax (530) 758-2844

RECEIVED
MAY 17 2006

Paralegal
Kristin Rauh

May 15, 2006

City of Sacramento
Planning Division
Dana Allen, City Planner
915 I Street
New City Hall, 3rd Floor
Sacramento, CA 95814

RE: The Metropolitan, 921 10th Street (10th & J Street)
Application #P05-205 - APN: 006-0044-012, 011, 009, 013

Dear Ms. Allen:

I have the following comments regarding The Metropolitan Project (Application #P05-205) proposed by Mr. John Saca. We are concerned that the EIR include the following issues:

1) Air quality modeling of the construction impacts on air quality.
2) Analysis of noise impacts during construction.
3) Building high impacts with respect to shading surrounding properties, including but not limited to adjacent Caesar Chavez Park.
4) Analysis of the traffic impacts on I and J Streets. The EIR needs to take into account the cumulative affect the Project will have as an addition to any impacts created by the soon to be completed 800 J Street Condominiums, 1 block away.
5) The impact of the loss of affordable housing caused by the closure and demolition of the Biltmore Hotel.
6) A discussion of all the green energy features of the particular building and how much energy is proposed to be conserved.

Thank you for your consideration of this matter.

Sincerely

William D. Kopper
Kgr

WILLIAM D. KOPPER

WDK:kgr

WELLS FARGO

PCS Trust Real Estate
400 Capitol Mall, Suite 702
Sacramento, CA 95814
916 440-4940
916 442-5518 Fax

May 23, 2006

Dana Allen
City of Sacramento
Development Services Department
2101 Arena Blvd., Second Floor
Sacramento, CA 95834

RE: Notice of Prepartion for EIR for the Metropolitan Project (P05-205)
Briggs Family Trust

Dear Mr. Allen:

Wells Fargo Bank as Trustee of the Briggs Family Trusts owns 1011-1025 K Street Mall consisting of four retail/restaurant units, a ground level movie theater with two underground theaters and a second floor office unit. We have reviewed your Notice of Preparation and wish to express our concerns. While we support the project, we are concerned about the effects of construction.

The movie theater does a significant business during the day and any pile driving and similar construction activities will most likely make watching a movie and other daytime theater activities unbearable. I also have concerns for our office and restaurant tenants conducting business with a pile driver next door. Our theater building is an older building with two story high walls that could be damaged by the pounding. I request mitigation measures for both possible damage to our buildings and loss of business.

The alleyway between 10th and 11th Street is vital to the conduct of the theater and retail/restaurant businesses. Since they front K Street Mall, all deliveries are from the alley, so the alley must remain unblocked to deliveries at all times. Uninterrupted food deliveries, equipment and trash service are vital to our tenants. Construction deliveries and removals for the subject construction must be on streets other than the alley.

Also of concern is utility interruption to our tenants. Any disruptions need to be well coordinated and limited to the hours of midnight to 8:00am.

The Landlord lost tenants and suffered major disruptions during the construction of light rail on K Street Mall. Lingering construction related problems still affect our property. While we support these projects, we have major reservations about the construction process and it impact on our tenants and buildings. Careful coordination by the City and the developer with existing property owners and tenants is a must. We look forward to the opportunity to express these concerns. Without these requirements and concerns being met, we must object to the project.

Cordially,

Gerald A. Shupe
Vice President
(916) 440-4940 ▪ (916) 442-5518 Fax

GAS/lcl

cc: Michael Ault

DEPARTMENT OF TRANSPORTATION
DISTRICT 3 – SACRAMENTO AREA OFFICE
VENTURE OAKS – MS 15
P.O. BOX 942874
SACRAMENTO, CA 94274-0001
PHONE (916) 274-0614
FAX (916) 274-0648
TTY (530) 741-4509

Flex your power!
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May 25, 2006

06SAC0067
03-SAC-05 PM 23.511
The Metropolitan (P05-205)
Notice of Preparation
SCH# 2006042161

Ms. Dana Allen
City of Sacramento
2101 Arena Boulevard, Suite 200
Sacramento, CA 95834

Dear Ms. Allen:

Thank you for the opportunity to review and comment on the Notice of Preparation for The Metropolitan project's Draft Environmental Impact Report. The project at 10th & J Streets proposes construction of a 430,500 sq. ft., 39-story residential mixed-use building with 320 residential condominium units, commercial/retail spaces on the ground floor, and 514 off-street parking spaces. Our comments are as follows:

- A Traffic Impact Study (TIS) should be completed. The TIS should include the Interstate-5 (I-5) interchanges between Richards Boulevard and Q Street. Mainline traffic operations should be studied on I-5 from north of Richards Blvd. to the I-5/US 50 interchange, and on US 50 from the I-5/US 50 interchange to 16th Street interchange. The TIS should consider all possible traffic impacts to all ramps, ramp intersections, and the mainline. The "Guide for Preparation of Traffic Impact Studies" can be found on our website at: http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/. We would appreciate the opportunity to review the scope of the TIS before the Study begins.

- Any significant traffic impacts will require mitigation. Feasible mitigation measures are available including proportional mitigation funding for future improvements such as ramp widening, ramp intersection improvements, signalization modification, or mainline improvements such as the I-5 Bus/Carpool Lanes project (EA 3C000).

If you have any questions about these comments please contact Alyssa Begley at (916) 274-0635.

Sincerely,

BRUCE DE TERRA, Chief
Office of Transportation Planning—South

SACRAMENTO METROPOLITAN
AIR QUALITY
MANAGEMENT DISTRICT

Larry Greene
AIR POLLUTION CONTROL OFFICER

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MAY 30 2006

May 26, 2006

Ms. Dana Allen
City of Sacramento
Development Services Department
2101 Arena Blvd., 2nd floor
Sacramento, CA, 95834

SUBJECT: NOP for an EIR, The Metropolitan # PO5-205
SMAQMD # SAC200600940B

Dear Ms. Allen:

Thank you for providing the project listed above to the Sacramento Metropolitan Air Quality Management District (District). Staff comments follow.

We appreciate this project for its density and mixed-use nature in the heart of downtown.

Because of the size of this high-rise project, we believe it may generate air quality impacts during the building phase of construction which may be in excess of the established threshold. An air quality analysis should be done on the project in order to determine if those impacts are significant. In particular, it will be important to analyze and include the demolition emissions in the analysis.

Relative to the construction air quality impacts, if those impacts are significant, the SMAQMD standard construction mitigation measures should be used. Those measures include on-site strategies and the possibility of a mitigation fee. The measures can be found on our website, www.airquality.org.

If the project is significant for operational impacts, we recommend the creation and implementation of an air quality mitigation plan which would seek to reduce those emissions by 15%. We recommend that the plan be endorsed by us and included in the DEIR. In order to achieve this timing, we recommend that the proponent work with us as early as possible in order to create that plan. I would be the point of contact for that effort.

All projects are subject to SMAQMD rules and regulations in effect at the time of construction. Please see the attached document describing SMAQMD Rules which may apply to this project.

We request that the City forward us the environmental document on the project once it is prepared. If you have questions, please contact me at 874-4885 or jborkenhagen@airquality.org

Sincerely,

Jeane Borkenhagen

Jeane Borkenhagen
Associate Air Quality Planner Analyst

cc: Larry Robinson SMAQMD
Mr. Eric Rasmusson Holloway, Rasmusson and Molodanof

Enc: SMAQMD Rules & Regulations Statement

SMAQMD Rules & Regulations Statement

*The following statement is recommended as standard condition of approval or construction document language for **all** construction projects within the Sacramento Metropolitan Air Quality Management District (SMAQMD):*

All projects are subject to SMAQMD rules and regulations in effect at the time of construction. A complete listing of current rules is available at www.airquality.org or by calling 916.874.4800. Specific rules that may relate to construction activities may include, but are not limited to:

Rule 201: General Permit Requirements. Any project that includes the use of equipment capable of releasing emissions to the atmosphere may require permit(s) from SMAQMD prior to equipment operation. The applicant, developer, or operator of a project that includes an emergency generator, boiler, or heater should contact the District early to determine if a permit is required, and to begin the permit application process. Portable construction equipment (e.g. generators, compressors, pile drivers, lighting equipment, etc) with an internal combustion engine over 50 horsepower are required to have a SMAQMD permit or a California Air Resources Board portable equipment registration.

Rule 403: Fugitive Dust. The developer or contractor is required to control dust emissions from earth moving activities or any other construction activity to prevent airborne dust from leaving the project site.

Rule 442: Architectural Coatings. The developer or contractor is required to use coatings that comply with the volatile organic compound content limits specified in the rule.

Rule 902: Asbestos. The developer or contractor is required to notify SMAQMD of any regulated renovation or demolition activity. Rule 902 contains specific requirements for surveying, notification, removal, and disposal of asbestos containing material.

Other general types of uses that require a permit include dry cleaners, gasoline stations, spray booths, and operations that generate airborne particulate emissions.

SRCSD

Wastewater Treatment

Technology in balance with nature

10545 Armstrong Avenue
Mather, CA 95655
Tele: [916] 876-6000
Fax: [916] 876-6160
Website: www.srcsd.com

May 31, 2006
E225.000

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JUN - 6 2006

Dana Allen
City of Sacramento
Development Services Department
2101 Arena Boulevard, Suite 200
Sacramento, CA 95834

Subject: **Notice of Preparation for an Environmental Impact Report (EIR) for the Metropolitan**
APN: 006-0044-009 thru-013
Control No. P05-205

Dear Mr. Allen:

Both the County Sanitation District 1 (CSD-1) and the Sacramento Regional County Sanitation District (SRCSD) reviewed the subject Notice of Preparation documents and have the following comments.

The subject property is outside the boundaries of CSD-1 but within the Urban Service Boundary and SRCSD shown on the Sacramento County General Plan. Sacramento City Utilities Department approval will be required for sewage service.

SRCSD Advisories:

SRCSD does not have any specific concerns. We expect that if the project is subject to currently established policies, ordinances, fees, and to conditions of approval, then mitigation measures within the EIR will adequately address the sewage aspects of the project. We anticipate a less than significant impact to the sewage facilities due to mitigation.

If you have any questions regarding these comments, please call Stephen Moore at (916) 876-6296 or myself at (916) 876-6094.

Sincerely,

Wendy Haggard

Wendy Haggard, P.E.
Department of Water Quality
Development Services

WH/JRO: cc

cc: Melenie Spahn
Amber Schalansky
Dave Ocenosak
Eric Rasmussson
Holloway, Rasmusson and Moldanof
2200 L Street
Sacramento, CA 95816

allen053106.ltr.doc

APPENDIX B

INITIAL STUDY

THE METROPOLITAN PROJECT (P05-205)

INITIAL STUDY

This Initial Study has been required and prepared by the Development Services Department, 2101 Arena Boulevard, Second Floor, Sacramento, CA 95834, pursuant to Title 14, Section 15070 of the California Code of Regulations; and the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento.

ORGANIZATION OF THE INITIAL STUDY

This Initial Study is organized into the following sections:

SECTION I - BACKGROUND

File Number, Project Name: The Metropolitan Project (P05-205)

Project Location: The project site is generally located between the alley south of I Street on the north, J Street on the south, 10th Street on the west, and 11th Street on the east (Figure 1). The parcels in the project are: 921 10th Street (006-0044-012), 927 10th Street (006-0044-011), 1009 J Street (006-0044-010), 1013 J Street (006-0044-009), and 1023 J Street (006-0044-013).

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Date Initial Study Completed: **June 2, 2006**

SECTION II - PROJECT DESCRIPTION

PROJECT LOCATION

The project site is generally located between the alley south of I Street on the north, J Street on the south, 10th Street on the west, and 11th Street on the east (Figure 1). The parcels in the project are: 921 10th Street (006-0044-012), 927 10th Street (006-0044-011), 1009 J Street (006-0044-010), 1013 J Street (006-0044-009), and 1023 J Street (006-0044-013).

PROJECT BACKGROUND

The proposed project site was originally considered for an apartment complex with ground floor retail by developer Dean Ingemanson in 2002. Ingemanson controlled the half-block on J Street between 10th and 11th streets since the early 1990s, except for the building at 11th and J streets. The Ingemanson holdings included the building at the corner of 10th and J streets across from Cesar Chavez Park that is still leased to city agencies. In the late 1990s, a high-rise was planned on part of the half-block to accommodate a larger concentration of city agencies. The City then turned away from this block to look at the Metro Place site at 8th and J streets, where it owned half the site, for the new civic building. The City ultimately constructed the new city offices behind City Hall on I Street.

In 2002, there was some effort to preserve the Biltmore Hotel because of some historic interior features. The Broiler Restaurant was relocated and other tenants were moved from the Biltmore; most of the buildings have been vacant for several years. The Biltmore has since deteriorated and is no longer be considered eligible for listing in the Sacramento Register, although the alley has been identified as one of four remaining 19th Century alleys in the Downtown area that have been proposed for listing.

Ingemanson sold all his holdings in Downtown Sacramento in 2005; John Saca LLC purchased the project site for the proposed project.

The 1000 block of J Street experiences blighting conditions characterized by vacant and deteriorating buildings, uneconomic land uses, and small and irregularly sized lots unsuitable for modern use. The proposed project would eliminate the blight in this project area and would create a modern space for residential and retail/commercial in Downtown Sacramento.

PROJECT COMPONENTS

The proposed project would require a special permit major modification, tentative map and a Design Review for a proposed new 420 foot high, 39-story mixed-use residential tower development, located at the northeast corner of 10th and J streets. The building would accommodate 320 residential condominium units, with commercial/retail spaces at street level facing both 10th and J streets (Figure 2 through Figure 4).

The proposed project would provide residential amenities such as private balconies, an infinity -- seemingly rimless -- swimming pool, fitness and recreation rooms, and landscape and open space terrace areas. The top of the building would be split into three levels, with the pool and penthouses on the lowest. An upstairs terrace for the penthouses would be next, and then a room with mechanical systems. The condos would range from 700 to 1,300 square feet, feature ample window space, and include open air balconies on all units. Two-story lofts would be available above the ground-floor stores, and some penthouses could have two floors.

The building's step-like design is intended to reflect the downtown's existing high-rise motif, which consists largely of distinct floors that typically step back from the street. The design intends to include as many "green" features as feasible. Green features for this project could come in the form of recyclable or sustainable products and interior finishes used for the building; these finishes have not yet been defined.

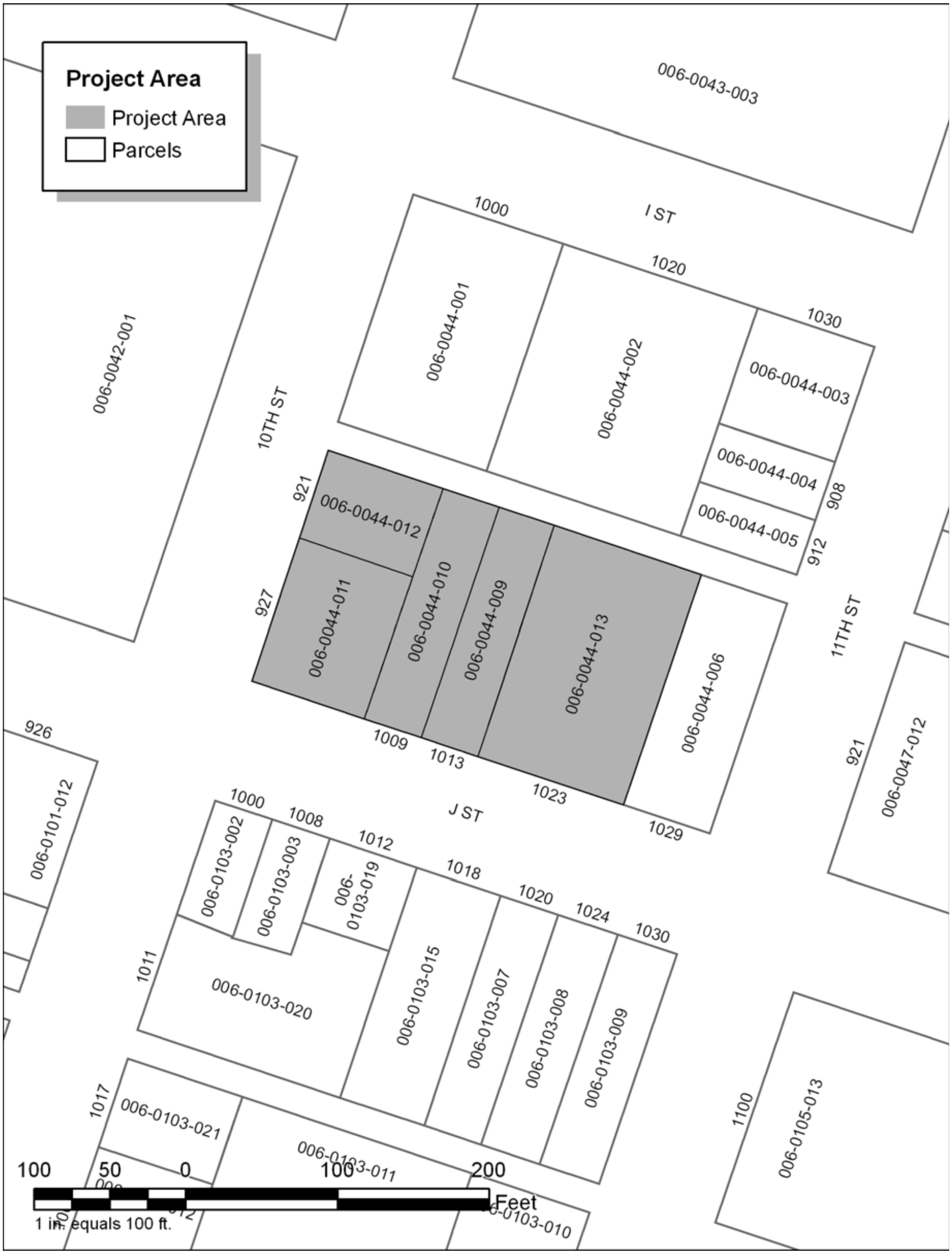
A residential entry lobby would be located off 10th Street, facing Cesar Chavez Plaza. The lower floors would wrap a four-story, 514-space parking garage. An arcade or plaza is planned across from Cesar Chavez Plaza, creating a place for outdoor dining. Ingress and egress for the parking garage would be off the alley on the northern boundary of the property.

There are currently five structures on the project site, which would be demolished for the project. None of the buildings are currently listed on the Sacramento Register, and the site is located outside the [Cesar Chavez] Plaza Park/Central Business District Historic District. Both the Biltmore Hotel and the 19th Century alley have been considered for listing.

There are currently three very small (less than 2-inch diameter) street trees in planters along the J Street sidewalk, and no trees on 10th Street. Street trees would be planted along J Street, consistent with the Urban Design Plan. The project has been designed to conform to the Capitol Protection standards.

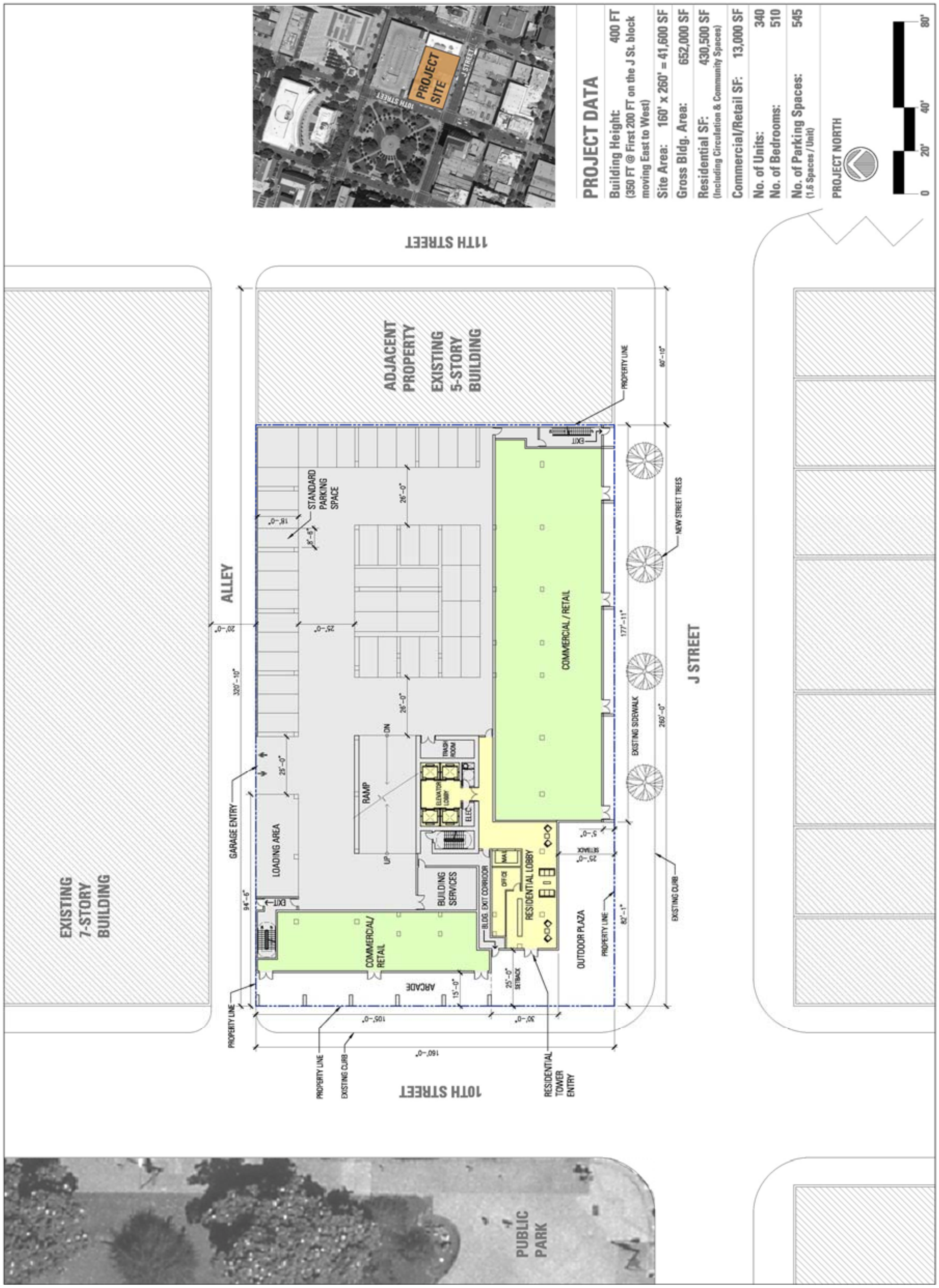
Requested entitlements for project approval include:

- Certification of the Environmental Impact Report and Adoption of Findings and a Mitigation Monitoring Plan
- Tentative Map to designate the site for condominium purposes
- Special Permit to construct 320 condominium units in the Central Business District (C-3-SPD) zone
- Special Permit for a Major Project over 75,000 gross square feet in the Central Business District (C-3-SPD) zone
- Special Permit to allow tandem parking
- Variance to reduce the required maneuvering area from 26 feet to 25 feet



Source: Ervin Consulting, 2006

FIGURE 1
PROJECT AREA



Source: KwanHenmi, 2006

FIGURE 2
SITE PLAN

Source: KwanHenmi, 2006

FIGURE 3
BUILDING SECTIONS

Source: KwanHenmi, 2006

FIGURE 4
SOUTH & WEST ELEVATIONS

SECTION III – ENVIRONMENTAL CHECKLIST AND DISCUSSION

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
1. LAND USE *Would the proposal:* A) Result in a substantial alteration of the present or planned use of an area?			✓
B) Affect agricultural resources or operation (e.g., impacts to soils or farmlands, or impact from incompatible land uses?)			✓

ENVIRONMENTAL SETTING

The project site is generally located between the alley south of I Street on the north, J Street on the south, 10th Street on the west, and 11th Street on the east (Figure 1). The parcels in the project are: 921 10th Street (006-0044-012), 927 10th Street (006-0044-011), 1009 J Street (006-0044-010), 1013 J Street (006-0044-009), and 1023 J Street (006-0044-013). All street frontages have curbs, sidewalks, gutters, and streetlights.

As noted above, the 1000 block of J Street experiences continuing blighting conditions characterized by vacant and deteriorating buildings, uneconomic land uses, and small and irregularly sized lots not suitable for modern use. The surrounding properties to the proposed project contain:

- North: City of Sacramento Parking Structure, cafe, hair salon, and City of Sacramento Information Technology Department
- South: Various businesses such as restaurants, copy/print store, liquor/cigar store, a law office/library, and sewing machine store. A condominium tower is proposed on this block.
- East: Elks Lodge No. 6 and Fed-Ex Kinko's (11th Street between I and J streets)
- West: Cesar Chavez Park/Plaza

The proposed project is located in the Central Business District of the City of Sacramento. The project site is designated Community/Neighborhood Commercial & Offices on the Sacramento City General Plan, and is zoned Special Planning District - Central Business District (C-3/CBD). The site is also located within the planning areas of the following City plans: Merged Downtown Redevelopment Plan, Cultural and Entertainment Master Plan, Central City Community Plan, and Central City Housing Strategy. The proposed project is consistent with these adopted plans. In addition, the project site is within the Sacramento Urban Design Plan areas. The Urban Design and Aesthetics section of the EIR will discuss the consistency of the project with these plans.

STANDARDS OF SIGNIFICANCE

For the purposes of this analysis, an impact is considered significant if the project would substantially alter an approved land use plan that would result in a physical change to the environment. Impacts to the physical environment resulting from the proposed project are discussed in subsequent sections of this document.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A AND B

The proposed project site is generally consistent with the adopted General Plan, community plan and zoning for project site, therefore no amendments or changes to respective plans or zoning are required. The proposed project is an infill project within the range of densities specified in the adopted plans and zoning ordinance for the site. In addition, the proposed project would not be incompatible with adjacent land uses, which are varied and range from retail and commercial to office or open space. Therefore, the proposed project would have a less-than-significant impact on present or planned land use.

The project site is within an urbanized area and is not considered to be suitable for agricultural use. Agricultural zoning or resources are not located within or adjacent to the project site, thus the proposed project would have no effect on agricultural resources or operations.

MITIGATION MEASURES

No mitigation measures are required.

FINDINGS

The proposed project would result in less-than-significant land use impacts.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
2. <u>POPULATION AND HOUSING</u> *Would the proposal:* A) Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	✓		
B) Displace existing housing, especially affordable housing?			✓

ENVIRONMENTAL SETTING

The project site is currently developed with five vacant buildings in the Central Business District of the City of Sacramento. Full urban utilities and services are provided to the site, and the site is zoned for the most intense development in the City. The project site is designated Community/Neighborhood Commercial & Offices on the Sacramento City General Plan, and is zoned Special Planning District - Central Business District (C-3/CBD). Housing is allowed in this zone with a special permit.

ANSWERS TO CHECKLIST QUESTIONS

QUESTION A

The proposed project will incrementally add to localized daytime population growth in the City's employment market area by providing additional jobs that would otherwise locate elsewhere. The project also proposes to construct 320 residential units on the site, which would directly result in an increased population of approximately 493 persons, based on 1.54 persons per household (2000 US Census data for Sacramento Downtown). The City has developed policies and plans to provide for long-term population and housing needs, such as the General Plan, the Merged Downtown Redevelopment Plan, and the Central City Housing Strategy. The CBD has been designated for the most intense employment and residential densities in the region, in an area highly served by transit and public services. However, whereas increased population resulting from the proposed project has the potential to result in physical effects on the environment, population impacts could be potentially significant. Any such effects will be addressed in the appropriate technical sections of the EIR. The potential growth-inducing effects of the proposed project would also be addressed in the CEQA Considerations chapter of the EIR.

QUESTION B

The proposed project would not displace existing housing, and would result in no impact on existing housing. The Biltmore Hotel was a residential facility that was closed in 2000, and has not been used for residential purposes for six years; all other buildings on the site were used for offices.

MITIGATION MEASURES

No mitigation measures are required.

FINDINGS

The proposed project would result in potentially significant population impacts, but will have no impacts on housing displacement.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
3. SEISMICITY, SOILS, AND GEOLOGY Would the proposal result in or expose people to potential impacts involving: A) Seismic hazards?			✓
B) Erosion, changes in topography or unstable soil conditions?			✓
C) Subsidence of land (groundwater pumping or dewatering)?			✓
D) Unique geologic or physical features?			✓

ENVIRONMENTAL SETTING

There are no known active faults occur in or adjacent to the City of Sacramento. During the past 150 years, there has been no documented movement on faults within Sacramento County, although the region has experienced numerous instances of ground shaking originating from faults located to the west and east. According to the Preliminary Map of Maximum Expectable Earthquake Intensity in California, prepared by the California Department of Mines and Geology, Sacramento is located near the border between the low and moderate severity zones, representing a probable maximum earthquake intensity of VII on the Modified Mercalli Scale. In Sacramento, the greatest intensity earthquake effects would come from the Dunnigan Hills fault, Midland fault, and the Foothill Fault System. The maximum credible earthquake for those faults is estimated at 6.5 on the Richter-scale.

Soils on the project site under the existing buildings and paving are categorized as Urban Land which consists of areas covered by up to 70 percent impervious surfaces. Topography is flat, and there are no outstanding topographic or ground surface relief features that would be disturbed as a result of the proposed project.

The project site is underlain by Holocene Floodplain deposits (SGPU EIR, T-2), which represent the depositional regime of the area immediately prior to streamflow and drainage changes brought about within the last 135 years. Floodplain deposits are unconsolidated sands, silts, and clays formed from flooding of the American and Sacramento rivers, and these generally are moderately to highly permeable. They are distributed in proximity to the present-day river channels and extend throughout the Central City, South Natomas, and a substantial portion of North Natomas (SGPU EIR, T-1). Exhibit T-4 of the SGPU EIR further indicates that the subject site correlates with the Sailboat-Scribner-Cosumnes soil type, a very deep, somewhat poorly- and poorly-drained soil that has a seasonal high water table and are protected by levees. The soils are characterized as nearly level on low and high floodplains.

The aquifer system underlying the City is part of the larger Central Valley groundwater basin. The Sacramento, American, and Cosumnes rivers, as well as other tributary streams, generally recharge the aquifer. Groundwater depth in the downtown area generally ranges from 10 to 20 feet, although site-specific differences in groundwater depth may exist.

STANDARDS OF SIGNIFICANCE

For the purposes of this analysis, an impact is considered significant if it allows a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards.

ANSWERS TO CHECKLIST QUESTIONS

QUESTION A

Development on the site could be exposed to potentially damaging seismically-induced groundshaking. However, in Sacramento, the maximum credible earthquake for regional faults is estimated at 6.5 on the Richter-scale. All structures built would be constructed to current Uniform Building Code standards, which would minimize the potential for damage due to ground shaking. The proposed project is therefore not considered to result in the exposure of people to geologic or seismic hazards, thus seismic impacts would be less than significant.

QUESTION B

The project could be exposed to impacts from liquefaction of subsurface soils. Liquefaction of soils could result in partial or complete loss of support, which could damage or destroy buildings or facilities. Liquefaction is the loss of soil strength due to seismic forces acting on water-saturated, granular material that leads to a “quicksand” condition generating various types of ground failure. The potential for liquefaction must account for soil types, soil density, and groundwater table, and the duration and intensity of ground shaking. Earthquakes of the magnitude expected to emanate from any of several nearby faults would be strong enough to induce liquefaction in susceptible sand layers. Per local building requirements, however, site-specific geologic investigations would be required to evaluate liquefaction potential and to recommend appropriate designs in order to avoid major structural damage, thus reducing this impact to less-than-significant.

Soils that have limitations for structural loading, i.e. weak or expansive soils, are scattered throughout the City. These limitations can usually be overcome through soil importation or specially engineered design for specific project construction. Adequate engineering studies are required by City regulation; although the geotechnical report has not been completed for this project, the project is similar to other high-rise structures in the downtown area and soils in the area have never been a limiting factor for development. The site is level and covered in structures and asphalt, thus the proposed project would not result in impacts relative to landslides or mudflows, erosion or changes in topography, expansive soils, or unique geologic or physical features.

The City of Sacramento has adopted policies as part of the General Plan Health and Safety Element which consider seismic related hazards, including liquefaction. These policies require that the City: 1) protect levees and property from unacceptable risk due to seismic and geologic activity or unstable soil conditions to the maximum extent feasible; 2) prohibit the construction of structures for permanent occupancy across faults; 3) require reports and geologic investigations for multiple story buildings; and 4) ensure the use of Uniform Building Code requirements that recognize State and federal earthquake protection standards in construction. Development on the site would not occur across any currently identified fault. In addition, the City requires soils reports and geological investigations for determining liquefaction, expansive soils, and subsidence problems on sites for new multiple-story buildings as a condition of approval, and that such information be incorporated into the project design and construction to eliminate hazards.

Project construction would require demolition, grading, excavation, pile driving, and trenching activities. It is anticipated that the new building would be supported on a deep foundation that would include, but not be limited to, steel H-piles or pre-cast, pre-stressed concrete piles below the existing surface level, or other means deemed appropriate and effective by the City of Sacramento. The policies listed above are required for new construction projects and reduce potential seismic impacts to less-than-significant levels.

QUESTION C

Project excavation and pile driving would result in temporary dewatering, but because the basement would be specifically designed to stop above the groundwater zone, no ongoing dewatering will be required for the proposed project. Dewatering activities could result in a minor short-term change in the quantity of groundwater and/or direction of rate of flow, and groundwater quality. Any dewatering activities must comply with application requirements established by the Central Valley Regional Water Quality Control Board (RWQCB) to ensure that such activities would not result in substantial changes in groundwater, and therefore any impacts would be less-than-significant.

QUESTION D

There are no recognized unique geologic features or physical features that would be impacted by the construction of the proposed project. Therefore, related impacts on area soils and earth conditions are anticipated to be less-than-significant.

MITIGATION MEASURES

No mitigation measures are required.

FINDINGS

The proposed project would result in less-than-significant impacts to geology, soils, and seismicity.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
4. <u>WATER</u> Would the proposal result in or expose people to potential impacts involving:			
A) Changes in absorption rates, drainage patterns, or the rate and amount of surface/stormwater runoff (e.g. during or after construction; or from material storage areas, vehicle fueling/maintenance areas, waste handling, hazardous materials handling & storage, delivery areas, etc.)?			✓
B) Exposure of people or property to water related hazards such as flooding?			✓
C) Discharge into surface waters or other alteration of surface water quality that substantially impact temperature, dissolved oxygen or turbidity, beneficial uses of receiving waters or areas that provide water quality benefits, or cause harm to the biological integrity of the waters?			✓
D) Changes in flow velocity or volume of stormwater runoff that cause environmental harm or significant increases in erosion of the project site or surrounding areas?			✓
E) Changes in currents, or the course or direction of water movements?			✓
F) Change in the quantity of ground waters, either through direct additions or withdrawal, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability?			✓
G) Altered direction or rate of flow of groundwater?			✓
H) Impacts to groundwater quality?			✓

ENVIRONMENTAL SETTING

Surface Water/Drainage

The Sacramento, American, and Cosumnes rivers are the main surface water tributaries that drain much of Sacramento. The aquifer system underlying the City is part of the larger Central Valley groundwater basin. Surface inflows to the east of the City Limits and deep percolation of precipitation and surface water applied to irrigated crop land recharge the aquifer system.

Water Quality

The City's municipal water is received from the American and Sacramento rivers, augmented by groundwater wells. Groundwater supplements municipal water supplies in areas north of the American River; the City is supplied exclusively with surface water in areas south of the American River.

The water quality of the American River is considered very good. The Sacramento River water is considered to be of good quality also, although higher sediment loads and extensive irrigated agriculture upstream of Sacramento tends to degrade water quality. During the spring and fall, irrigation tailwaters are discharged into drainage canals that flow to the river. In the winter, runoff flows over these same areas. In both instances, flows are highly turbid and introduce large amounts of herbicides and pesticides into the drainage canals, particularly rice field herbicides in May and June. The aesthetic quality of the river is changed from relatively clear to turbid due to irrigation discharges.

The City of Sacramento has obtained a municipal stormwater NPDES permit from the State Water Resources Control Board (SWRCB) under the requirements of the Environmental Protection Agency and Section 402 of the Clean Water Act (CWA). The goal of the permit is to reduce pollutants found in urban storm runoff. The general permit requires the City to employ best management practices (BMPs) before, during, and after construction, and the City enforces these requirements through conditions on private projects, such as the proposed project.

The primary objective of the BMPs is to reduce non-point source pollution into waterways. These practices include structural and source control measures for residential and commercial areas, and BMPs for construction sites. BMP mechanisms minimize erosion and sedimentation and prevent pollutants such as oil and grease from entering the stormwater drains. BMPs are approved by the Department of Utilities prior to construction (the BMP document is available from the Department of Utilities, Engineering Services Division, 1395 35th Avenue, Sacramento, CA).

Flooding

The Federal Emergency Management Agency (FEMA) publishes Flood Insurance Rate Maps (FIRM) that delineates flood hazard zones for communities. The project site is located within an area designated as an X flood zone by a Letter of Map Revision (LOMR) to the City's FIRM (dated July 6, 1998), issued by FEMA on February 18, 2005 (Panel Numbers 060266 0025F). This zone is applied to areas of the City which have more than 100-year flood protection.

Groundwater

The project site is located within the Sacramento River Hydrologic Basin, as defined by the California Department of Water Resources. The aquifer system underlying the City is part of the larger Central Valley groundwater basin. The Sacramento, American, and Cosumnes Rivers are the main surface water tributaries that drain much of Sacramento and recharge the aquifer system. Depth to groundwater in the project vicinity is 10 to 20 feet below ground surface (bgs)

STANDARDS OF SIGNIFICANCE

Water Quality

For purposes of this environmental document, an impact is considered significant if the proposed project would substantially degrade water quality and violate any water quality objectives set by the SWRCB, due to increased sediments and other contaminants generated by consumption and/or operation activities.

Flooding

For purposes of this environmental document, an impact is considered significant if the proposed project substantially increases exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A, D AND E

The project site is located within a developed urbanized area with existing infrastructure to accommodate existing drainage patterns. Storm drainage for the Downtown area is maintained by the City Department of Utilities. Stormwater drainage improvements are planned and financed by the Department of Utilities using a citywide stormwater utility fee.

The project is located in an area served by the Combined Sewer System (CSS). During wet weather, stormwater drainage in the CSS is added to sewage flows. The proposed project's stormwater effect on the CSS would be considered significant if it would increase the impervious surface area by greater than 0.25 acre. The project site is less than one acre, and currently covered in impermeable surfaces, both buildings and parking areas, with no vegetation or landscaping; the City provides guidelines for preventing stormwater pollution associated with construction activities on small building sites through BMPs. There will be no net increase in stormwater runoff from the project site, and construction and operational stormwater will be controlled by required BMPs. Therefore, stormwater impacts will be less than significant.

QUESTION B

FEMA publishes FIRMs that delineate flood hazard zones for communities. The project site is located within an area designated as an X flood zone by a LOMR to the City's FIRM (dated July 6, 1998), issued by FEMA on February 18, 2005 (Panel Numbers 060266 0025F). This zone is applied to areas of the City which have more than 100-year flood protection. Therefore, the proposed project would have a less-than-significant impact on building in a flood zone designated as X.

QUESTION C

Construction related activities have the potential to impact water quality. Construction activities would include grading, trenching, paving, and landscaping. These activities have the potential to increase sediment loads in runoff that would enter the CSS. The degree of construction related impacts to water quality are partially determined by the duration of the various construction activities and rainfall distribution. Due to low summer rainfall, summer construction activities would decrease the sediment and other pollutant levels that may impact water quality.

Fuel, oil, grease, solvents, and other chemicals used in construction activities have the potential to create toxicity problems if allowed to enter a waterway. Construction activities are also a source of various other materials including trash, soap, and sanitary wastes.

The project improvement plans will be required as a condition of approval to comply with the City's Grading, Erosion, and Sediment Control Ordinance (Code 15.88.250). All stormwater enters the CSS in this area, and would be treated at the Sacramento Regional Wastewater Treatment Plant (SRWTP), which is located south of the City of Sacramento east of Freeport Boulevard. In addition, compliance with City and State regulations will reduce impacts to surface water and drainage. Therefore, impacts to water quality would be less-than-significant.

QUESTIONS F, G AND H

The proposed project is not expected to involve substantial excavation or trenching that would impact groundwater at 10 to 20 feet bgs; the subterranean parking would be designed based on geotechnical studies to ensure no permanent dewatering would be required. However, pile driving activities will reach groundwater levels. Construction dewatering could result in a short-term change in the quantity of groundwater and/or direction of rate of flow, and groundwater quality. Any dewatering activities associated with the proposed project would be temporary and must comply with the City's BMPs and application requirements established by the Central Valley RWQCB and the City to ensure that such activities would not result in substantial changes in groundwater flow or quality; dewatering of contaminated groundwater will be addressed in the EIR as a construction hazard. The proposed project would have a less-than-significant impact on groundwater.

MITIGATION MEASURES

No mitigation measures are required.

FINDINGS

Impacts associated with stormwater, flooding, ground water, and water quality are less-than-significant and will not be discussed further.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
5. <u>AIR QUALITY</u> *Would the proposal:*			
A) Violate any air quality standard or contribute to an existing or projected air quality violation?	✓		
B) Exposure of sensitive receptors to pollutants?	✓		
C) Alter air movement, moisture, or temperature, or cause any change in climate?	✓		
D) Create objectionable odors?			✓

ENVIRONMENTAL SETTING

The project area is located in the Sacramento Valley Air Basin (SVAB), which is bounded by the Sierra Nevada on the east and the Coast Range on the west. Prevailing winds in the project area originate primarily from the southwest. These winds are the result of marine breezes coming through the Carquinez Straits. These marine breezes diminish during the winter months, and winds from the north occur more frequently at this time. Air quality within the project area and surrounding region is largely influenced by urban emission sources.

The SVAB is subject to federal, state, and local air quality regulations under the jurisdiction of the Sacramento Metropolitan Air Quality Management District (SMAQMD). The SMAQMD is responsible for implementing emissions standards and other requirements of federal and state laws. As there are minimal industrial emissions, urban emission sources originate primarily from automobiles. Home fireplaces also contribute a significant portion of the air pollutants, particularly during the winter months. Air quality hazards are caused primarily by carbon monoxide (CO), particulate matter (PM_{10}), and ozone, primarily as a result of motor vehicles. In 2005, the Sacramento area was within California Environmental Protection Agency (Cal EPA) attainment standards for all pollutants except ozone. The SVAB is considered to be in attainment for PM_{10}, as it has not exceeded state or federal standards since 1991 (California Air Resources Board, 1999).

STANDARDS OF SIGNIFICANCE

The SMAQMD adopted the following thresholds of significance in 2002:

Ozone and Particulate Matter. An increase of nitrogen oxides (NOx) above 85 pounds per day for short-term effects (construction) would result in a significant impact. An increase of either ozone precursor, nitrogen oxides (NOx) or reactive organic gases (ROG), above 65 pounds per day for long-term effects (operation) would result in a significant impact (as revised by SMAQMD, March 2002). The threshold of significance for PM_{10} is a concentration based threshold equivalent to the California Ambient Air Quality Standard (CAAQS). For PM_{10}, a project would have a significant impact if it would emit pollutants at a level equal to or greater than five percent of the CAAQS (50 micrograms/cubic meter for 24 hours) if there were an existing or projected violation; however, if a project is below the ROG and NOx thresholds, it can be assumed that the project is below the PM_{10} threshold as well (SMAQMD, 2004).

Carbon Monoxide. The pollutant of concern for sensitive receptors is carbon monoxide (CO). Motor vehicle emissions are the dominant source of CO in Sacramento County (SMAQMD, 2004). For purposes of environmental analysis, sensitive receptor locations generally include parks, sidewalks, transit stops, hospitals, rest homes, schools, playgrounds and residences. Commercial buildings are generally not considered sensitive receptors. Carbon monoxide concentrations are considered significant if they exceed the 1-hour state ambient air quality standard of 20.0 parts per million (ppm) or the 8-hour state ambient standard of 9.0 ppm (state ambient air quality standards are more stringent than their federal counterparts).

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A-B

The proposed project is located within the Sacramento metropolitan area which is considered a non-attainment area for selected pollutants. Federal air quality standards for ozone and particulate matter are being exceeded several times per year in Sacramento County. Vehicles associated with the project operation will produce those emissions that contribute to regional ozone and the deterioration of ambient air quality. The net increases in regional emissions of ozone are significant environmental effects. In addition, air pollutants would be emitted by construction equipment, and fugitive dust would be generated during grading and site preparation. Construction activities are regulated by the City, as well as SMAQMD. Traffic increases (Transportation Section) and short-term construction impacts associated with the development of this project could result in significant adverse air quality impacts. This issue will be discussed in the EIR.

QUESTIONS C-D

The proposed project would construct a 420 foot high residential tower with ground floor retail and parking in the CBD. Tall buildings can strongly affect the wind environment that pedestrians can experience on public sidewalks and building grounds. Building designs that present tall flat surfaces square to strong winds can create ground-level winds that can prove to be hazardous to pedestrians.

In cities, groups of buildings tend to slow the winds near ground level, due to the friction and drag of the building structures. There are existing tall buildings on three sides of the project site; Cesar E. Chavez Plaza is adjacent to the west with mature trees. A building that is much taller than the surrounding buildings and trees intercepts winds that otherwise might flow overhead and redirects them down the vertical faces of the building to ground level, creating ground-level wind and wind turbulence. These redirected winds can be relatively strong and relatively turbulent, and can prove to be incompatible with the intended uses around the building.

Sacramento climate is typical of inland valleys in California. Summers are hot, with maximum temperatures frequently approaching or exceeding 100 degrees Fahrenheit. Winters are cool and wet. Rainfall averages near 20 inches per year, with almost all occurring between November and March. Wind direction and speed data recorded over a five year period at the Sacramento Executive Airport from 1985 through 1989 indicate that southwesterly winds predominate and are strongest on average. During winter, when the sea breeze diminishes, northerly winds of some strength occur more frequently but southerly winds still predominate.

Sacramento climate includes several wind regimes that have the greatest potential for adversely affecting outdoor comfort. The predominant wind direction is southwest, reflecting the orientation of the Sacramento Valley and the effect of marine breezes reaching Sacramento through the Carquinez Straits, a sea level gap in the Coast Range. The speeds of winds from this direction are the highest on average, and these winds are most dominant in the summer, when they have a profound positive effect on comfort outdoors.

Another relative maximum in frequency occurs for south southeast winds. These winds occur primarily in winter during storms, and are the highest speed winds measured in Sacramento.

The third wind type affecting outdoor comfort includes strong, dry winds from the north, north northeast or north northwest. These winds typically occur in the fall and winter months when high pressure dominates the Great Basin, and are associated with cold temperatures and low humidity. Strong winds from this direction are not particularly frequent, so they normally do not affect the pedestrian wind environment, although in certain circumstances, speeds high enough to be hazardous can occur.

The comfort of pedestrians varies under different conditions of sun exposure, temperature, clothing, and wind speed. Winds up to four mph have no noticeable effect on pedestrian comfort. With velocity from four to eight mph, wind is felt on the face. Winds from 8 to 13 mph will disturb hair, cause clothing to flap, and extend a light flag mounted on a pole, while winds from 13 to 19 mph will raise loose paper, dust and dry soil, and will disarrange hair. For speeds from 19 to 26 mph, the force of the wind will be felt on the body. At 26 mph to 34 mph, umbrellas are used with difficulty; hair is blown straight; there is difficulty in walking steadily; and wind noise is unpleasant. Winds over 34 mph increase difficulty with balance and gusts can blow people over.

The City of Sacramento has not established criteria for determining the acceptability of wind conditions that might exist. The proposed project is a residential structure with balconies and mixed architectural materials on a stepped back design. Unlike office structures with significant glass surfaces that present tall flat surfaces square to strong winds, the proposed project is not anticipated to result in ground-level winds that can prove to be hazardous to pedestrians. Balconies and architectural treatments would interrupt the downward flow of winds intercepted by the tower. Because there are existing buildings on the project site and surrounding most of the site, the change in massing at street level and the existing wind environment would be less than significant.

Both wind and shade can affect temperatures several degrees; during hot Sacramento summers this could be perceived as beneficial, but during the winter this could increase pedestrian discomfort. Shade impacts on Cesar E. Chavez Plaza will be analyzed in the EIR.

The project would not significantly alter moisture, cause any change in climate, or support any activities that would create objectionable odors. Although the project would likely create some change in air movement and reduced temperatures slightly under changed wind conditions, the City of Sacramento has not established criteria for determining the acceptability of wind conditions, thus impacts to air movement, moisture, or change in climate are anticipated to be less than significant. Shadow impacts will be analyzed in the EIR.

FINDINGS

The proposed project could result in potentially significant violations of air quality standards or contribute to existing or projected air quality violations; these issues will be discussed further in the EIR. Impacts associated with air movement, moisture, and odors are less-than-significant and will not be discussed further. Shade impacts will be analyzed in the EIR.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
6. <u>TRANSPORTATION/CIRCULATION</u> Would the proposal result in: A) Increased vehicle trips or traffic congestion?	✓		
B) Hazards to safety from design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	✓		
C) Inadequate emergency access or access to nearby uses?	✓		
D) Insufficient parking capacity on-site or off-site?			✓
E) Hazards or barriers for pedestrians or bicyclists?	✓		
F) Conflicts with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	✓		
G) Rail, waterborne or air traffic impacts?			✓

ENVIRONMENTAL SETTING

Regional automobile access to the project site, the Sacramento Central City, and the midtown area is provided primarily by the freeway system that serves the Richards Boulevard area and Downtown Sacramento, including the US 50, the Capital City Freeway (Business Route 80), and State Route 99 (SR 99).

Local access in Downtown and Midtown Sacramento are served by a grid street system. Numbered streets exist in a north-south orientation and lettered streets exist in an east-west orientation, with east-west alleys between the numbered streets. Sidewalks are provided on both sides of the street on almost all blocks throughout the downtown grid, including those adjacent to the project site. The site is bound by 10th Street to the west and J Street to the south. K Street, one block south of the site, is a pedestrian/transit mall in the downtown area that is not open to general motor vehicle traffic between 3rd and 13th streets.

Regional Transit's light rail lines are currently located along 7th, 8th, K and 12th streets; an extension up 7th and 8th streets to the Amtrak depot is planned in the near future. The proposed project site is also extremely well served by regional and intercity transit facilities. Transit services to downtown are provided by Amtrak, Greyhound, Gray Line, Regional Transit, El Dorado Transit, Folsom Commuter Bus, Folsom Stage Line, Yuba-Sutter Transit, Roseville Commuter Service, Yolobus, and limousine and taxi services. Amtrak provides daily scheduled passenger train service from its station near 5th and I streets, and Greyhound Line provides bus connections between downtown and major urban centers throughout California and the nation.

Parking facilities in the Central City include City, State, and privately-owned lots and garages, off-street residential spaces, and on-street parking, including permitted and metered parking spaces. On-street parking restrictions for metered and permitted spaces vary by location. The majority of on-street parking in the Downtown area is metered.

STANDARDS OF SIGNIFICANCE

The following *Standards of Significance* have been established in assessing the impacts of proposed projects on the transportation facilities (Source: *Traffic Impact Analysis Guidelines, Rev. July 19, 2002*).

Roadways:

(1) An impact is considered significant for roadways when the project causes the facility to degrade from Level of Service (LOS) C or better to LOS D or worse.

(2) For facilities that are already worse than LOS C without the project, an impact is also considered significant if the project increases the v/c ratio by 0.02 or more on a roadway.

Signalized and unsignalized Intersections:

(1) An impact to the intersections is considered significant if the Project causes the LOS of the intersections to degrade from LOS C or better to LOS D or worse.

(2) For intersections that are already operating at LOS D, E, or F without the Project, an impact is significant if the implementation of the Project increases the average delay by 5 seconds or more at an intersection.

Transit Facilities:

An impact is considered significant if the implementation of the project will cause one or more of the following:

(1) The project-generated ridership, when added to the existing or future ridership, exceeds existing and/or planned system capacity. Capacity is defined as the total number of passengers the system of buses and light rail vehicles can carry during the peak hours of operation.

(2) Adversely affect the transit system operations or facilities in a way that discourages ridership (e.g. removes shelter, reduces park and ride).

Bicycle Facilities:

An impact is considered significant if the implementation of the project will cause one or more of the following:

(1) eliminate or adversely affect an existing bikeway facility in a way that discourages the bikeway use;

(2) interfere with the implementation of a proposed bikeway;

(3) result in unsafe conditions for bicyclists, including unsafe bicycle/ pedestrian or bicycle/motor vehicle conflicts.

Pedestrian Facilities:

An impact is considered significant if the project will adversely affect the existing pedestrian facility or will result in unsafe conditions for pedestrians, including unsafe pedestrian/bicycle or pedestrian/motor vehicle conflicts.

Parking Facilities

A significant impact to parking would occur if the anticipated parking demand of the Project exceeds the available or planned parking supply for typical day conditions. However, the impact would not be significant if the Project is consistent with the parking requirements stipulated in the City Code.

ANSWERS TO CHECKLIST QUESTIONS

QUESTION A

The proposed project would provide 320 condominium units and retail space; employees and residents will be traveling to and from the project site by both automobiles and alternative transportation modes. An increase in traffic from the proposed project may result in a significant decrease in LOS on existing arterials, intersections and freeway ramps. A traffic study is required to analyze the impacts from the proposed project, alternatives and cumulative build out. The project participated in the cumulative downtown traffic study conducted by City, and will be required to further analyze project specific impacts. These analyses will be discussed in the EIR.

QUESTIONS B, C AND E

Streets surrounding and traversing the project vicinity include I, J, K, 9th, 10th, and 11th streets. During construction there could be hazards due to construction activities. Project construction could create a hazard to pedestrians and cyclists, or inadequate emergency access resulting in a potentially significant impact. This issue will be further addressed in the EIR.

QUESTION D

Development of the mixed-use residential tower would result in intensified usage of the project site and increased parking demand. The proposed project would provide approximately 514 parking spaces. This would provide 1.6 spaces per dwelling unit; the city requirement is one space per unit and one guest space per 15 units, or a total of 342 spaces. The proposed project would exceed the parking requirements stipulated in the City Code; therefore, parking impacts would be less than significant.

QUESTIONS F

No existing or proposed bikeways would be impeded or removed as part of the proposed project. The proposed project would also be required as a condition of approval to maintain adequate pedestrian access to the site with all public improvements, in compliance with the City's Design Procedures Manual. The project will result in an increased demand on transit and alternative transportation modes in the City. This issue will be discussed in the EIR.

QUESTION G

The project is not adjacent to any rail line, waterway, or airport and would not result in uses that would generate significant rail, waterborne, or air traffic. Because of the height of the building including architectural details, this project will be reviewed by the Caltrans Department of Aeronautics. All airports are greater than 3 statute miles from the project site, thus the site is not within any airport approach zone. No helistop is proposed for the roof; fire safety will be provided by a dedicated freight elevator. Therefore, the proposed project would result in a less-than-significant impact to these modes of transportation.

MITIGATION MEASURES

Mitigation measures will be discussed in the EIR.

FINDINGS

The proposed project could result in a potentially significant impact for increased traffic congestion, could create hazards to safety due to design features, result in inadequate emergency, pedestrian and/or cycling access during project construction, or result in insufficient parking capacity and will be discussed further in the EIR. Impacts associated with rail, waterborne, and air traffic impacts are less-than-significant and will not be discussed further.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
7. BIOLOGICAL RESOURCES Would the proposal result in impacts to:			
A) Endangered, threatened or rare species or their habitats (including, but not limited to plants, fish, insects, animals and birds)?			✓
B) Locally designated species (e.g., heritage or City street trees)?			✓
C) Wetland habitat (e.g., marsh, riparian and vernal pool)?			✓

ENVIRONMENTAL SETTING

The Project Area is located in a densely developed Urban Land Habitat. There are no wetlands or water features on the project site. Urban Land Habitat does not support foraging or nesting habitat for any animal species on the State or Federal Endangered Species lists. There are three small street trees in planters along the J Street sidewalk, and no trees on 10th Street

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact would be significant if any of the following conditions or potential thereof, would result with implementation of the proposed project:

- Creation of a potential health hazard, or use, production, or disposal of materials that would pose a hazard to plant or animal populations in the area affected;
- Substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal;
- Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands); or

- Violation of the Heritage Tree Ordinance (City Code 12.64.040).

ANSWERS TO CHECKLIST QUESTIONS

QUESTION A

The project site is located in a developed urbanized area of the City. There is no vegetation on the site, and no threatened, endangered, or rare species within the project site. The project would have no impact on species or habitat.

QUESTION B

There are three very small (less than 2-inch diameter) street trees in planters along the J Street sidewalk, and no trees on 10th Street, thus no possibility of heritage trees present on the project site. The applicant proposes to plant trees in accordance with City requirements, as feasible due to the hollow sidewalk construction. Because there are no heritage trees present on the site the project would have no impact on locally designated species.

QUESTION C

The proposed project does not contain any wetlands or any soils or vegetation that indicate the presence of wetlands or waters of the US on the site. Therefore, the project would have no impact on wetland habitat.

MITIGATION MEASURES

No mitigation measures are required.

FINDINGS

There is no vegetation or habitat on this urban project site, thus biological impacts of the proposed project would be less-than-significant.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
8. <u>ENERGY</u> Would the proposal result in impacts to: A) Power or natural gas?			✓
B) Use non-renewable resources in a wasteful and inefficient manner?			✓
C) Substantial increase in demand of existing sources of energy or require the development of new sources of energy?			✓

ENVIRONMENTAL SETTING

Gas service is supplied to the City of Sacramento and the project site by Pacific Gas and Electric (PG&E). PG&E gas transmission pipelines are concentrated north of the City of Sacramento. Distribution pipelines are located throughout the City, usually underground along City and County public utility easements (PUEs).

Electricity is supplied to the City of Sacramento and the project site by the Sacramento Municipal Utility District (SMUD). SMUD operates a variety of hydroelectric, photovoltaic, geothermal, and co-generation powerplants. SMUD also purchases power from PG&E and the Western Area Power Administration. Major electrical transmission lines are located in the northeastern portion of the City of Sacramento.

STANDARDS OF SIGNIFICANCE

<u>Gas Service</u>

A significant environmental impact would result if a project would require PG&E to secure a new gas source beyond their current supplies.

<u>Electrical Services</u>

A significant environmental impact would occur if a project resulted in the need for a new electrical source (e.g., hydroelectric and geothermal plants).

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A THROUGH C

Increased demands on natural gas resources are met either by current PG&E infrastructure or upgraded/new facilities if the demand is increased beyond existing local infrastructure capacity. PG&E is currently planning to construct a 12-inch transmission line from Stockton to Sacramento, terminating at Meadowview. Other improvements are planned for tying into the growth occurring east of the City. The utility has not identified any major service problems within the City. Additional improvements are generally made as the need arises to meet customer demand (General Plan Technical Background Report, Section 4.5, June 2005). Project developers would be assessed the cost of upgraded/new facilities on a case-by-case basis if required because of the increased demand; new developments are required to coordinate through PG&E to assure that gas is efficiently supplied. The proposed project would not generate a demand that would require PG&E to secure a new gas source beyond their current suppliers.

As is the case with gas supply, increased electrical demands are met either by current infrastructure or upgraded/new facilities if the demand is increased beyond existing local infrastructure capacity. The proposed project will be assessed the cost of upgraded/new facilities if required because of the increased demand, as determined by SMUD. A significant environmental impact would result if a project resulted in the need for a new electrical source (e.g., hydroelectric and geothermal plants). The electrical demands of the residential tower would not result in a need for new power plants. New development may require the construction of additional electrical facilities, but SMUD anticipates no major problems in serving any newly developed areas within the City (General Plan Technical Background Report, Section 4.4, June 2005).

SMUD has a standard set of measures it requires for approval of new developments:

1. Contact the SMUD Electric System Design Department and consult with SMUD through project planning, development, and completion. Early notification and consultation will be required, since there is a lead time of 12 to 18 months for acquisition of equipment and extension or modification of facilities.
2. Work closely with SMUD during the design stage of the project to ensure that energy conservation and load management measures recommended by SMUD are implemented to the maximum extent feasible.
3. Work with SMUD to locate a vault for electrical transformers with the project as required.
4. Pay SMUD costs associated with any relocation of SMUD's electrical facilities due to project development.
5. Cooperate fully with SMUD in disclosing information concerning existing and proposed electrical facilities in the Project Area to those parties involved on acquisition of property within the area or the development, maintenance, or regular use of facilities located within the area.

The proposed project is also required to meet State Building Energy Efficient Standards (Title 24) and will have energy conservation measures built into the project. Therefore, the project's impact to energy sources is expected to be less-than-significant.

MITIGATION MEASURES

No mitigation measures are required.

FINDINGS

The proposed project would result in less-than-significant impacts to energy resources.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
9. <u>HAZARDS</u> *Would the proposal involve:* A) A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)?	✓		
B) Possible interference with an emergency evacuation plan?			✓
C) The creation of any health hazard or potential health hazard?	✓		
D) Exposure of people to existing sources of potential health hazards?	✓		
E) Increased fire hazard in areas with flammable brush, grass, or trees?			✓

ENVIRONMENTAL SETTING

The project vicinity is characterized by mostly small retail and commercial/office uses along J and K streets from 7th to 12th streets. Though this area is primarily commercial use, it contains several gasoline and diesel leaks, as well as the potential for many underground storage tanks (UST). The groundwater in this zone is known to have been contaminated. This area has a high risk for asbestos and lead, contains a large number of hollow sidewalks, and some unsafe structural conditions. In addition, the site has been occupied by a variety of businesses since the 1880s that could have installed boilers or USTs, or conducted operations such as dry cleaners that use hazardous chemicals. No environmental site assessments have been recently conducted on the site.

STANDARDS OF SIGNIFICANCE

For the purposes of this document, an impact is considered significant if the proposed project would:

- expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities;
- expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials; or
- expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A, C, AND D

The project consists of five developed parcels. The existing buildings to be demolished could contain asbestos and lead based paint, and equipment such as boilers. Previous uses could have included some kind of USTs or chemicals. In addition, this part of the downtown area is affected by the Union Pacific groundwater contamination plume, which extends from the Railyards Central Shops south to P Street (California Department of Toxic Substance Control, 2006). The contamination potential of all project parcels will be investigated and potential health risks and applicable regulations will be discussed in the EIR.

QUESTION B

Development on the project site would not interfere with either an adopted emergency response plan or an emergency evacuation plan. No routes used for emergency access and response would be adversely affected by either construction or operation of the proposed residential tower and ground floor retail/commercial uses.

QUESTION E

The proposed project would not create an increased fire hazard in areas with flammable brush, grass, or trees.

MITIGATION MEASURES

Any necessary mitigation measures will be discussed in the EIR.

FINDINGS

The proposed project could result in a potentially significant impact for the release of hazardous substances, create a health hazard, or expose people to a health hazard and will be discussed further in the EIR. Impacts associated with interfering with an emergency evacuation plan or an increased fire hazard are less-than-significant and will not be discussed further.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
10. <u>NOISE</u> *Would the proposal result in:* A) Increases in existing noise levels? Short-term Long Term	 ✓ ✓		
B) Exposure of people to severe noise levels? Short-term Long Term	 ✓ ✓		

ENVIRONMENTAL SETTING

The site is located in an urbanized environment, which is subject to noise from traffic corridors, trucks, and other noise sources typical of a downtown environment. Surface traffic noise is the dominant noise source in this part of the City. The site is also adjacent to Cesar E. Chavez Plaza/ Park, and uses could be exposed to excessive noise during activities in the park such as concerts or demonstrations.

STANDARDS OF SIGNIFICANCE

Thresholds of significance are those established by the Title 24 standards and by the City's General Plan Noise Element and the City Noise Ordinance. Noise and vibration impacts resulting from the implementation of the proposed project would be considered significant if they cause any of the following results:

- Exterior noise levels at the proposed project which are above the upper value of the normally acceptable category for various land uses (SGPU DEIR AA-27) caused by noise level increases due to the project;
- Residential interior noise levels of L_{dn} 45 dB or greater caused by noise level increases due to the project;
- Construction noise levels not in compliance with the City of Sacramento Noise Ordinance;
- Occupied existing and project residential and commercial areas are exposed to vibration peak particle velocities greater than 0.5 inches per second due to project construction;
- Project residential and commercial areas are exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations; and
- Historic buildings and archaeological sites are exposed to vibration peak particle velocities greater than 0.25 inches per second due to project construction, highway traffic, and rail operations.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A AND B

The proposed project would construct residential units in an urban environment, and generate additional vehicle trips on area roadways. Construction and normal operation at the project site could result in both a short term (construction) and long term (operation) increase in existing noise levels and potentially expose people to increased noise levels. Impacts associated with these issues are considered potentially significant and will be further addressed in the EIR.

MITIGATION MEASURES

Any necessary mitigation measures will be discussed in the EIR.

FINDINGS

The proposed project could result in a potentially significant impact for the increase to existing noise levels and could expose people to severe noise levels and will be discussed further in the EIR.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
11. <u>PUBLIC SERVICES</u> Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas: A) Fire protection?		✓	
B) Police protection?		✓	
C) Schools?			✓
D) Maintenance of public facilities, including roads?			✓
E) Other governmental services?			✓

Environmental Setting

The City's General Fund and other special collections such as Measure G, state school funds, and developer fees provide the financial support to achieve basic safety, school, library, and park services. The City does not recognize the level of provision of these services as physical environmental impacts. The City views police, fire, school, library, and park services as basic social services to be provided by the City. The level of service is based in part on the economic health of the service provider, in this case, the City of Sacramento.

Police/fire personnel, schools, libraries, and parks provide a wide range of services that are affected by population increases. These services, however, are generally not impacted by physical environmental effects created by the proposed project. Section 15382 of the CEQA Guidelines defines a significant effect on the environment as a substantial or a potentially substantial adverse change in any of flora, fauna, ambient noise, and/or objects of historic or aesthetic significance. An economic or social change is not by itself considered a significant effect on the environment.

The project is required to incorporate design features identified in the Uniform Building Code and the California Fire Code. Both the Police Department and the Fire Department are given the opportunity to review and comment on the site design features that could affect public or fire safety.

<u>Fire Protection</u>

The SFD provides fire protection services to the entire City, which includes the project site, and some small areas just outside the City boundaries within the County limits. The Sacramento Fire

Department operates approximately 21 stations in the City of Sacramento. The fire stations that serve the project site are Fire Station 1, located at 624 Q St with an Engine and Medic, and Fire Station 5 (HazMat), located at 731 Broadway with an Engine, Truck, and HazMat. The Battalion 1 Headquarters and Fire Station 2 located at 1229 I Street with an Engine, Truck, Hazmat, and CO_2 Trailer is the closest station to the project site.

Police Protection

The City Police Dept provides police protection for the City of Sacramento. The project site is within the service area of the William J. Kinney Police Station located at Marysville Boulevard and South Avenue, approximately five miles to the south.

Schools

The project site is served by Washington Elementary School (520 18th Street), Sutter Middle School (3150 I Street) and CK McClatchy High School (3066 Freeport Boulevard).

STANDARDS OF SIGNIFICANCE

For the purposes of this report, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, school facilities, roadway maintenance, or other governmental services.

ANSWERS TO CHECKLIST QUESTIONS

QUESTION A

The proposed project would construct 320 residential units at a height (420 feet). All new buildings that have floors used for human occupancy located more than seventy-five (75) feet above the lowest level of fire department access are regulated by City Municipal Code Section 15.100. The proposed project is above the ability of ladders to provide evacuation in an emergency, and would increase the number of fire personnel required to provide safety for the occupants, contributing to a cumulative demand in the Central City for an additional fire station, equipment, and company. This issue will be addressed in the EIR.

QUESTION B

The proposed project would increase the residential population in the Central City by approximately 532 persons, adding to a cumulative demand for increased staffing. The commercial/retail space and parking would contribute to traffic congestion and an increase in Police Calls for Service. The Police Department has indicated that although the direct impact of the proposed project is somewhat minimal with regard to police services, the cumulative impact of this project along with concurrent projects in the Central City core is significant. The Sacramento Police Department's existing police facilities are currently staffed beyond capacity and there currently are no police patrol facilities in the central downtown area. The cumulative residential growth in the Central City will necessitate the construction of a new police facility. This issue will be discussed in the EIR.

QUESTION C

The proposed project would construct up to 320 residential units, consistent with the overall growth projections of the City's General Plan (1988). The policies and implementation measures outlined below are contained in the City's General Plan. These policies are expected to be sufficient to provide adequate school facilities to accommodate any students that may live in the proposed project.

Goal A: Continue to assist school districts in providing quality education facilities that will accommodate projected student enrollment growth.

Policy 1: Assist school districts with school financing plans and methods to provide permanent schools in existing and newly developing areas in the City.

Policy 2: Involve school districts in the early stages of the land use planning process for the future growth of the City.

Policy 3: Designate school sites on the General Plan and applicable specific plans of the City to accommodate school district needs.

Policy 5: Continue to assist in reserving school sites based on each district's criteria, and upon the City's additional locational criteria as follows:

- Locate elementary schools on sites that are safely and conveniently accessible, and free from heavy traffic, excessive noise and incompatible land uses.
- Locate schools beyond the elementary level adjacent to major streets. Streets that serve as existing or planned transit corridors should be considered priority locations.
- Locate all school sites centrally with respect to their planned attendance areas.

Increases in school enrollment are triggered when residential development occurs and consequently a school impact fee is typically assessed. Due to the passage of Proposition 1A in November 1998, Senate Bill (SB) 50, Senate Bill (SB) 50 (Chapter407, Statutes of 1998) was enacted to change the way school districts can levy developer fees. SB 50 has resulted in full State preemption of school mitigation, enabling the district to collect a fee that is equal to the current statutory Level I fees. SB 50 also allows the district to collect additional fees in an amount that would approximate 50 percent of the cost of additional facilities, where justified. The collection of the 50 percent mitigation fees assumes that the State School Facility funding program remains intact and that State funds are still available for partial funding of new school facilities. If the funds are not available, districts may collect up to 100 percent mitigation fees under certain circumstances. Satisfaction of the statutory requirements by a developer (payment of fees) is deemed to be full and complete mitigation.

Goals and Policies adopted as mitigation measures for the City's General Plan Update (1988) were determined to mitigate impacts of growth on schools to less-than-significant levels. The proposed project would not generate new students beyond those anticipated as indirect impacts in the City's General Plan. School impact fees would be paid as mitigation for any effect on local schools, thus impacts on schools would be less-than-significant.

QUESTIONS D THROUGH E

Public rights-of-ways, driveways, alleys, and parking would all be designed and constructed in compliance with City standards. Any required project specific road improvements will be discussed in the transportation section of the EIR; roadway maintenance is funded through a variety of tax sources.

The proposed project would increase the residential population in the downtown area, which is served by a high level of existing governmental services. This would be consistent with the Regional Blueprint to provide increased densities in areas already served by public utilities and services. The proposed increase in residential population and a small retail employment population would not generate a demand for new or expanded services in the Downtown area. Impacts on governmental services would be less-than-significant.

MITIGATION MEASURES

Any necessary mitigation measures for fire services will be discussed in the EIR.

FINDINGS

The proposed project could result in a potentially significant impact for fire services, which will be discussed further in the EIR. Impacts associated with police services, schools, public facilities, and government services are less-than-significant and will not be discussed further.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
12. <u>UTILITIES</u> *Would the proposal result in the need for new systems or supplies, or substantial alterations to the following utilities:* A) Communication systems?			✓
B) Local or regional water supplies?			✓
C) Local or regional water treatment or distribution facilities?		✓	
D) Sewer or septic tanks?		✓	
E) Storm water drainage?		✓	
F) Solid waste disposal?			✓

ENVIRONMENTAL SETTING

<u>Water Supply/Treatment</u>

The City provides water service from a combination of surface and groundwater sources. The area south of the American River is served by surface water from the American and Sacramento Rivers. The City diverts water pursuant to riparian and pre-1914 rights, and pursuant to five post-1914 appropriative water rights. In 1957, the City and the U.S. Bureau of Reclamation agreed to a contract authorizing Sacramento to divert a maximum of 326,800 acre-feet per year (AFY) from the Sacramento and American Rivers (245,000 AFY from the American River, and 81,800 AFY from the Sacramento River) through the year 2030 and subsequent years. Of that total, the City is currently authorized to withdraw 205,500 AFY from the Sacramento and American Rivers, but the authorized diversions will increase over time until reaching the maximum level. With conservation efforts and a new requirement for retrofitting water meters on all City properties, the amount of water delivered by the City has decreased over recent years despite an increase in population. According to the Department of Utilities' Operation Statistics, water conservation savings for FY 2004/2005 was 3.7 percent, or 1,756 mg.

The City has developed an Urban Water Management Plan (UWMP) in accordance with the State's Urban Water Management Act. The UWMP describes water demand and supply within the City, evaluates methods related to the conservation of water, presents an urban water shortage contingency plan, and provides information on the availability of reclaimed water and its potential for use as a water source in the City. With the expanded facilities, water supply would be reliably provided to all areas of the City under buildout conditions. Growth of the City's water supply system is intended to primarily meet the City's needs within its service area, and also facilitate regional programs to conjunctively manage surface and groundwater supplies as part of the ongoing Water Forum implementation project.

Sanitary and Storm Sewers

The proposed project site is within a combined sewer system (CSS) maintained by the City of Sacramento, Department of Utilities. Existing CSS lines are located in portions of the adjacent rights of way.

Solid Waste

The Solid Waste Removal Division within the Department of Public Works is responsible for collecting solid waste, sweeping the streets, and abating litter.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact is considered significant if the proposed project would:

- Result in a detriment to microwave, radar, or radio transmissions;
- Create an increase in water demand of more than 10 million gallons per day;
- Substantially degrade water quality;
- Generate more than 500 tons of solid waste per year; or
- Generate stormwater that would exceed the capacity of the stormwater system.

ANSWERS TO CHECKLIST QUESTIONS

Construction Impacts on Utilities

The construction of the proposed project may result in short term disruption of public services and utilities. While steps are taken during construction planning to minimize disruption, some measure of disruption could occur. The source could either be the City (water services) or a private service provider, such as SMUD or PG&E. The City Utilities Department's standard practice is to inform adjacent property owners 10 days in advance of any water service disruption that will last longer than 4 hours (the Fire Department is included in the notification). City Utilities may shut off water services at any time in an emergency situation without prior notification. Outside agencies may, as a courtesy, inform adjacent businesses as well. This would be a less than significant impact.

QUESTION A

Many federal, state, and local government agencies, as well as private entities, use radio and microwave repeaters mounted on building rooftops. Radar dishes are also mounted on regional mountaintops. Most radar energy is receivable within a certain arc, or range, from the sending point to the receiving point. Obstacles such as tall buildings sometimes block communications within this range. Some systems require a clear line of sight for dependable communications, and any obstacle located between the sending point and the receiving point, including buildings, could block communications or create a blind spot in the communications system.

Sacramento County uses a radio system to allow communication between remote stream and rain gauges and the County Administration Building at 700 H Street, just north of the project site. The County Administration Building is also linked to the University of California, Davis Medical Center (UCDMC) by radio and microwave communications systems. The UCDMC is the major hub of the entire County radio communications system. The Sheriff’s Department operates an independent radio and microwave communications system between its offices at 711 G Street and mobile patrol units. The County also uses an independent radio and microwave system to communicate with County employees who work at Sacramento International Airport.

Sacramento County, in conjunction with the City of Sacramento, City of West Sacramento, City of Folsom, and ten fire agencies, installed a new communications system for police, fire, and local government agencies in 1996. The system, referred to as the Sacramento Regional Radio Communications System (SRRCS) was developed to avoid interference problems with buildings in downtown Sacramento.

The City of Sacramento operates radio communications systems to communicate with mobile police, fire, public safety, and public works units, and the City’s 911 Communications Center at 111 Bercut Drive. The City also communicates with the Sacramento County Jail located downtown on I Street between 6th and 7th streets.

The National Weather Service has a weather radar at 1416 9th Street that is used for severe weather forecasting. A radio system also connects state and federal hydrologic forecasting centers located there with a network of rain and stream gauges in the area. A new weather radar was installed in the Davis area in 1994. The Davis radar supplements the 9th Street radar, which will eventually be decommissioned. Use of the Davis radar avoids impacts to the National Weather Service weather forecasting system caused by tall buildings in downtown Sacramento.

Multi-story buildings throughout the downtown area have resulted in modifications to the communication systems to avoid building interferences. The proposed project will construct a retail/residential building up to 420 feet in height, and a microwave repeater or similar device may be required by the City to allow unhindered operation of any downtown telecommunication system. Communication issues are considered less-than-significant.

QUESTION B

The City of Sacramento provides water service to areas within the City limits from both surface and ground water sources. The City has water rights to 326,800 acre feet of water per year (AFY). Of this, Sacramento Municipal Utility District (SMUD) has rights to 15,000 AFY. About 100,000 acre-feet or 32 percent of available supplies were consumed by the city water users during 1990.

The City's Department of Utilities, Division of Water has a policy of serving all planned developments within the City boundary that are part of the City's General Plan, thereby allowing the City to plan future treatment facilities in advance of the required demand. Eventually, the City's water rights to the Sacramento and American rivers may be the limiting factor of future development beyond the year 2035; however, treatment capacity is currently the deciding factor in determining a level of significant impact on the City's Water System. The City has adequate water rights to supply anticipated demand within the City at buildout. New water supply system infrastructure would be coordinated with development as it occurs throughout the City, and all necessary infrastructure would be put in place to serve projects on a case-by-case basis. The proposed project would be required to contribute towards its share of expanding the water treatment facility to accommodate increases in flow through the system.

Assuming a demand factor of 225 gallons per day per residential unit, 600 gpd/1000 sf of restaurant, and 61 gpd/1000 sf of retail, the proposed project would generate a demand of less than 77,000 gpd, which is well below the 10 million gpd threshold of significance. Water supply impacts would be less-than-significant.

QUESTION C

Sewage treatment for the City of Sacramento is provided by the Sacramento Regional County Sanitation District (SRCSD). The SRCSD is responsible for the operation of all regional interceptors and wastewater treatment plants, while local collection districts maintain the systems that transport sewage to the regional interceptors. From the collection system and regional interceptors, sewage flows ultimately reach the Sacramento Regional Wastewater Treatment Plant (SRWTP), which is located south of the City of Sacramento east of Freeport Boulevard. The SRWTP has an existing treatment capacity of approximately 181 million gallons per day (mgd) of seasonal dry-weather flow and 392 mgd of peak wet-weather flow (SRWTP Master Plan Draft Update, 1995). This expanded capacity is anticipated to serve a projected year 2005 service area population of approximately 1.6 million people.

Currently, the City has an agreement with SRWTP to deliver no more than 60 mgd peak flow from the City's Sump 2 service area to the regional interceptor sewer. The SRWTP is a secondary treatment facility that provides raw influent and effluent pumping, primary clarification, secondary treatment with the high-purity oxygen activated sludge process, disinfection, solids thickening, and anaerobic solids digestion.

When CSS flows are greater than 60 mgd, CSS flows are diverted to the City's Combined Wastewater Treatment Plant (CWTP), located near South Land Park Drive and 35th Avenue, which only provides primary treatment. Wet weather flows are known to exceed system capacity during heavy storm events. Flows during heavy storm events, which are in excess of the 190 mgd combined capacities of the SRWTP (60 mgd) and CWTP (130 mgd), result in a combined sewer overflow (CSO). During CSO events, the City diverts excess flows to the Pioneer Reservoir for storage, which has a capacity of 28 mgd. When the Pioneer Reservoir reaches capacity, excess flows are directly discharged into the Sacramento River without treatment. When the pipeline system and treatment plant capacities are surpassed, the excess flows flood local streets in the downtown area through manholes and catch basins. Exposure of people to untreated wastewater creates a health risk. This issue will be discussed in the EIR under Public Services and Utilities.

QUESTIONS D AND E

As noted above, the site is served by the City of Sacramento's Combined Sewer Service System (CSS). This system consists of a single network of pipelines that collect both storm water drainage and sanitary sewer discharges.

An impact is considered potentially significant if a development project represents an increase in flow of wastewater in excess of 40 Equivalent Single Family Dwelling Units (ESD) to the CSS. An ESD is equal to 400 gallons per day. To convert gallons per day (gpd) to ESD, the gpd calculation is divided by 400. The proposed project is expected to exceed this threshold. Any impacts to the CSS are considered significant and adverse, and will be analyzed in the EIR.

QUESTION F

The City of Sacramento, Department of Public Works, Solid Waste Division currently collects most of the solid waste in the project area. Most commercial establishments, however, hire private collectors to dispose of their dry solid waste. Waste generated within the City is taken to a transfer station, where a private contractor provides disposal to appropriate landfills consistent with federal, state, and local statutes and regulations. The proposed project would not result in growth beyond that anticipated in the General Plan and solid waste disposal projections.

Solid waste generation rates, provided by the City of Sacramento Utilities Department, for commercial uses at 1 lb/100 sf/day and residential apartments at 8 lbs/unit/day would result in approximately 2,690 pounds of waste per day from the proposed project, or 491 tons per year. This is less than the 500 tons per year threshold.

State Assembly Bill 939 (AB 939) required all cities to develop a source reduction and recycling program to achieve at least a 50 percent diversion of waste from the landfill. To comply with the AB 939 requirements, the City of Sacramento amended its comprehensive Zoning Ordinance to include a Recycling and Solid Waste Disposal Regulations section. The Recycling and Solid Waste Disposal Regulations call for all commercial, office, industrial, public/quasi-public, and 5-unit or more multiple family residential developments to create a recycling program which includes a flow chart depicting the routing of recycled materials and a site plan specifying the designing components and storage locations associated with recycling efforts. The proposed project would be required to implement this plan and would result in less-than-significant solid waste impacts.

MITIGATION MEASURES

Any necessary mitigation measures will be discussed in the EIR.

FINDINGS

The proposed project could result in a potentially significant impact on the CSS and sewage treatment facilities, and will be discussed further in the EIR. Impacts associated with communication systems, water supplies, and solid waste disposal are less-than-significant and will not be discussed further.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
13. <u>AESTHETICS, LIGHT AND GLARE</u> Would the proposal: A) Affect a scenic vista or adopted view corridor?	✓		
B) Have a demonstrable negative aesthetic effect?	✓		
C) Create light or glare?	✓		
D) Create shadows on adjacent property?	✓		

ENVIRONMENTAL SETTING

The project site is located in Sacramento's Central Business District (CBD), generally extending from 3rd Street to 16th Street and from I Street to N Street inside the Core Area, which extends from H Street to R Street and from 16th Street to the Sacramento River. The Core Area is the most intensely developed area of the City and serves as the government, civic, office, and entertainment center of the Region.

Through historic growth and development, and the planned efforts of the City and Redevelopment Agency, the City of Sacramento has promoted the concept of a compact urban core in the Central City. In accordance with policies such as the Urban Design Plan and the CBD Zone, sections of the CBD and Core are the only areas in the City with no height limitations, except within the two-block area around Capitol Park subject to the Capitol View Protection Ordinance. As a consequence, the project vicinity includes a number of high rise office towers.

The site is faces Cesar Chavez Plaza to the west, and the historic City Hall building is located along the Plaza's northern boundary. A parking garage is located immediately north of the site, and tall buildings surrounding the Plaza include the CalEPA building at 10th and I streets, the US Bank building at 9th and J streets, and the 926 J building at the southwest corner of 10th and J streets.

STANDARDS OF SIGNIFICANCE

Light

Light is considered significant if it would be cast onto oncoming traffic or residential uses.

Glare

Glare is considered to be significant if it would be cast in such a way as to cause public hazard or annoyance for a sustained period of time.

Shadows

New shadows from developments are generally considered to be significant if they would shade a recognized public gathering place (e.g., park) or place residences/child care centers in complete shade.

ANSWERS TO CHECKLIST QUESTIONS

QUESTION A

The proposed project is located on J and 10th streets, which are both identified as Priority Streetscapes and designated Protected Views and Vistas corridors (§16.0). The Urban Design Plan (UDP) protects these streets from development that would in any way block views and vistas. The impact of the proposed project on these view corridors is potentially significant and will be considered in the EIR.

QUESTION B

The site has been identified in the General Plan and Central City Community Plan as an appropriate location for urban development. In addition, the proposed project will be required to meet the design and performance standards identified in the UDP and the Design Standards for the Central Business District C3-SPD zone.

The Merged Downtown Redevelopment project area is included in the UDP, and the proposed project is within this redevelopment area. The proposed project is also within the Central City Historic District and the project's design will be reviewed by the Design Review and Preservation Board staff to ensure design compliance with adjacent land uses. The design of the proposed project may potentially be inconsistent with the goals for the UDP. The EIR will compare the urban design characteristics of the proposed project with the project area, adjacent land uses, existing site, and against adopted City policies on urban design.

QUESTIONS C AND D

Solar glare created by the reflection of light off building surfaces has the potential to create impacts if it causes distracting glare for drivers on city streets or on nearby freeways. As the sun travels from east to west, areas of glare may be produced as the sun hits the surface of a building and reflects from that surface. The height and width of a structure affects the area of glare. The length (size) of the glare changes during the year with the longer areas of glare occurring during the winter and shorter areas during the summer. The proposed office/retail/residential building may be visible from local streets as well as Interstate 5 and State

Highway 160 at angles that could produce glare (although usually at an angle and not front-on glare) and could potentially produce a significant glare impact. This issue will be discussed in the EIR.

Any new high rise structure modifies the shade/shadow pattern in the project vicinity. During the summer in Sacramento, additional outdoor shade may be a beneficial effect. In winter, cutting off the sun may increase heating bills or pedestrian discomfort. Increased shading may also affect plant growth and interfere with utility of public gathering places, such as Cesar Chavez Plaza. Because the sun is higher on the horizon in summer, shadow lengths are generally shorter. The beneficial effect of summer shade may be overcompensated by unwelcome winter sun blockage. A significant shadow impact is identified where a recognized public gathering place or residential properties are completely shaded by the proposed project. Winter shadows could potentially adversely affect public spaces such as Cesar Chavez Plaza, thus this issue will be discussed in the EIR.

MITIGATION MEASURES

Any necessary mitigation measures will be discussed in the EIR.

FINDINGS

The proposed project could result in potentially significant impacts to aesthetics, light and glare, shadows and will be discussed further in the EIR.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
14. <u>CULTURAL RESOURCES</u> *Would the proposal:* A) Disturb paleontological resources?	✓		
B) Disturb archaeological resources?	✓		
C) Affect historical resources?	✓		
D) Have the potential to cause a physical change which would affect unique ethnic cultural values?	✓		
E) Restrict existing religious or sacred uses within the potential impact area?	✓		

ENVIRONMENTAL SETTING

The area near the confluence of the Sacramento and American Rivers, including this portion of Downtown Sacramento, is considered a sensitive archaeological area by the Sacramento General Plan Update (SGPU) Draft EIR (SPGU DEIR Page V-6). Significant archaeological resources have been identified in the project vicinity, including Native American burial grounds at Cesar Chavez Park and City Hall, and significant historic deposits at 8th and J streets.

The project site contains several buildings greater than 50 years old, and hollow sidewalks are present along both the 10^{th} and J streets frontages. The site also contains one of the last remaining remnants of an historic alley.

STANDARDS OF SIGNIFICANCE

Cultural resource impacts may be considered significant if the proposed project would result in one or more of the following:

- Cause a substantial change in the significance of a historical or archaeological resource as defined in CEQA Guidelines Section 15064.5 or
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A THROUGH E

The physical environment of the project site has been greatly altered by human modification over the past 150 years. Specifically, the urbanization of the City of Sacramento has greatly altered the pre-1850 environment. On a larger scale, the deposition of deep alluvial soils over the past 10,000 years has buried any early archaeological resources. Nonetheless, the area near the confluence of the Sacramento and American rivers, including this portion of Downtown Sacramento, is considered a potentially sensitive archaeological area by the Sacramento General Plan Update (SGPU) Draft EIR (SPGU DEIR Page V-6). Significant archaeological resources have been identified nearby, including Native American burial grounds at Cesar Chavez Park and City Hall, and significant historic deposits at 8th and J street. Disturbance of the site may uncover resources, which would constitute a potentially significant impact. The potential impact of the project on cultural resources will be discussed in the EIR.

Several structures in the project vicinity are listed structures in the City's Sacramento Register and subject to City protections, and several buildings on the site are greater than 50 years old. In addition, there are underground sidewalks along 10th and J streets from the late 1800s when the street level was raised for flood control and the historic alley features represent one of four remaining alleys in the CBD. The potential impact of the project on historic resources will be discussed in the EIR

MITIGATION MEASURES

Any necessary mitigation measures will be discussed in the EIR.

FINDINGS

The proposed project could result in a potentially significant impact for paleontological, archaeological, and historic resources or affect unique ethnic cultural values and/or religious or sacred uses and will be discussed further in the EIR.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
15. <u>RECREATION</u> *Would the proposal:* A) Increase the demand for neighborhood or regional parks or other recreational facilities?			✓
B) Affect existing recreational opportunities?			✓

ENVIRONMENTAL SETTING

Neighborhood parks nearest the project site include Cesar E. Chavez Plaza, St. Rose of Lima Park, Discovery Park, and Old Sacramento.

STANDARDS OF SIGNIFICANCE

Impacts to recreational resources are considered significant if the proposed project would do either of the following:

- cause or accelerate substantial physical deterioration of existing area parks or recreational facilities; or
- create a need for construction or expansion of recreational facilities beyond what was anticipated in the General or Community Plan.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A AND B

The City's General Fund and other special collections provide the financial support to achieve basic park and recreational services. The City does not recognize the level of provision of these services as physical environmental impacts. The City views park services as basic social services to be provided by the City. The level of service is based in part on the economic health of the service provider, in this case, the City of Sacramento.

Parks provide a wide range of services that are affected by population increases. These services, however, are not impacted by physical environmental effects created by the proposed project. Section 15382 of the CEQA Guidelines defines a significant effect on the environment as a substantial or a potentially substantial adverse change in any of flora, fauna, ambient noise, and/or objects of historic or aesthetic significance. An economic or social change is not by itself considered a significant effect on the environment.

Development on the project site could increase the demand for recreation resources by new residents and employees. Cesar E. Chavez Plaza, St. Rose of Lima Park, Discovery Park, and Old Sacramento are located in the vicinity of the project site, and contain the capacity to accommodate new residents and employee increases in the CBD. The project site is located within the City's Central City Planning Area, which contains 20 parks with a total of over 83 developed acres and approximately 185 parks city-wide.

In addition, the project proponent would be required to pay in-lieu fees, in accordance with the provisions of the Quimby Act, requiring residential developers to dedicate land or in-lieu funds toward park development. Residents and guests of the project are anticipated to use some of the park facilities in the vicinity of the project site and other city-wide facilities. However, the population generated by the proposed project would not increase the use of the parks such that there would be substantial physical deterioration of the facility or that additional or expanded recreation facilities would be required. The impact on recreational facilities would be less-than-significant.

MITIGATION MEASURES

No mitigation measures are required.

FINDINGS

The proposed project would result in less-than-significant impacts to recreational resources.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-significant Impact
16. <u>MANDATORY FINDINGS OF SIGNIFICANCE</u> A. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	✓		
B. Does the project have the potential to achieve short-term, to the disadvantage of long-term environmental goals?	✓		
C. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	✓		
D. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? Disturb paleontological resources?	✓		

Answers to Checklist Questions

Question A

The proposed project would involve excavation and pile driving in an area known to contain sensitive historic and archaeological resources, and would demolish several buildings over 50 years old. These issues will be discussed in the EIR.

Question B & C

The proposed project is anticipated, in conjunction with other projects in the City, to potentially have a cumulative adverse impact on air quality, traffic congestion, and the combined sewer system. Cumulative impacts will be discussed in the EIR.

Question D

Any of the identified potential impacts for air quality, noise, transportation, cultural resources, hazards and hazardous materials, aesthetics or public services could cause a substantial adverse effect on human beings, either directly or indirectly. These issues will be discussed in the EIR.

SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would potentially be affected by this project.

	Land Use and Planning	✓	Hazards
	Population and Housing	✓	Noise
	Seismicity, Soils and Geology	✓	Public Services
	Water	✓	Utilities and Service Systems
✓	Air Quality	✓	Aesthetics
✓	Transportation/Circulation	✓	Cultural Resources
	Biological Resources		Recreation
	Energy and Mineral Resources	✓	Mandatory Findings of Significance
	None Identified		

SECTION V - DETERMINATION

On the basis of the initial evaluation:

I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because the project-specific mitigation measures described in Section III have been added to the project. A NEGATIVE DECLARATION will be prepared.

X I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

Gail M. Ewing for

Signature

6/2/06

Date

DANA ALLEN

Printed Name

REFERENCES CITED

This analysis is incorporating by reference the general discussion portions of earlier environmental documents (CEQA Guidelines Section 15150(a)). These documents are available for public review at the City of Sacramento, Development Services Department, 915 I Street, 3rd Floor, Sacramento, CA 95814.

- *City of Sacramento General Plan*, City of Sacramento, January 19, 1988
- *City of Sacramento Zoning Code*, current through Ordinance 2005-097 and the February 2006 code supplement, City of Sacramento, http://ordlink.com/codes/sacramento/index.htm
- *City of Sacramento General Plan Update Draft and Final Environmental Impact Report*, City of Sacramento, Draft EIR dated March 2, 1987, and Final EIR dated September 30, 1987
- *Guide to Air Quality Assessment in Sacramento County*, Sacramento Metropolitan Air Quality Management District, July 2004
- *Sacramento Register*, City of Sacramento Listing of Landmarks, Historic Districts, and Contributing Resources, updated August 2004
- *Merged Downtown Redevelopment Plan EIR,* Redevelopment Agency of the City of Sacramento, Downtown Development Group, November 5, 2004
- *Cultural and Entertainment District Master Plan*, City of Sacramento, adopted May 990
- *Sacramento Central City Community Plan*, City of Sacramento, adopted May 15, 1980, reflects City Council amendments through February 25, 1997
- *Sacramento Central City Housing Strategy*, Sacramento Housing and Redevelopment Agency and Department of Planning and Development, City of Sacramento, May, 1991
- *Sacramento Urban Design Plan*, Central Business District Urban Design Framework Plan, Sacramento Housing and Redevelopment Agency, adopted February 18, 1987.
- *The Towers on Capitol Mall Draft Environmental Impact Report*, City of Sacramento, May 2005.

APPENDIX C

AIR QUALITY BACKGROUND DATA – URBEMIS

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Metropolitan.urb
Project Name: Metropolitan
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	31.32	233.86	235.71	0.03	19.96	10.41	9.55

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	31.26	222.51	243.34	0.00	9.60	9.49	0.11

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	21.39	2.55	2.51	0.00	0.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	15.30	13.12	131.15	0.07	12.13

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	36.69	15.67	133.66	0.07	12.14

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\Metropolitan.urb
Project Name: Metropolitan
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: March, 2007
Construction Duration: 15.6
Total Land Use Area to be Developed: 0.955 acres
Maximum Acreage Disturbed Per Day: 0.955 acres
Single Family Units: 0 Multi-Family Units: 320
Retail/Office/Institutional/Industrial Square Footage: 13000

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	4.83	-	4.83
Off-Road Diesel	6.62	39.35	56.31	-	1.26	1.26	0.00
On-Road Diesel	0.85	16.60	3.11	0.03	0.43	0.36	0.07
Worker Trips	0.09	0.18	1.93	0.00	0.01	0.00	0.01
Maximum lbs/day	7.56	56.13	61.35	0.03	6.53	1.62	4.91
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	9.55	-	9.55
Off-Road Diesel	7.91	54.93	62.48	-	2.29	2.29	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.02	0.01	0.26	0.00	0.00	0.00	0.00
Maximum lbs/day	7.93	54.94	62.74	0.00	11.84	2.29	9.55
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	30.59	233.42	226.39	-	10.40	10.40	0.00
Bldg Const Worker Trips	0.73	0.44	9.33	0.00	0.12	0.01	0.11
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	31.32	233.86	235.71	0.00	10.52	10.41	0.11
Max lbs/day all phases	31.32	233.86	235.71	0.03	19.96	10.41	9.55
*** 2008***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	30.59	222.10	234.65	-	9.48	9.48	0.00
Bldg Const Worker Trips	0.67	0.41	8.69	0.00	0.12	0.01	0.11
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	31.26	222.51	243.34	0.00	9.60	9.49	0.11
Max lbs/day all phases	31.26	222.51	243.34	0.00	9.60	9.49	0.11

Phase 1 - Demolition Assumptions
Start Month/Year for Phase 1: Mar '07
Phase 1 Duration: 2.7 months
Building Volume Total (cubic feet): 682500
Building Volume Daily (cubic feet): 11500
On-Road Truck Travel (VMT): 639
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
5	Rubber Tired Loaders	165	0.465	8.0

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: May '07
Phase 2 Duration: 1.4 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	417	0.490	8.0
1	Rubber Tired Dozers	352	0.590	8.0
1	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jul '07
Phase 3 Duration: 11.5 months
Start Month/Year for SubPhase Building: Jul '07
SubPhase Building Duration: 11.5 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
15	Other Equipment	190	0.620	8.0

SubPhase Architectural Coatings Turned OFF
SubPhase Asphalt Turned OFF

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.20	2.54	1.13	0	0.00
Hearth - No summer emissions					
Landscaping	0.21	0.01	1.38	0.00	0.00
Consumer Prdcts	15.66	-	-	-	-
Architectural Coatings	5.33	-	-	-	-
TOTALS(lbs/day,unmitigated)	21.39	2.55	2.51	0.00	0.01

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Condo/townhouse high rise	9.73	7.30	74.90	0.04	7.16
General Retail Space	5.57	5.82	56.25	0.03	4.97
TOTAL EMISSIONS (lbs/day)	15.30	13.12	131.15	0.07	12.13

Includes correction for passby trips.
Includes the following double counting adjustment for internal trips:
Residential trips: 35.38 % reduction. Nonresidential trips: 28.06 % reduction.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Condo/townhouse high rise	0.96	2.89 trips/dwelling unit	320.00	924.00
General Retail Space		99.77 trips/1000 sq. ft.	13.00	1,297.00

Sum of Total Trips 2,221.00
Total Vehicle Miles Traveled 7,976.38

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	9.7	3.8	4.6	7.8	4.5	4.5
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
General Retail Space				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse high rise have changed from the defaults 5.26/5. to 4.46875/.955

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

Changes made to the default values for Area

The hearth option switch changed from on to off.
The landscape year changed from 2005 to 2008.

Changes made to the default values for Operations

The pass by trips option switch changed from off to on.
The double counting option switch changed from off to on.
The operational emission year changed from 2005 to 2008.

Construction Emissons Mitigation Fee Calculation

PART 1: PROJECT INFORMATION

Project Name:	Metropolitan Project		
Control/Application #:			
Single Family Dwelling Units:	0	*Note: Enter information only in blue bordered cells*	
Multi Family Dwelling Units:	320	Total Residential Acreage:	0.99
Non-residential Square Feet:	13000	Total Non-residential Acreage:	

PART 2: EMISSIONS INFORMATION

	Activity Phase	NOx (lbs/day) unmitigated	NOx (lbs/day) mitigated*	NOx over threshold (lbs/day)	duration (days)	Total significant NOx (lbs)
Year 1	Demolition	56.13	44.90	0	13	0.00
Year 1	Grading	54.94	43.95	0	31	0.00
Year 1	Building Construction	233.86	187.09	102.09	176	17967.49
Year 2	Building Construction	222.51	178.01	93.01	77	7161.62
Year 2	Asphalt		0.00	0		0.00
	Total project Nox over threshold (lbs)		*25129.10*			
	Total project Nox over threshold (tons)		*12.56*			

PART 3: MITIGATION FEE RESULTS

Total Mitigation fee ($14,300/ton)	***$179,673***
Mitigation Fee ($/acre)	**$181,487.97**

* assumes a construction mitigation plan which achieves a 20% reduction in NOx

APPENDIX D

CULTURAL RESOURCES SENSITIVITY STUDY

CULTURAL RESOURCE SENSITIVITY STUDY FOR THE
METROPOLITAN PROJECT,
SACRAMENTO, CALIFORNIA

Prepared for:

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June 2006

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240 WEST E STREET, SUITE B
Dixon, CA 95620

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Dixon, CA 95620

INTRODUCTION

This letter reports the findings of our sensitivity study for the Metropolitan Project conducted as part of the Environmental Impact Report (EIR) required by the California Environmental Quality Act (CEQA). TREMAINE was contracted to identify potential impacts of the proposed project on historic and cultural resources contained within the grounds of the project area.

PROJECT LOCATION & DESCRIPTION

The proposed project is located in the southern half of the city block between I and J streets and 10th and 11th streets (10-11/IJ) within the City of Sacramento. The proposed re-development will consist of demolition of existing structures and construction of a 420 foot high, 39-story mixed-use tower development, at the corner of 10th and J streets, which will accommodate 320 residential condominium units, as well as commercial/retail units at street level facing both 10th and J streets.

Redevelopment fronting J Street (west of existing 5-story building) will involve demolition of three existing structures on 1009 J to 1023 J; while the redevelopment fronting 10th Street (south of the alley) will involve demolition of two existing structures at 921 10th Street and 927 10th Street. A new mixed-use building will be constructed across the five parcels and will include ground floor retail with one (1) subterranean level and condominium units above podium parking accessed from the alley.

METHODS

This study involved a records search of the project area and vicinity (1-block radius) (Figure 1) at the North Central Information Center (NCIC) of the California Historical Resources Information System, identifying any known or previously recorded prehistoric sites (File No. SAC-06-79). NCIC staff reviewed the National Register of Historic Places (National Park Service 1988, Computer Listings 1966 through 2000), the Directory of Properties in the Historic Property Data File for Sacramento County also known as the State of California Historic Properties Directory City of Sacramento Listings (California Department of Parks and Recreation 2005a), the California Register of Historical Resources (California Department of Parks and Recreation 2005b), the California Inventory of Historic Resources (California Department of Parks and Recreation 1976), California State Historical Landmarks (1979), California Points of Historical Interest (California Department of Parks and Recreation 1992), City of Sacramento Historic Resources Inventory (March 2005), General Land Office plat maps (1860 Rancho New Helvetia, 1866/1872 GLO plat T 8N/R 4E), and historic maps (1849 Sacramento

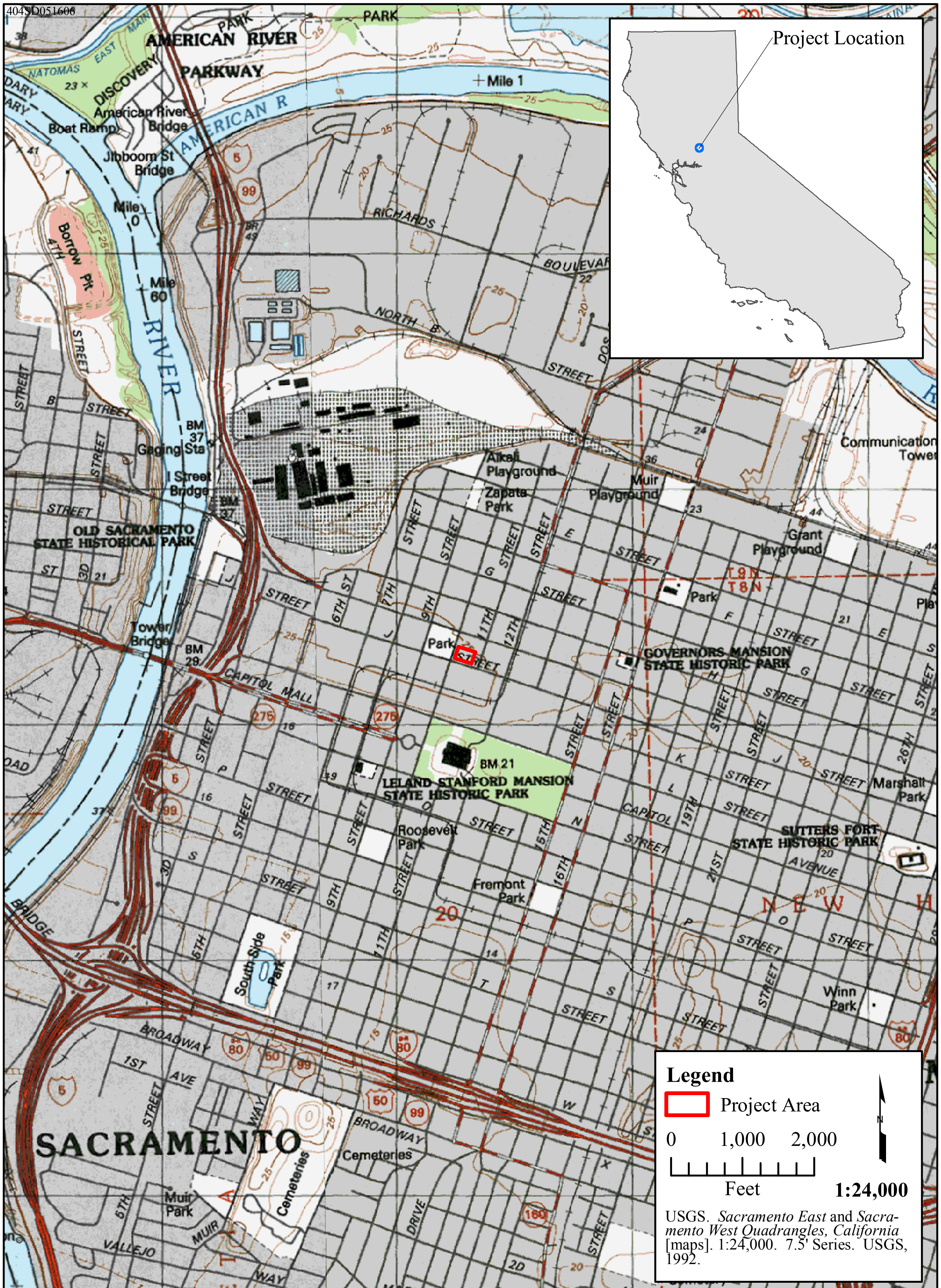

Figure 1. Project Vicinity Map.

Valley, 1892 USGS Sacramento Sheet, 1911 USGS Brighton Quad, and 1967 USGS Sacramento East 7.5' Quad).

An additional search was made at the Sacramento Archives and Museum Collection Center (SAMCC). These searches were made to acquire information on the historic topography in the vicinity, any records of historic development (e.g., checking the City Assessor's maps, Sanborn Fire Insurance Maps; historic photos etc.) prior to modern-day occupation, geological and soils maps, and historic aerials. Historic maps were scanned and geo-referenced to existing plans in an effort to evaluate subsurface resource-sensitivity within the bounds of the project.

FINDINGS

Seven studies (Hider & Mikesell 1991; Holman 1987; Jones & Stokes 2001; Nelson 2005; Praetzellis 1987; Praetzellis et al. 1993; Cultural Resources Unlimited 1998; Tremaine 2006) have been conducted, and two archaeological sites (CA-SAC-38 and CA-SAC-670-H) are recorded within a one-block radius of the project area.

Prehistoric Sites

One prehistoric site (CA-SAC 38) was recorded within a one-block radius of the project area and two other prehistoric sites (CA-SAC-36 and RT-1) were recorded within a half-mile radius of the project (Figure 2).

Site CA-SAC-38 is located across the street from the Metropolitan Project, at the intersection of I and 10th streets (within Cesar Chavez Park and under the Sacramento City Hall and the EPA building) (Heizer 1934a; Hider and Mikesell 1991; Tremaine 2006). This site is noted as the village of *Sa'cum* in the 1850 lithograph (Casselear and Bainbridge n.d.). A portion of SAC-38 has been excavated as part of the City Hall expansion project (TREMAINE-report in progress). The site appears to be quite large and spans over 8,000 years of prehistory. Several Native American burials were recovered.

As part of the Downtown Sacramento Amtrak and Folsom Corridor Light Rail Transit Project, an unanticipated discovery (RT-1) was made during archaeological monitoring of trenching work on 6th and H streets (Tremaine 2006). It is situated approximately 1,400 feet northwest of the proposed Metropolitan Project. Of primary concern were human skeletal remains identified at nine feet below street grade, lying beneath a concrete duct bank. These were determined to be Native American in origin based on the presence of *olivella* shell beads lining the base of the cranium. Additional burials, cremations, hearth features, and the

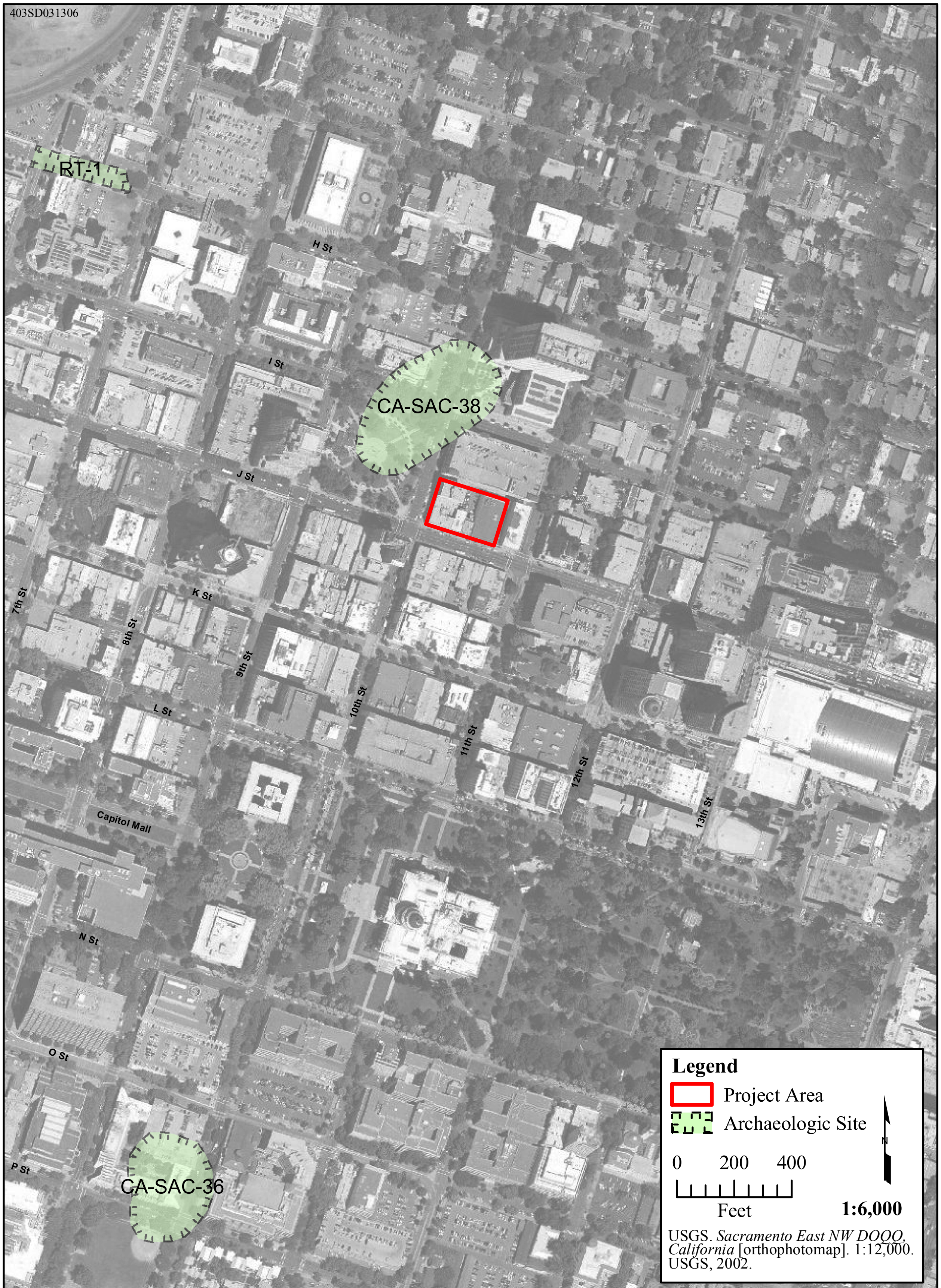

Figure 2. Prehistoric Resources.

Tremaine & Associates, Inc.

floor of a large semi-subterranean assembly house were found. This site is situated on what, historically, would have been the east side of Sutter Lake.

Site CA-SAC-36 is located six blocks south of the Metropolitan Project, at 10th and P streets. No additional information is provided on the site record, except that a house was located on the site at the time it was recorded (Heizer 1934b).

Historic Resources

As a result of the record search and literature review, five properties (921 9th Street, 927 9th Street, 1009 J Street, 1013 J Street, and 1017 J Street) are listed or will be listed in the Historic Property Data File for Sacramento County within the project area. Additionally, a number of historic properties were identified in the Historic Property Data File, Sacramento Register, and National Register of Historic Places (NRHP) within a one-block radius of the project location (Table 1). The NCIC also identified one historic site (CA-SAC-670H) previously recorded within a one-block radius of the project and several other sites in the surrounding area (approximately 1/4 mile radius). Other archaeological excavations in the downtown area were also identified. Although the project area does not lie within a historic district; it is adjacent to two approved historic districts. There are no State Historic Landmark properties, California Inventory of Historic Resources properties, or California Points of Historical Interest located within a one-block radius of the project.

<u>Structures within the Project Area</u> (see Figures 3 & 4)

921 9th Street

This building, commonly known as the Plaza Building, was built in 1906. It was originally built as the Redman's Wigwam, for the Improved Order of the Red Men. The local Sacramento tribes were the Cosumnes Tribe No. 14, the Red Jacket Tribe No. 28, the Owosso Tribe No. 39, and the Red Cloud Tribe No. 41 (http://mill-valley.freemasonry.biz/marin-fraternities-Appendix04.htm). The building was recorded by Don Cox of Historic Environment Consultants (1981).

927 9th Street

This building, commonly referred to as the Retail Credit Association Building, was designed by prominent local architect Harry Devine in 1940. The first major tenant was the Retail Credit Association. The building was recorded by Paula Boghosian of Historic Environment Consultants in 2001.

1009 J Street

This building, located at 1009 J Street, is currently known as the Biltmore Hotel, was constructed in 1882 after the previous building (Sacramento Plow Factory) owned by W.B. Ready burned in the summer of 1879 (Thompson and West 1880). While the Biltmore opened its doors in 1918, previous proprietors

Table 1. Hisoric Properties Located Within Project Vicinity (1-Block Radius).

Key
Located within project area
Conflicting information regarding location

Number	Street	Construction Date	Historic Name	National Register	California Register	Sacramento Register	Historic Property Data File for Sacramento County
921	10th Street	1906	Redman's Wigwam, Plaza Building				×
1000	10th Street	1860	California State Capitol	×	×		×
1011	10th Street	1938	American Trust Company, Wells Fargo			×	×
1017	10th Street		Recess Room				×
1017	10th Street	1911-1912				×	
1118	10th Street		Federation of California Teachers/				×
1010-1012	10th Street	1912-1913	Ms. Dora Werner-Hair Dresser			×	×
1016-1020	10th Street	1925	Hart Brothers Cafeteria, Fabric Ce			×	×
1019-1021	10th Street	1909-1910	Sacramento Glass and Crockery Company			×	×
915	11th Avenue		Pumping Station No. 2		×		
719	11th Street	c. 1870				×	×
915	11th Street	1878				×	×
921	11th Street	(1925)1926	Elks Building /Sacramento BPOE Temple		×	×	×
1012	11th Street	1912	Taking Care of Business				×
1020	11th Street	1910-1911	Mohr and Yoerk Realty Co.			×	
1106	11th Street	1911-1912	Hotel Regis			×	
1110	11th Street	1913-1914	Howe Apartments, El Cortez Apartments			×	×
1112	11th Street	1923	Cordano Company/ Majestic Theater				×
1117	11th Street	1939	Bedell's, The Lobby				×
1017-1025	11th Street	1887	Cathedral of the Blessed Sacrament			×	×
1127-1131	11th Street	1928	Sacramento Medical Dental Building			×	×
816	12th Street	1914	Jim Denny's			×	×
906	12th Street	1925	Amerin Restaurant/hotel Congress				×
908	12th Street	1920	Schwab Tire Company				×
909	12th Street	1942	American Lung Association Building				×
912	12th Street	1912	Hotel ridgeway/Hotel Del Paso				×
1005	12th Street	1925	Corum Building				×
1020	12th Street	1915	Trust Building				×
1111	12th Street	1923-1924	Weinstock, Lubin, & Company	aka 1130 K Street		×	×
1127	12th Street	1924	Francesca Apartments				×
1011-1013	12th Street	1923-1924	W.D. Fuller and Company / Jerry Shams Sho			×	×
922	9th Street	1880	St. Louis Saloon				×
922	9th Street	unknown		Demolished		×	
1009	9th Street	1878	Jones, Ingram Blacksmiths, HFC FI				×
1015	9th Street	1931	The Peoples Acceptance Building, S				×
1107	9th Street	1911	Forum Building			×	×
1125	9th Street	unknown				×	
1013 &1015	9th Street	1878-1879	The People's Acceptance Building			×	
1017-1031	9th Street	1870	I.O.O.F. Temple			×	×
1117-1131	9th Street	1912-1913	Siller Building, Capital Park Hotel			×	×
1127 &1129	9th Street	1912	Seadler & Hoen			×	
1127 &1129	9th Street	1911				×	
917	H Street						×

Number	Street	Construction Date	Historic Name		National Register	California Register	Sacramento Register	Historic Property Data File for Sacramento County
925	H Street	1885	Llewellyn Williams Mansion				×	
1021	H Street	1871	Julius Wetzler House		×	×		×
1021	H Street	c. 1885	Latriada Apartments				×	
1115	H Street	1930	Dailey Recorder					×
828	I Street	1918	Sacramento City Library		×	×	×	×
915	I Street	1911	Sacramento City Hall				×	×
1112	I Street	1960	Pharmacy Association Headquarters					×
1126	I Street	1947	Liquor Store					×
1200	I Street	1929	B.F. Goodrich Tire Center				×	×
828	J Street	1865	J. Rippan & Co. - Grocery, Fabian					×
900	J Street	1898	Ruhstaller Building		×	×	×	×
904	J Street	1856	Goggins Drug Store, Jack's Loans J				×	×
912	J Street	1866	Plaza Harness Shop, United Cobbler					×
920	J Street	1871	John Bellmer & Co., Joe's Style Sh				×	×
926	J Street	1925	Cal Western Life Insurance Co., 92				×	×
1004	J Street	1872	Fred Mayes Jewelers' Clock/ J's Ca					×
1008	J Street	1925-1935	Fred Meyers Jeweler's Clock				×	
1012	J Street	1898	Lorenzo Patino School of Law					×
1013	J Street	1889	The Broiler / Breuner Property / H					×
1017	J Street	1960						×
1018	J Street	1880	Copenhagen Furniture (Former)					×
1020	J Street	1868	Pfaff Sewing Machines / Bean Coffe					×
1024	J Street	1912	Martyr & Curry stationery					×
1030	J Street	1911	Mother India/Country Maid					×
1109	J Street	1882	Russ House / The Omaha / The Biltm					×
1201	J Street	1959	USC School of Management					×
1208	J Street	1910	The Neva-Emigh Hardware, Wendell H					×
1215	J Street	1922	The Grand					×
1123 &1131	J Street	1918-1920	Masonic Temple		×	×	×	×
1208-1208 1/2	J Street	1910-1911	Neva/Emigh Hardware				×	
828-830	J Street	unknown		Demolished			×	
816	K Street	1920	Devon's Jewelers					×
818	K Street	1931	S. H. Kress and Company, Dress			×	×	×
825	K Street		Hotel Regis			×		
830	K Street	1936	Montgomery Ward Co., Department of			×		×
831	K Street	1881	Rite Aid / Hale Brothers Department					×
909	K Street	1911	Sequoia Hotel					×
915	K Street	1920	Subway/ Bento House					×
916	K Street	1880	On-Time Fashions/capital clothin					×
919	K Street		Golden Rice Bowl					×
920	K Street	1962	Nails Galore, Tanning & More					×
921	K Street	1919	Mini Mart					×
923	K Street	1895	Mike's Tailoring & Clothing					×
924	K Street	1962	Choice Casual					×
930	K Street	1961	Washington Mutual Bank					×
931	K Street	1890	Cronan Building/ J. Magnin Store/					×

Number	Street	Construction Date	Historic Name		National Register	California Register	Sacramento Register	Historic Property Data File for Sacramento County
1000	K Street	1956	Woolworth Store					×
1001	K Street	1902	Roos Atkins/ Ross Brothers Store/					×
1011	K Street	1947	World of Beauty					×
1012	K Street	1957	Rite Aid Drug Store / Payless Shoe					×
1013	K Street	1910-1912	Empress Theater, Crest Theater				×	×
1016	K Street	1927	Capitol Clothing					×
1024	K Street	1911	Hotel Regis		×	×		×
1100	K Street	1912	P.G.& E. Headquarters, Grebituf & S				×	×
1106	K Street	1924	The Locker Room Site					×
1110	K Street	1951	Governor's Office of Volunteerism					×
1130	K Street	1923-1924	Weinstock, Lubin, & Company	aka 1111 12th Street			×	×
1029-1031	K Street	1910-1911	Mohr & Yoerk Realty Co. Building, Ransohoffs			×	×	×
1106-1112	K Street	unknown		Demolished			×	
801-821	K Street	unknown		Demolished			×	
825 & 831	K Street	1881	Hale Brothers & Company / River Ci				×	×
Cathedral Square Historic District							×	
Plaza Park/Central Business District Historic District							×	

McCunny Collection, Sacramento Archives and Museum Collection Center. 85/24/1354. February 4th, 1940.

Figure 3. Northeast Corner of 10th and J Street.

Eugene Hepting Collection, Sacramento Archives and Museum Collection Center. 73/03/187.

Figure 4. J Street Looking East at 10th Street.

also operated either a hotel or boarding house. In the 1880s it was known as the Russ House. In the early 1890s it was the Hotel Rhein, then Mrs. Balinger's Lodgings, followed by the Omaha House, and lastly Hotel Pleasant in 1916. The lot, prior to it's use as a wagon and plow works, was began as the Illinois House. Thus, this property was for nearly 150 years used almost exclusively as a boarding house/hotel.

1013 J Street

This building, located at 1013 J Street, was constructed in 1889 and was submitted as part of a reconnaissance survey in February 2002 as "The Broiler / Breuner Property" (Historic Property Data File for Sacramento County) by Historic Environment Consultants. The 1895 Sanborn Fire Insurance Map (Figure 5) shows the property has a two-story building with a basement. It was occupied by a store, and junkyard. The store and junkyard are still present in the 1915 Sanborn Fire Insurance Map (Figure 6); however, the 1915-51 map (Figure 7) shows that the junkyard and privies are no longer there by 1951. The owners and occupants of this property are discussed further in the Block Study portion of this report. Prior occupants from 1853 to 1889 were blacksmiths and wagon and plow makers.

1017 J Street

This building, located at 1017 J Street, was constructed in 1960 (Historic Property Data File for Sacramento County). Early owners and occupants of this property are discussed further in the Block Study portion of this report; however, the date of construction for the current building falls outside the range of this research.

<u>Historic Properties within a One-Block Radius</u>

Numerous other historic properties within a one-block radius of the project are on file with in the Historic Property Datafile for Sacramento County, Sacramento Register, and NRHP (Table 1). The NRHP properties include: the California State Capitol (1000 10th Street); Pumping Station No. 2 (915 11th Avenue); the Elks Temple (921 11th Street); Julius Wetzler House (1021 H Street); Sacramento City Library (828 I Street); Masonic Temple (1131 J Street); Ruhstaller Building (900 J Street); Hotel Regis (1024 K Street); Mohr & Yoerk Building, Ransohoffs (1031 K Street); S. H. Kress & Co., Dress (818 K Street); Hale Brothers & Co./River City bank (825 K Street); and Montgomery Ward Co., Department of Rehabilitation (830 K Street).

Site CA-SAC-670-H represents historic materials recovered from the entire 8-9/IJ block, except the northeast corner. The site was excavated in 1990 by the Anthropological Studies Center – California State University, Sonoma (Praetzellis and Praetzellis 1990a). Several other historic sites (i.e. CA-SAC-394-H, CA-SAC-669-H, and CA-SAC-692-H) have been recorded within a quarter-mile

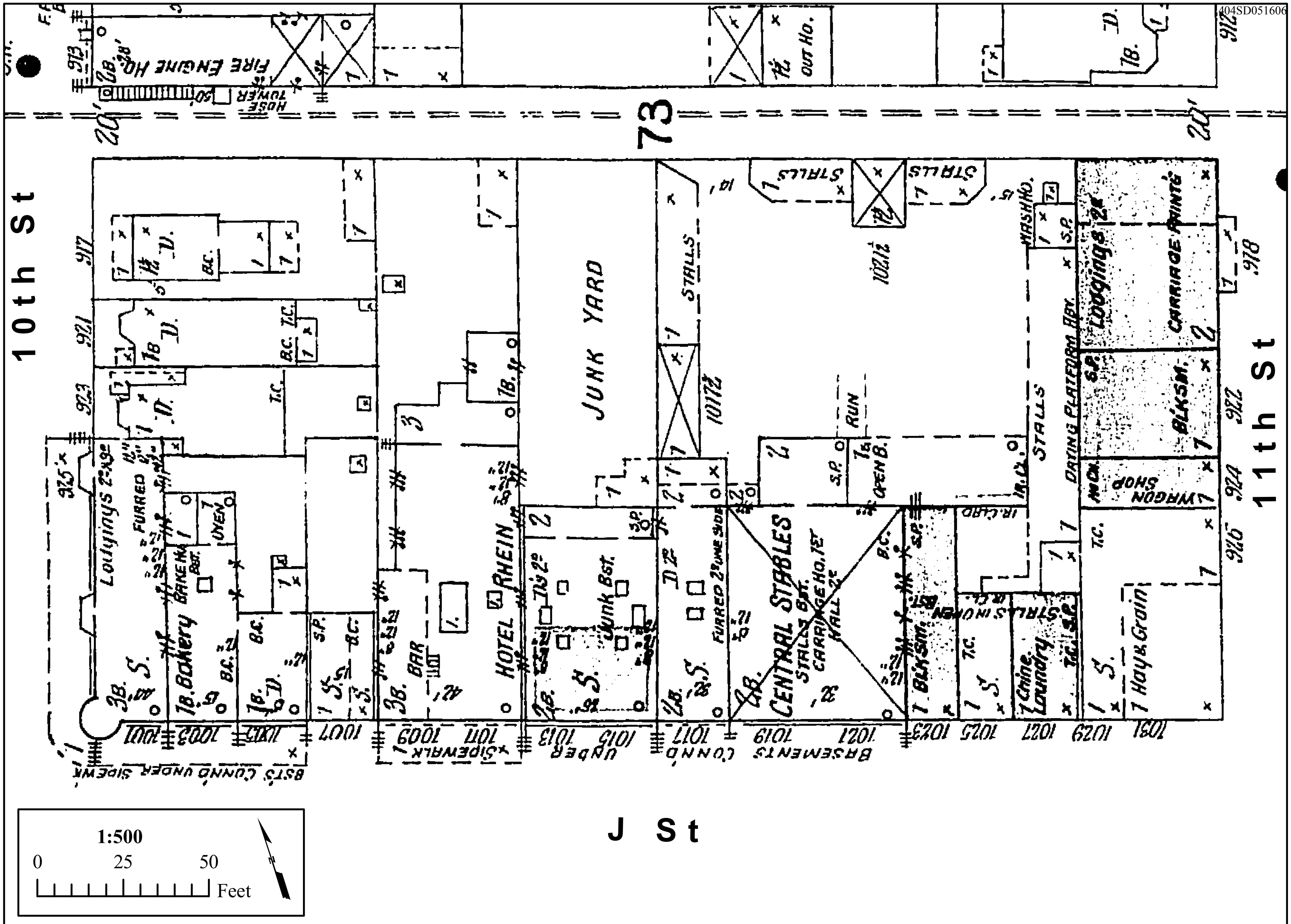

Figure 5. 1895 Sanborn Fire Insurance Map.

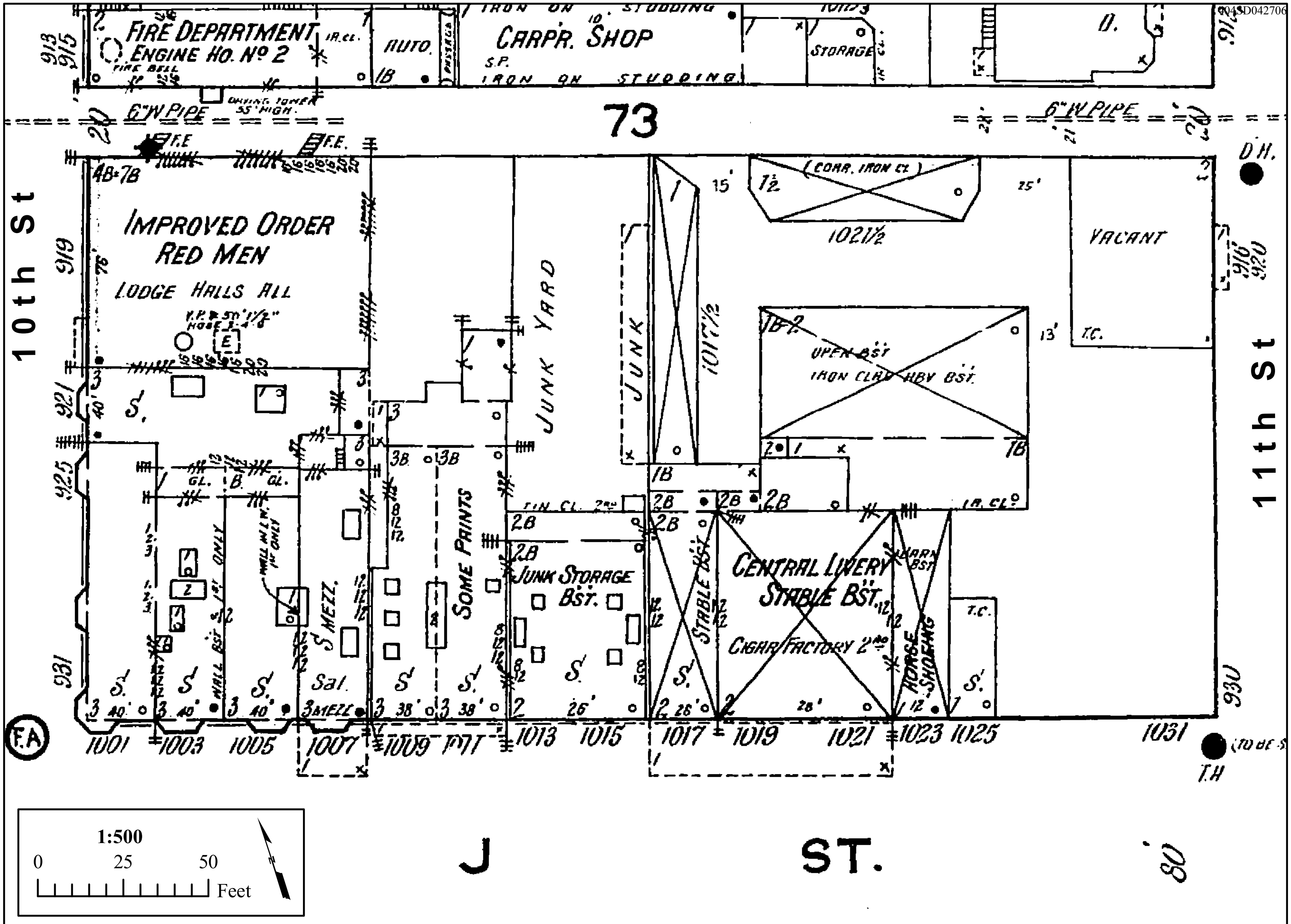

Figure 6. 1915 Sanborn Fire Insurance Map.

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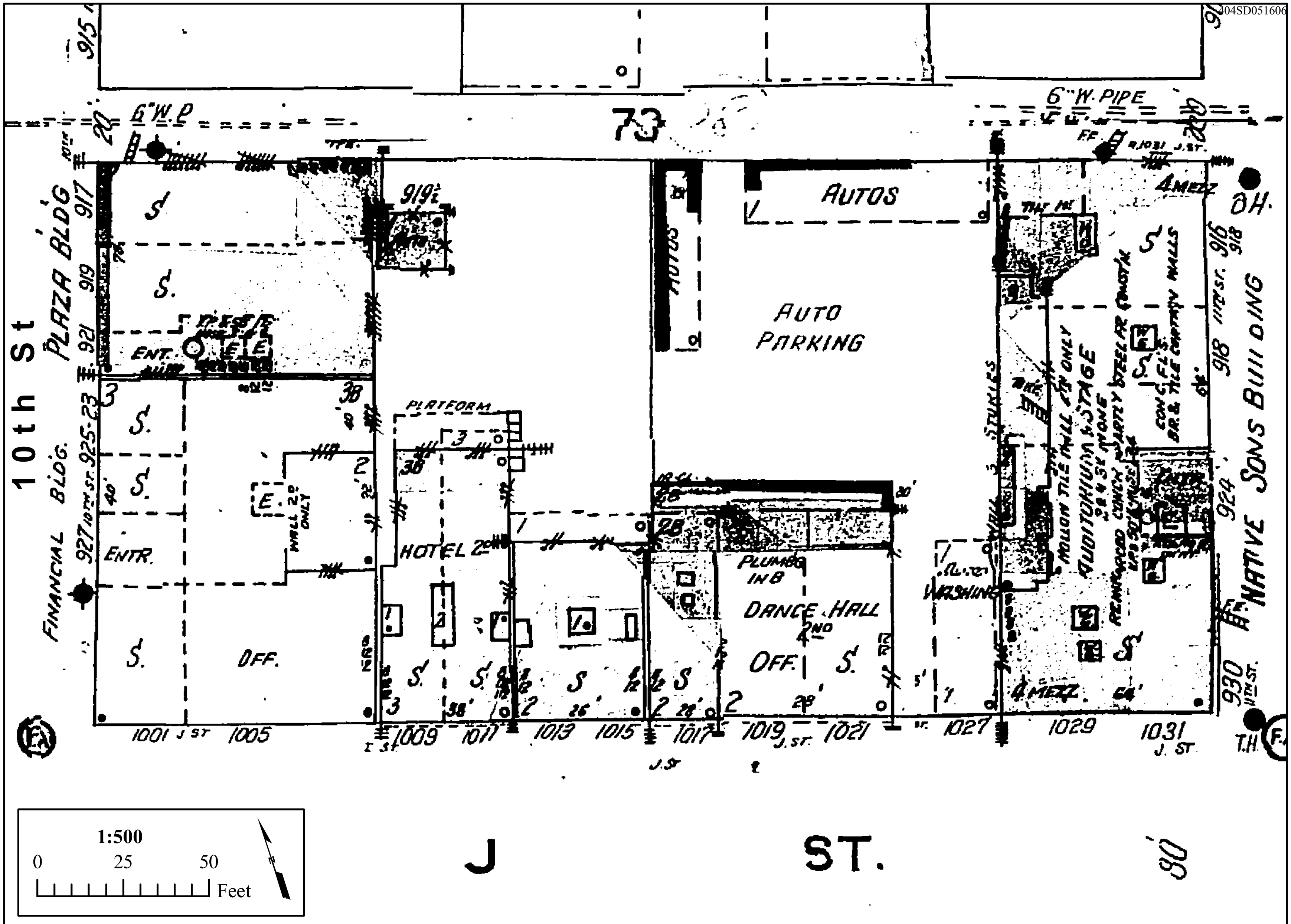

Figure 7. 1915-51 Sanborn Fire Insurance Map.

Tremaine & Associates, Inc.

radius of the project. Site CA-SAC-394-H consists of structural remains and refuse deposits associated with the Golden Eagle Hotel (1851-1963), Cronin's Oyster Saloon (1874-1880), Hillebrand Boot Manufacturer (1860-1874), Aiken & Luce, Monumental Masons (ca. 1860-1890), and Samuel Nixon, blacksmith (ca- 1860-1890). This site was excavated in 1980 by the Anthropological Studies Center – California State University, Sonoma (Praetzellis et al. 1980). Site CA-SAC-669-H is the site of the Oschner/Sun building, which is still standing. Site CA-SAC-692-H represents the foundation remains and artifacts of the Philadelphia House, excavated in 2004 (Nelson 2005). The Philadelphia House was the only boarding house in Sacramento that catered specifically to the needs of German immigrants.

Several other historical archaeological excavations have been conducted nearby in downtown Sacramento (e.g., 1423 K Street [Praetzellis and Praetzellis 1992a], 1408 J Street [Praetzellis and Praetzellis 1992b], and 814 I Street [Praetzellis and Praetzellis 1990a]). All of these investigations revealed refuse filled features, such as wells, privy pits, and garbage pits, that were sources of discarded ceramics, glass containers, broken personal items, and food remains (e.g., butchered bone). Historical research (e.g., block studies) for these projects established a link between the archaeological deposits and previous occupants of the lots, thus providing important information about life in the latter half of 19th century Sacramento.

Historic Districts

The project is sandwiched between two approved historic districts (Figure 8): Cathedral Square Historic District and Cesar Chavez Plaza Park Historic District (City of Sacramento 2005). Additionally, the project area is in a proposed Sacramento Underground Historic District The underground district is proposed by TREMAINE as a result of the discovery of buried historic features (i.e., historic underground sidewalk, plank crosswalks) identified during the Downtown Sacramento Amtrak and Folsom Corridor Light Rail Transit Project.

Block Studies

The following discussion is based on City Assessor's maps from the SAMCC, which were examined in five-year increments from 1850 through 1930. Sanborn Fire Insurance maps were also examined for the years 1895 and 1915. Findings are presented by year by block and lot. Associated figures (Figures 9-30) list property values when available, along with improvement values (e.g. Imp 850 or I. 850). In some cases it was not possible to distinguish between lot values and improvement values. Variations of the individual's names were included in parentheses. The archival records for each block point to potentials for encountering remnant physical materials associated with identified households and/or businesses, suggestive of lot-specific sensitivity.

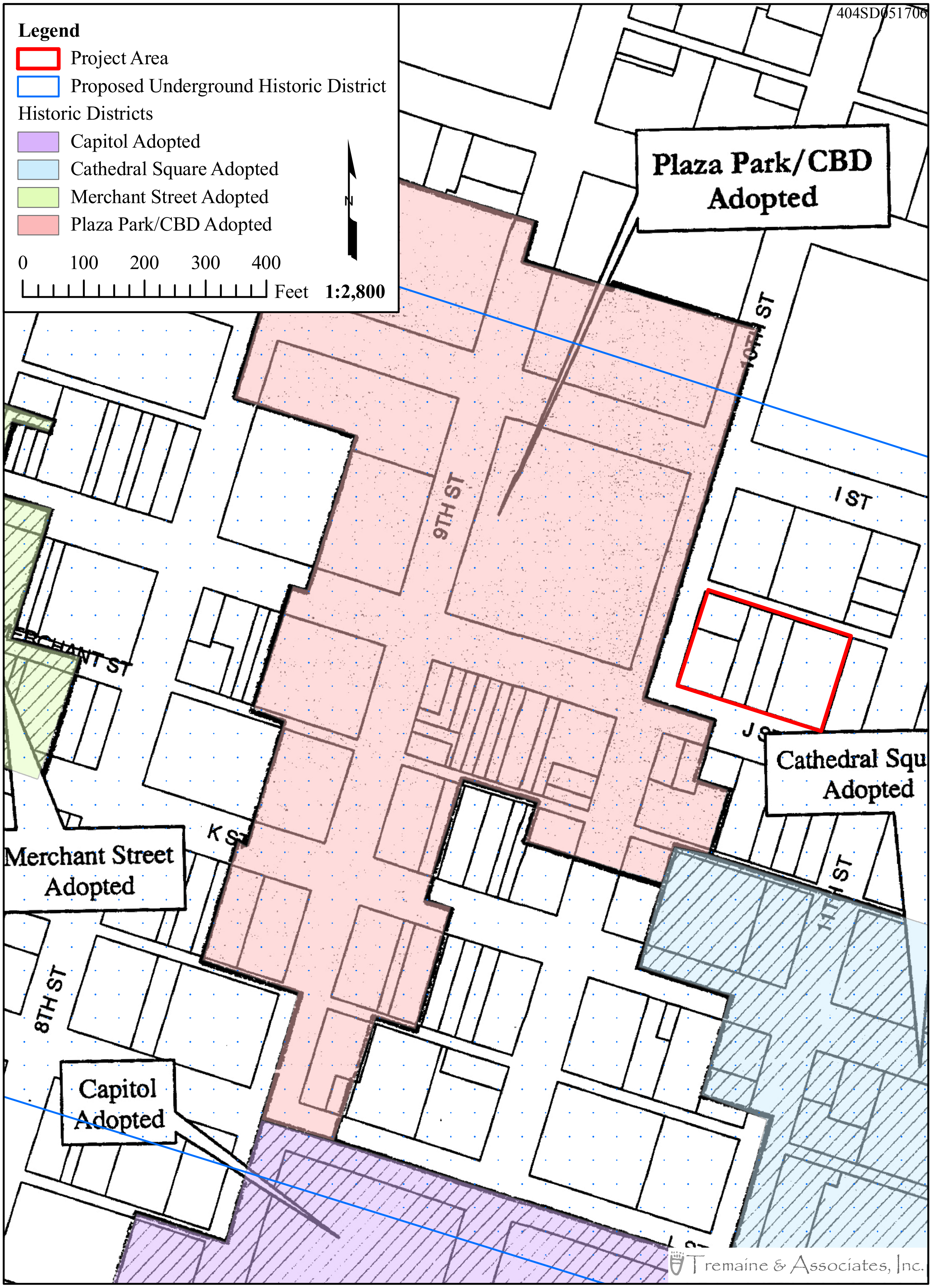

Figure 8. Cesar Chavez Plaza Park / CBD Historic District (from City of Sacramento Register of Historic Resources, March 2005).

1850s (see Figure 9)

The 1851 County Assessor City Map Book reveals that Lot 5 is divided into eight parcels. Dr. Tom J. Conduitte owns two parcels valued at $300 each; improvements of $1,200 have been made to one of his parcels and $50 of improvements was made to the other parcel. Alex Robertson Jr. also owns two parcels valued at $300 each and has improved the northern parcel by $900. The four parcels fronting J Street are owned by Seth Briggs; Campbell & Rogue; Fannan & Bunk; and an unnamed owner. Briggs' parcel is valued at $800 and $1,000 worth of improvements was made. Campbell & Rogue improved their parcel by $600. Improvements of $500 are noted on the parcel owned by Fannan & Bunk, which is valued at $500. The unnamed owner of the adjacent parcel has a value of $500 with $1,000 of improvements noted. Lot 6 is divided into four parcels each valued at $500. An unnamed owner made improvements of $1,000 to two of the parcels. Owner, (S) J. Brannan made no improvements to his two properties. Howard and Larkin own Lot 7, which is valued at $2,000 having had improvements of $400. There appear to be nine parcels in Lot 8. Howard & Riley own the northwest corner of the lot. Hayes & Riley own the four parcels that make up the northeast corner of the lot. Owners of the four parcels fronting J Street are not listed; two of these parcels are valued at $1,000 each and the other two parcels have had improvements of $300 and $1,000 respectively.

The occupants of many of the properties are listed in the Sacramento Directories compiled by J. H. Culver in the late 1800s. According to the Sacramento Directory 1851 (Culver 1851:296); the southern half of the block bounded by I Street to the north, J Street to the south, 10th Street to the west, and 11th Street to the east; was occupied by several businesses (Figure 10) including two blacksmiths, a baker, a grocer, and a merchant.

The 1853-54 Sacramento Directory offers the names and occupations of individuals and businesses located along J Street between 10th Street and 11th Street (Figure 11). While many of the exact street addresses are unknown, City Assessor maps from 1855 were used to help locate the properties. A cluster of physicians was located on 10th Street across from the public square. There was also a carriage maker, two wagon makers, a blacksmith, a stock and hay dealer, and several merchants conducting business on the property.

Watson's map of Sacramento in 1854 shows buildings lining the edge of the property towards 10th Street and J Street, with no development of the area near the alley (Figure 12).

1855 (see Figure 13)

In 1855, there were nine property owners listed with parcels on the south half of the block. Lot 5 is divided into 6 parcels, three fronting 10th Street and

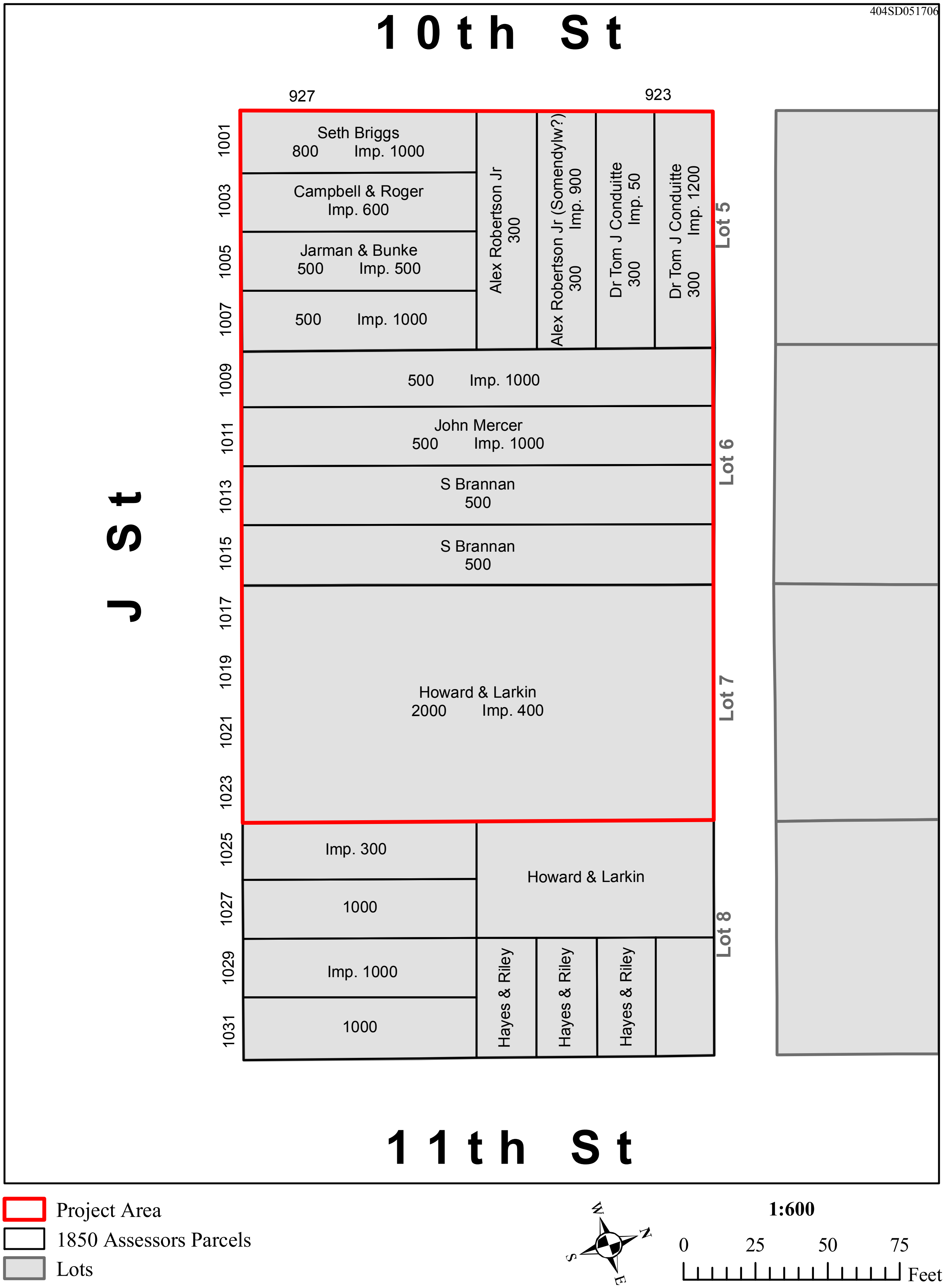

Figure 9. 1850 Assessors Map Parcels.

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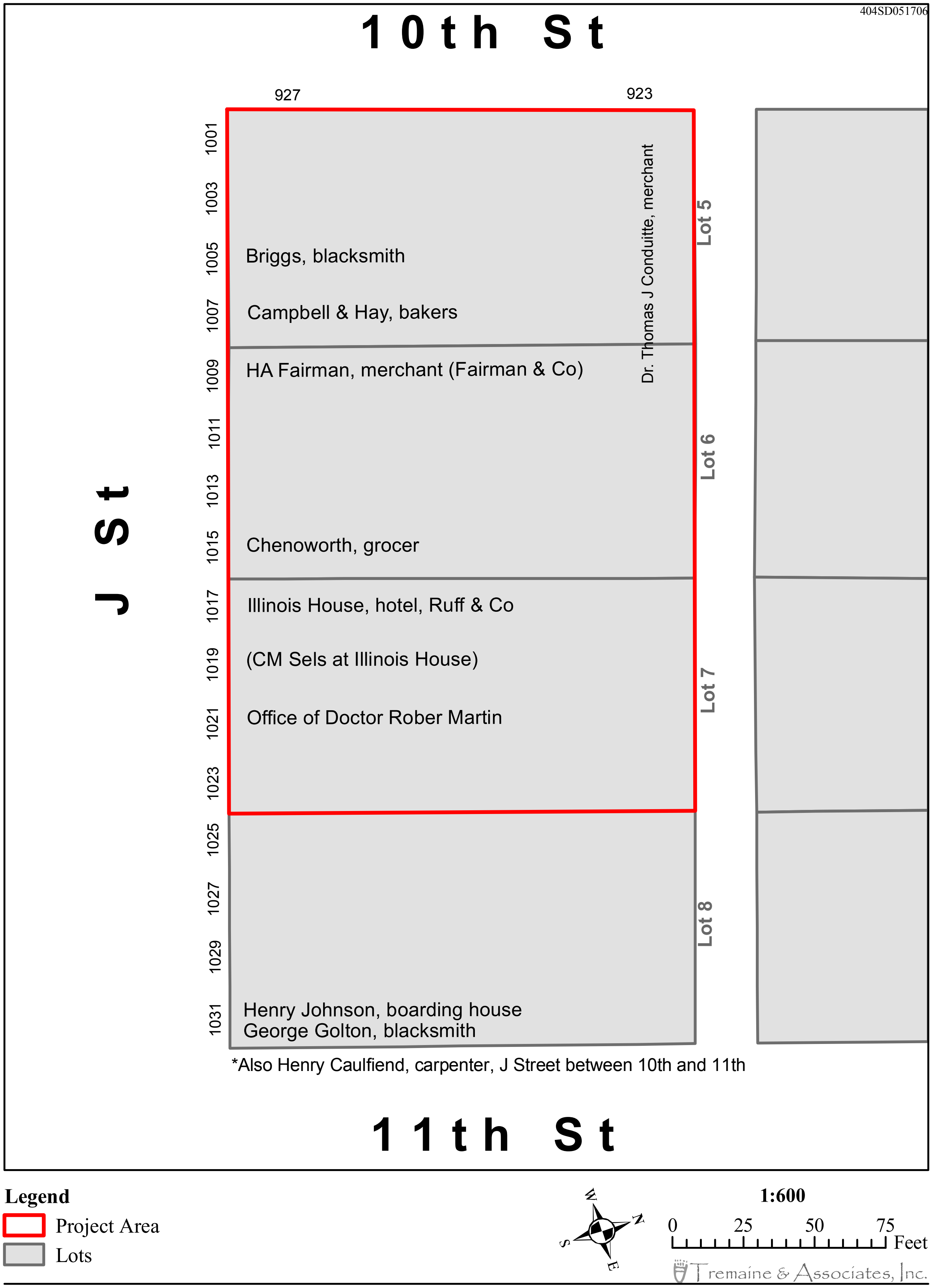

Figure 10. Occupants of J Street between 10th and 11th Street, 1851 (Based on Culver 1851: 296 & McGowan etal. 1978).

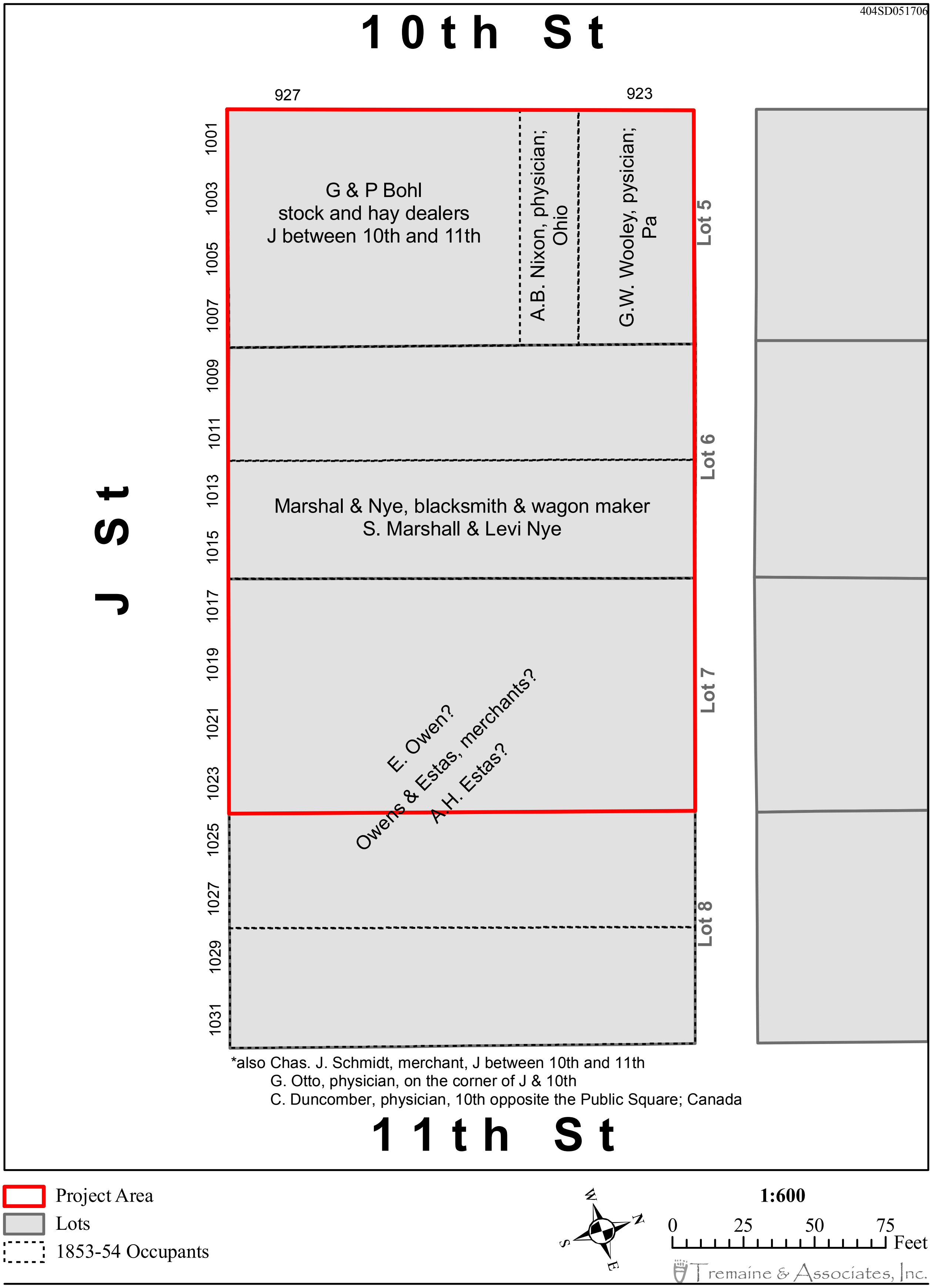

Figure 11. Occupants of J Street between 10th and 11th Street, 1853-54 (Based on Sacramento City Directory and McGowan etal, 1978).

Figure 12. Portion of Watson's Map of Sacramento in 1854.

Tremaine & Associates, Inc.

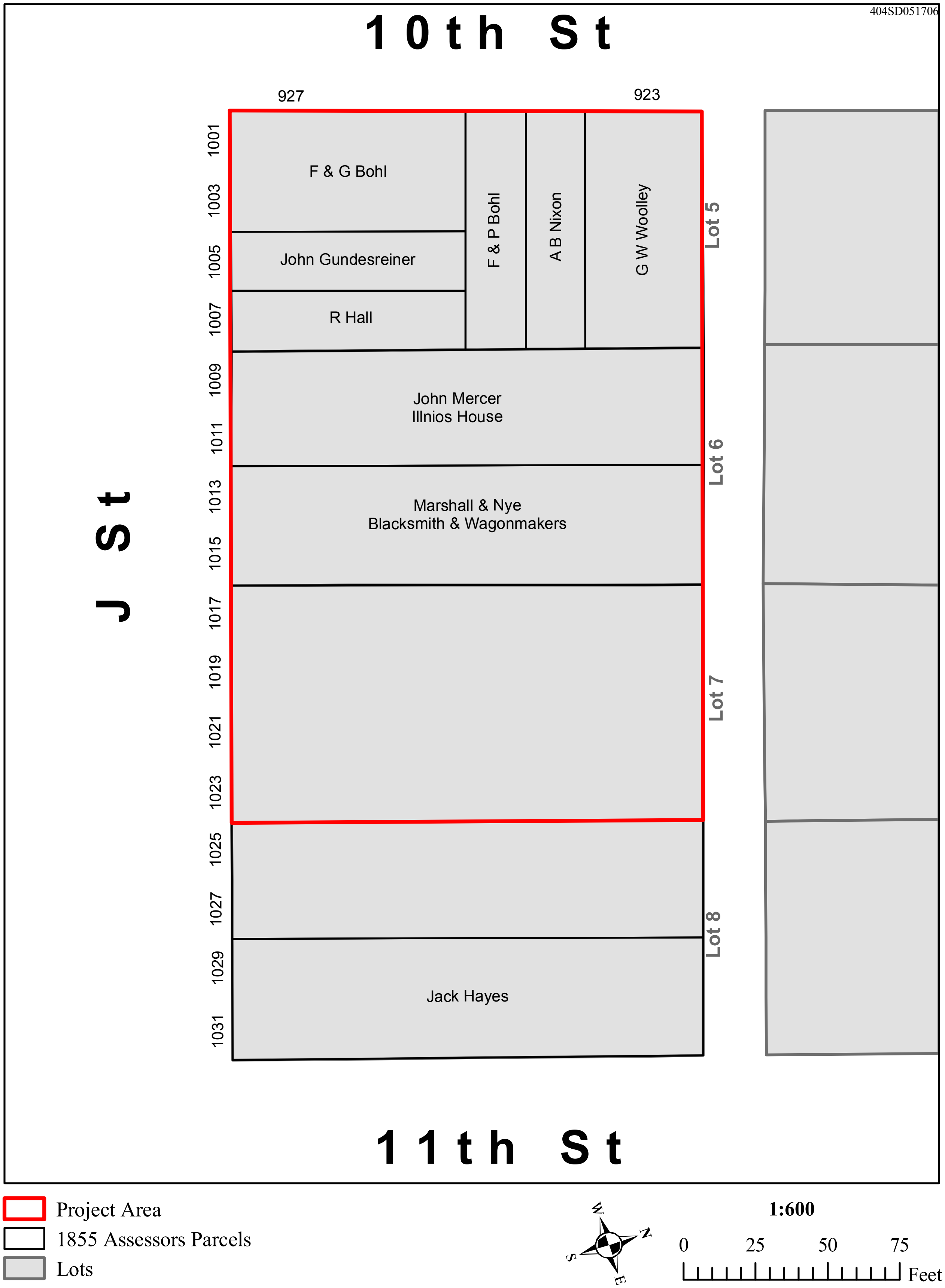

Figure 13. 1855 Assessors Map Parcels.

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three fronting J Street. G. W. Woolley, who is identified in the 1853-54 Sacramento Directory as a physician, owns the northern-most parcel. A. B. Nixon, also a physician, owns the parcel located to the south of Dr. Woolley. Two adjacent parcels on the southwest corner of the lot are owned by F. & P. Bohl and F. & G(?) Bohl. This may be a mis-recording of G. & P. Bohl, stock and hay dealers, identified in the 1853-54 directory. East of the Bohl property is John Gundesreiner's property. The easternmost parcel on Lot 5 is owned by R. Hall. Lot 6 is divided into two parcels. John Merker (Mercer) owns the western parcel and S. Marshall and Levi Nye, of Marshall & Nye blacksmith and wagon-makers, own the eastern parcel. The owner of Lot 7 and the western portion of Lot 8 are unknown. Jack Hayes owned the Eastern most parcel of Lot 8. The 1853-54 Sacramento Directory (110) identifies Mr. Hayes as a carriage and wagon-maker.

<u>1860</u> (See Figure 14)

By 1860, the northwest parcel in Lot 5 has been divided into two smaller parcels that are owned by B. McAllister and Chas. Smith. McAllister made $300 worth of improvements. A. B. Nixon continued to own his parcel fronting 10th Street, which he made $200 worth of improvements to. The parcel just south of Nixon is still owned by F. & P. Bohl while the owner of the southwest parcel has changed from F. & G. Bohl to P. Bohl & Bro. The Bohl's have improved the southwest corner property by $2,800. There has been a change of ownership at the parcel just east of Bohl & Bro. Robt. Anderson is the new owner and $300 of improvements has been made. The owner of the easternmost parcel of Lot 5 is not listed; however, $200 of improvements has been made to the property. John Merker (Mercer) continues to own the western half of Lot 6 and has made $700 improvements to the property. Ownership of the eastern half of Lot 6 has passed to R. T. Edwards, merchant with Terhune & Edwards, via agent Mark Robinson. $2,800 worth of improvements has been made to the property. Eben Owen is the owner of record for Lot 7 and the western parcel of Lot 8. Lot 7 has had $400 of improvements while the western half of Lot 8 has been improved by $300. John (Jack) Hayes continues to own the parcel fronting 11th Street and has made $500 worth of improvements to the property.

<u>1865</u> (see Figure 15)

By 1865, the northern-most parcel of Lot 5 has changed hands, now owned by Mary Ann Bontecou, having made $240 worth of improvements. The adjacent parcel is owned by Chas. Smith & Mrs. McAllister, with no improvements noted. The parcel just south of Smith & McAllister is now the property of Chas. Crocker. Peter Bohl owns a large L-shaped parcel, which was shown on previous maps to be two separate parcels. Improvements have been made in the amounts of $7,000 and $2,500. Robert Anderson continues to own the parcel adjacent to the Bohl Property; $600 worth of improvements has been made. John Van Orden now owns the southeast parcel of Lot 5 and has made improvements of $200 and $400.

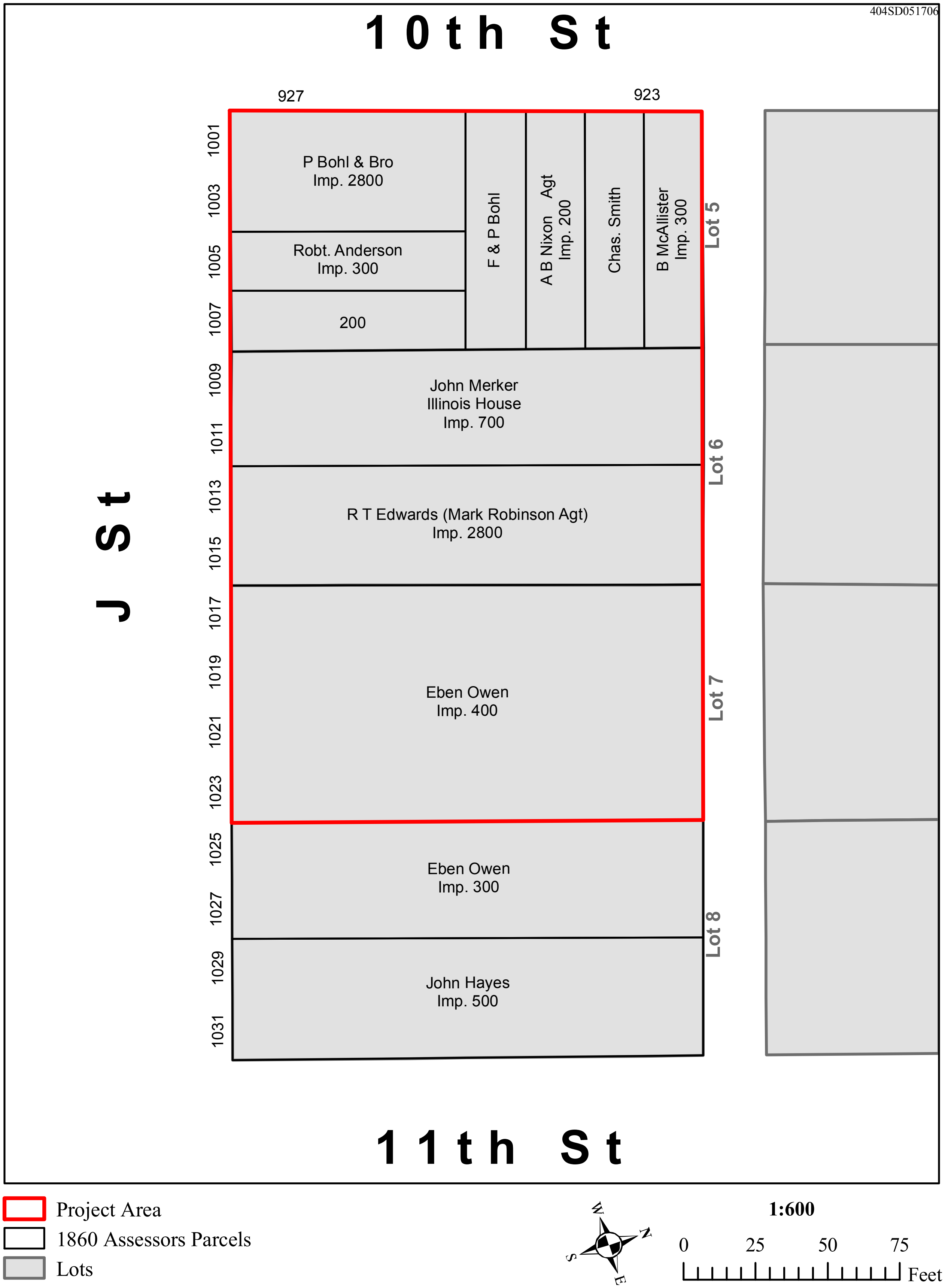

Figure 14. 1860 Assessors Map Parcels.

Tremaine & Associates, Inc.

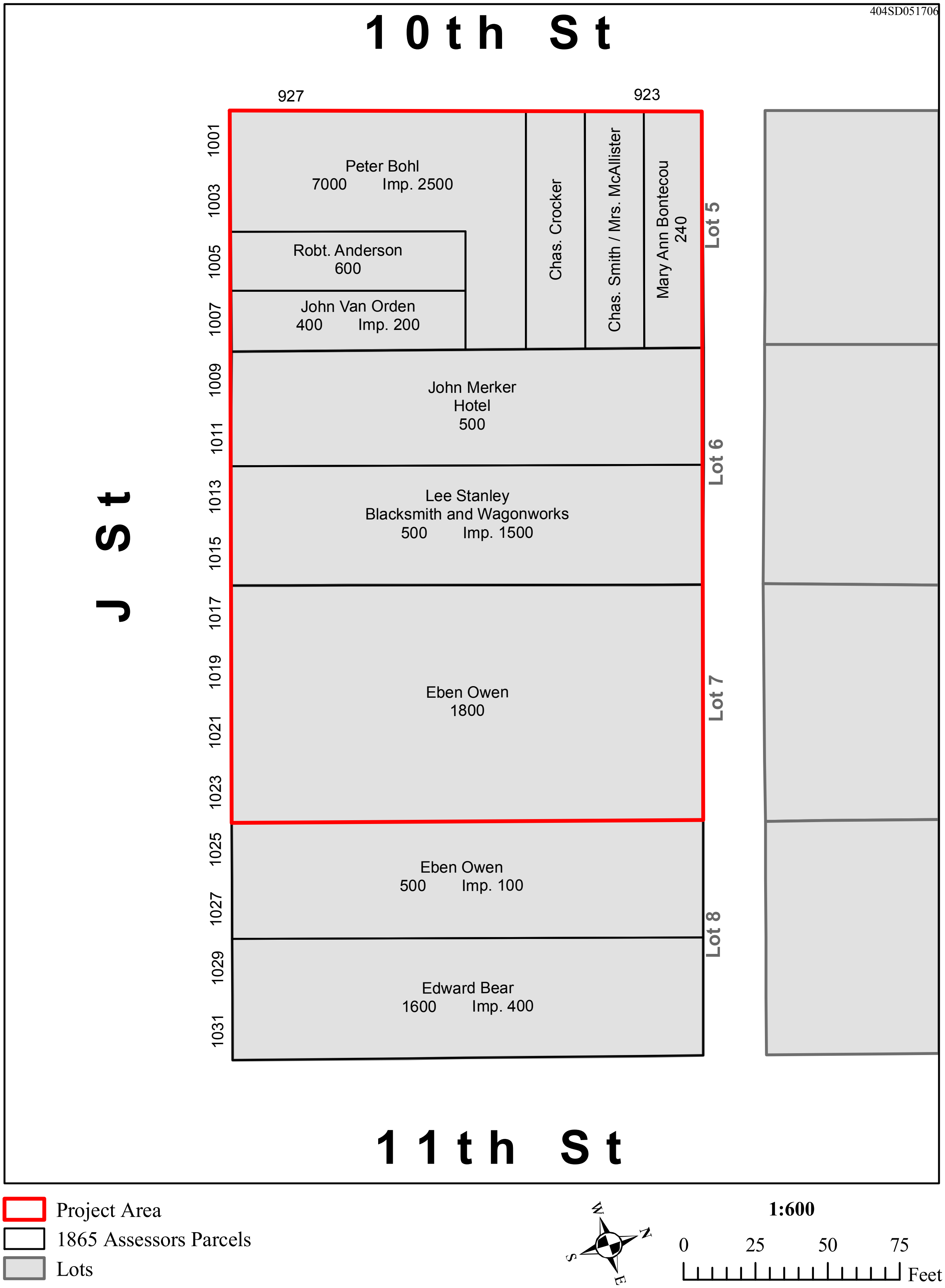

Figure 15. 1865 Assessors Map Parcels.

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John Merker (Mercer) continues to own the western half of Lot 6, which has had $800 of improvements. The eastern half of the lot has been acquired by Lee Stanley and has been improved by $800 and $1,800. Lot 7 has had improvements worth $1,800 while the western half of Lot 8 has had $800 and $100 of improvements made. Eben Owen continues to own both of these properties. The parcel fronting 11th Street has changed hands and is now owned by Edward Bean. Improvements totaling $2000 have been made to the property.

1870-1871 (see Figure 16)

Property ownership has once again changed hands. George Lorenz has acquired two parcels fronting 10th Street that have been improved by $500 and $1,000. The property formerly belonging to Crocker is now owned by B. F. Bell; improvements of $250 and $350 have been made. Peter Bohl has improved his property by $2,750 and acquired a small portion of land from John Van Orden. The Van Orden parcel now measures twenty feet by eighty feet and has had improvements of $350 and $150. All of the parcels in Lot 6 are now the property of W. B. Ready. Lot 6 has had improvements of $1,500 and $1,250. It appears that Eben Owen sold all of his property. The unnamed owner of Lot 7, possibly E. Jacobs, has made improvements of $1,250 and $200. Enoch Jacobs now owns the western half of Lot 8, where $650 worth of improvements has been made. The owner of the eastern parcel of Lot 8 is noted only as E OH (Edward Bien Othick) and the property has been improved by $750 and $250.

1875-1876 (see Figure 17)

The properties in Lots 5, 6, and 7 have not changed ownership from those noted approximately five years earlier. It also appears that no improvements were made to any of these lots. An improvement of unknown value was made to the western half of Lot 8, which continues to be owned by Enoch Jacobs. Edward Bien (Othick,E OH) continues to own the eastern half of Lot 8, which has been improved by an unspecified amount.

1880-1801 (see Figure 18)

At this time, the parcels in Lot 5 continue under the same ownership as noted for the past decade. Capitol Savings Bank has acquired Lot 6 from W. B. Ready. Enoch Jacobs continues to own Lot 7 and the western half of Lot 8. Wise & McNair have purchased the property formerly owned by Edward Bien (Othick,E OH). Property values or improvements are no longer noted for any of the properties.

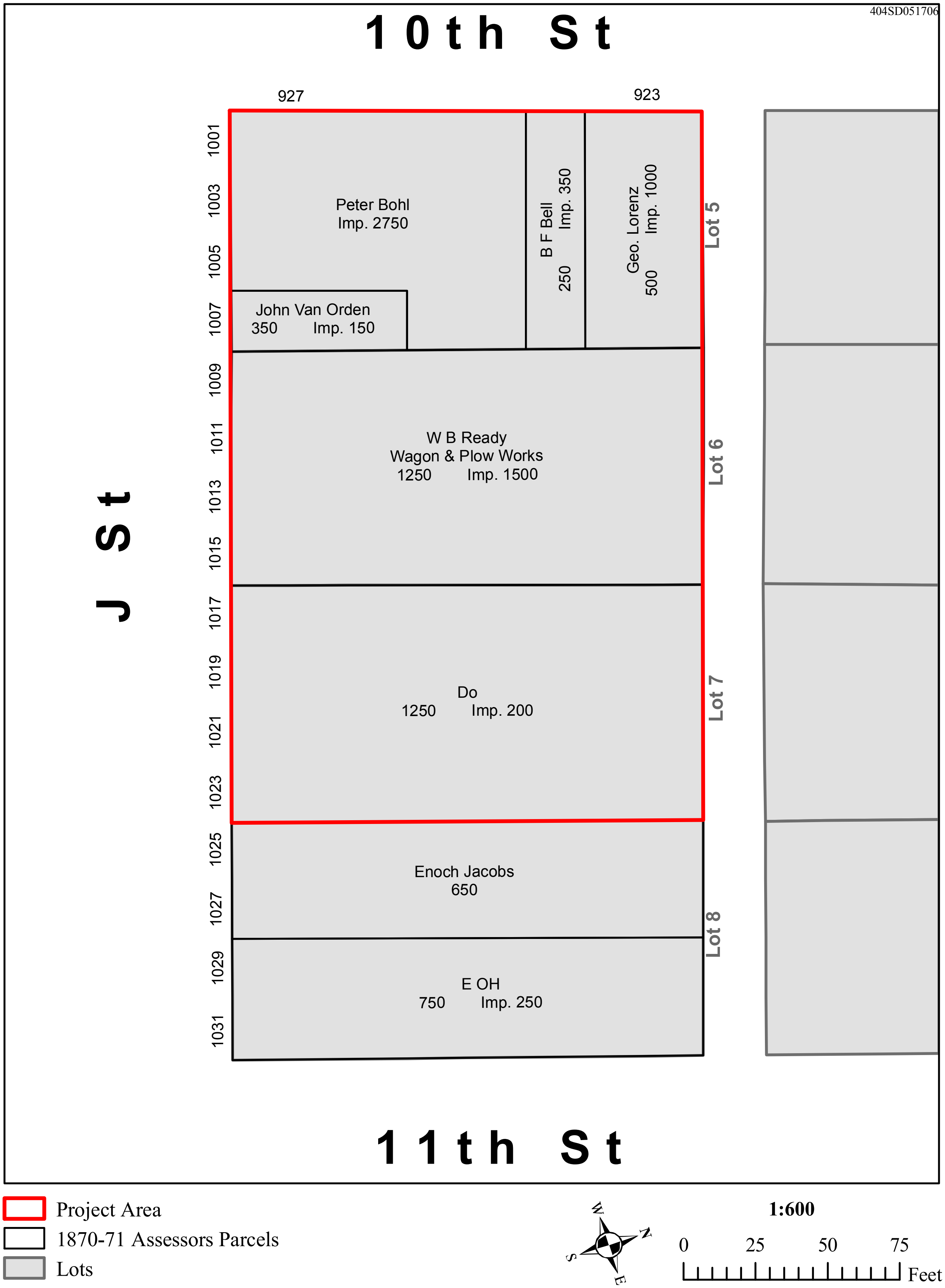

Figure 16. 1870-71 Assessors Map Parcels.

Tremaine & Associates, Inc.

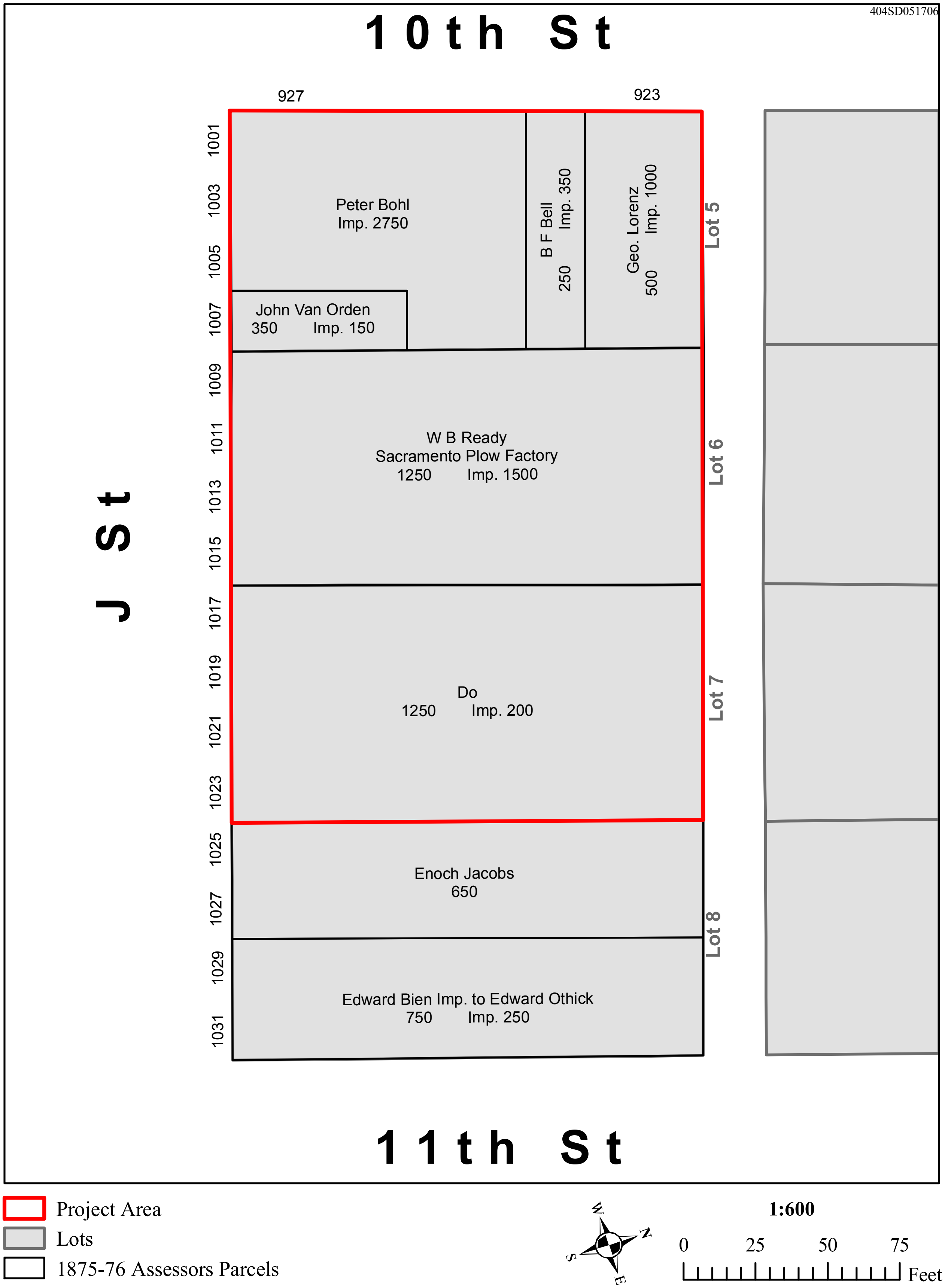

Figure 17. 1875-76 Assessors Map Parcels.

Tremaine & Associates, Inc.

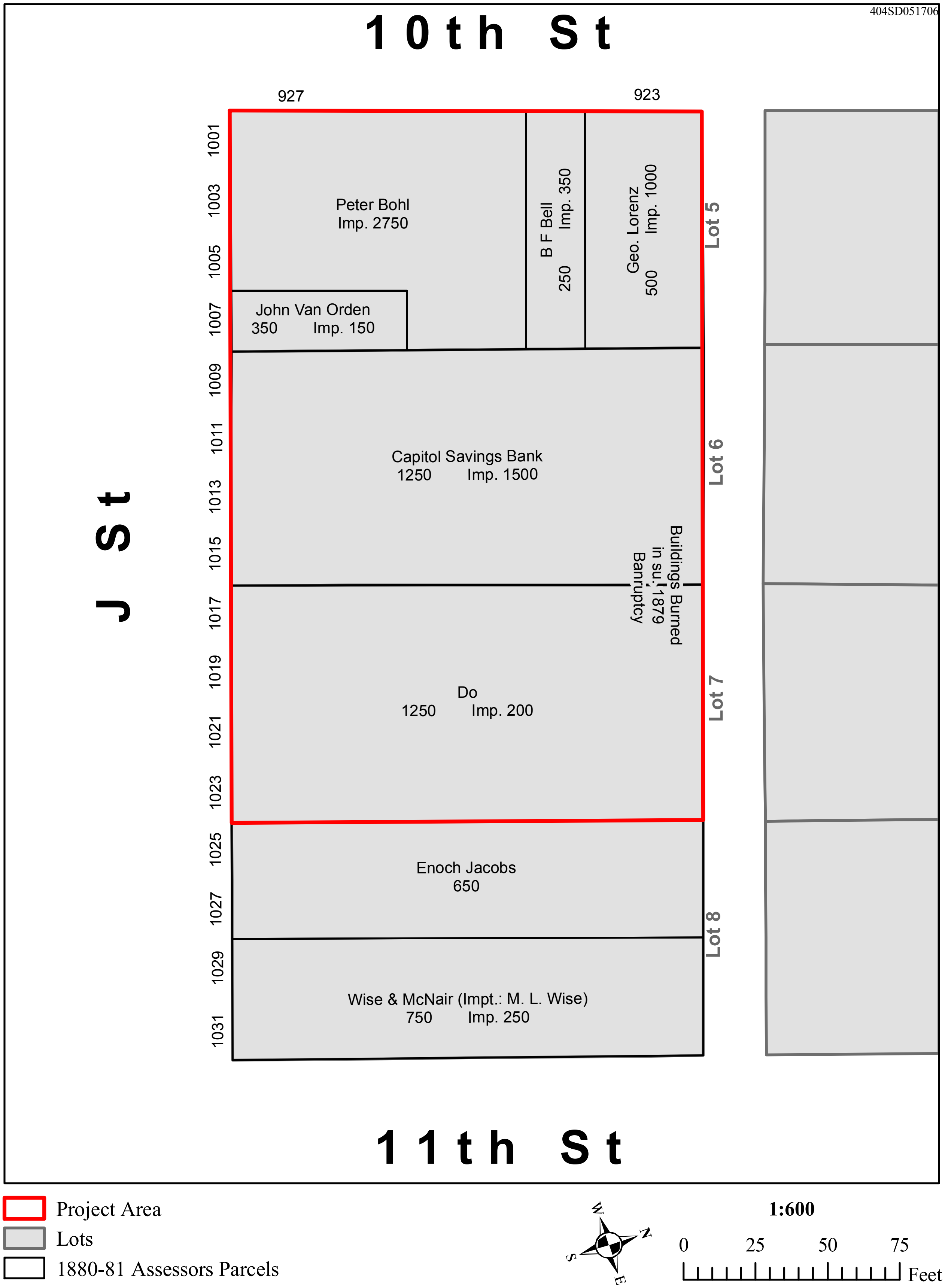

Figure 18. 1880-81 Assessors Map Parcels.

1885-1886 (see Figure 19)

The owners of Lot 5 are still the same as those noted one and one half decades earlier, in 1870. Ownership of Lot 2 has changed, now the property of John Breuner. E. Jacobs continues to own Lot 7 and the western half of Lot 8; while the eastern half of Lot 8 is under the ownership of M. L. Wise (of Wise & McNair).

1890 (see Figure 20)

In 1890, all parcels on the south half of the block have the same owners as noted five years prior, except that parcels previously owned by E. Jacobs are now owned by W. S. Jacobs. The 1890 Bird's Eye View (Figure 21) shows both single-level and multi-level buildings fronting J Street, 10th Street, and 11th Street. It also appears that the central area along the alley is undeveloped.

1895 (see Figure 22)

By 1895, George W. Lorenz continues to own the northernmost parcel of Lot 4, which he has owned for twenty-five years. The 1895 Sanborn Map (Figure 3), indicates that there is a single-story dwelling located on the property. Jacob Schmid now owns the property previously owned by B. F. Bell; and there is a single-story dwelling with a basement located on the property. Peter Bohl continues to own a parcel fronting 10th Street and a parcel fronting J Street, and has sold another parcel fronting J Street to Geo. H. Braun. Mr. Bohl has a single-story dwelling located at 923 10th Street and a three-story store with a basement located at 1001 J street. Mr. Braun's property consists of a single-story bakery and dwelling both with basements. The three afore mentioned buildings located on the southwest corner of Lot 5 have basements which continue under the sidewalk. John Ruedy is the new owner of the parcel at 1007 J Street. There are two stores occupying a single level building. Lot 5 is owned by Kath. Breuner. The property is occupied by the Hotel Rhein and Bar, a three-story building with a basement; and a two-story building with a store fronting J Street, dwellings on the second floor, and a junkyard near the alley. Sam Ginsberg now owns the properties previously belonging to W. S. Jacobs. The property houses a store, dwellings, several stables, a blacksmith, a carriage house, a hall, and a Chinese Laundry. M. I. (L.) Wise continues to own the corner parcel; a store, hay and grain dealer, wagon shop, blacksmith, lodgings, and carriage painter occupy this property.

1900 (see Figure 23)

By 1900, Peter Bohl has reclaimed the parcel that he sold to Geo. Braun a half decade ago. All other properties in Lot 5 continue under the same ownership. Carrie Breuner and Kath. Breuner now share Lot 6. Sam Ginsberg continues to

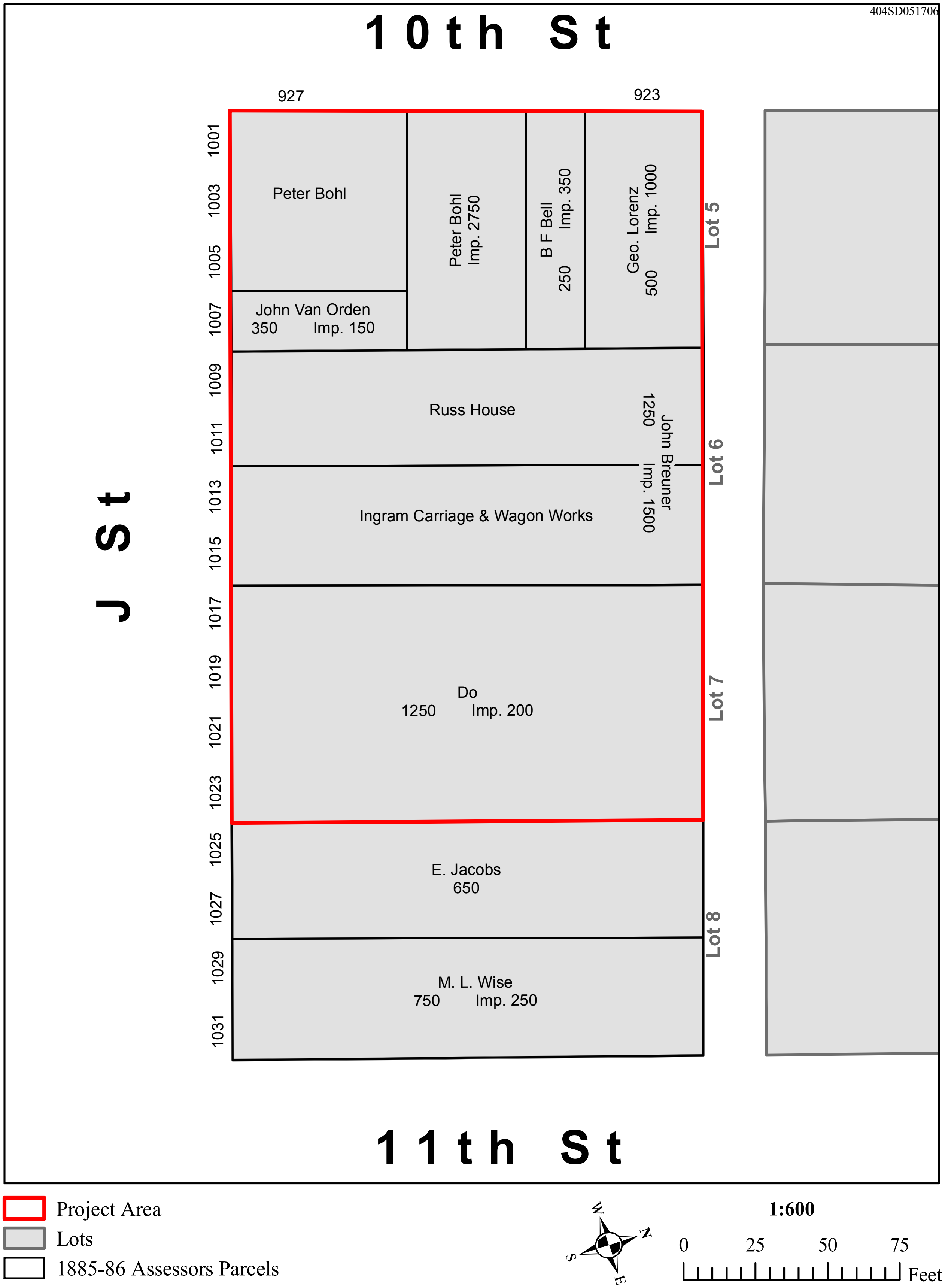

Figure 19. 1885-86 Assessors Map Parcels.

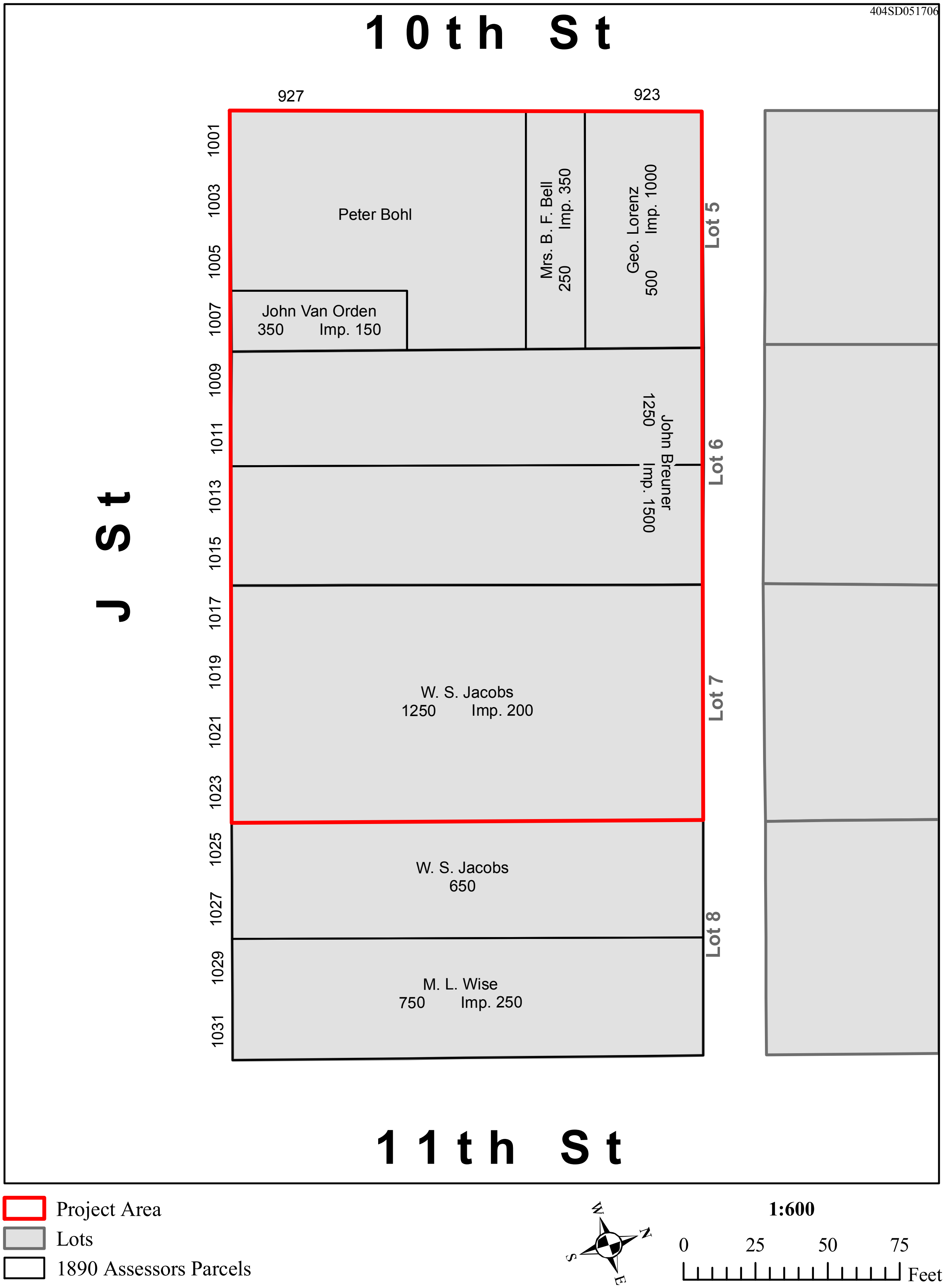

Figure 20. 1890 Assessors Map Parcels.

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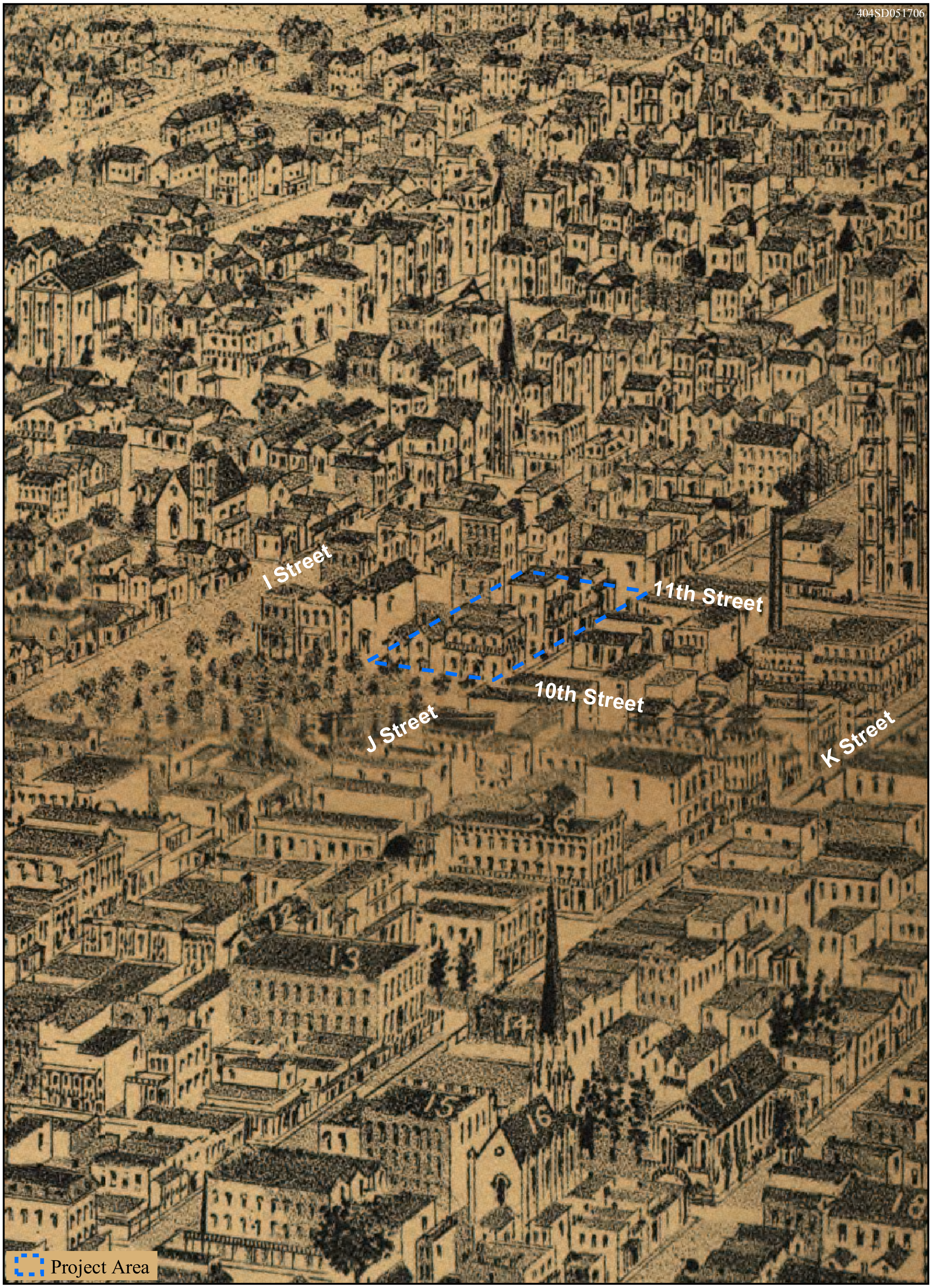

Figure 21. 1890 Elliott's Bird's Eye View.

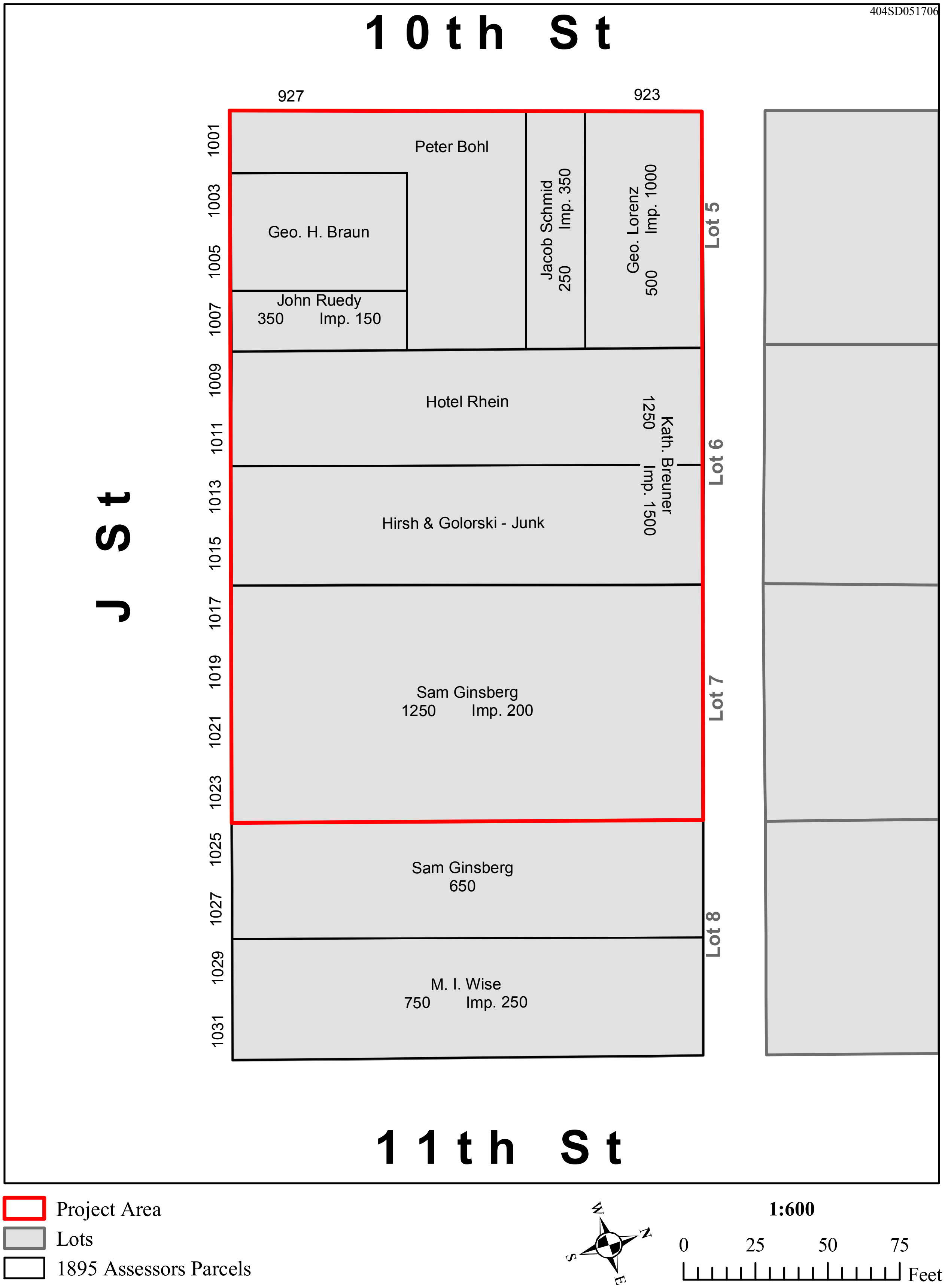

Figure 22. 1895 Assessors Map Parcels.

Tremaine & Associates, Inc.

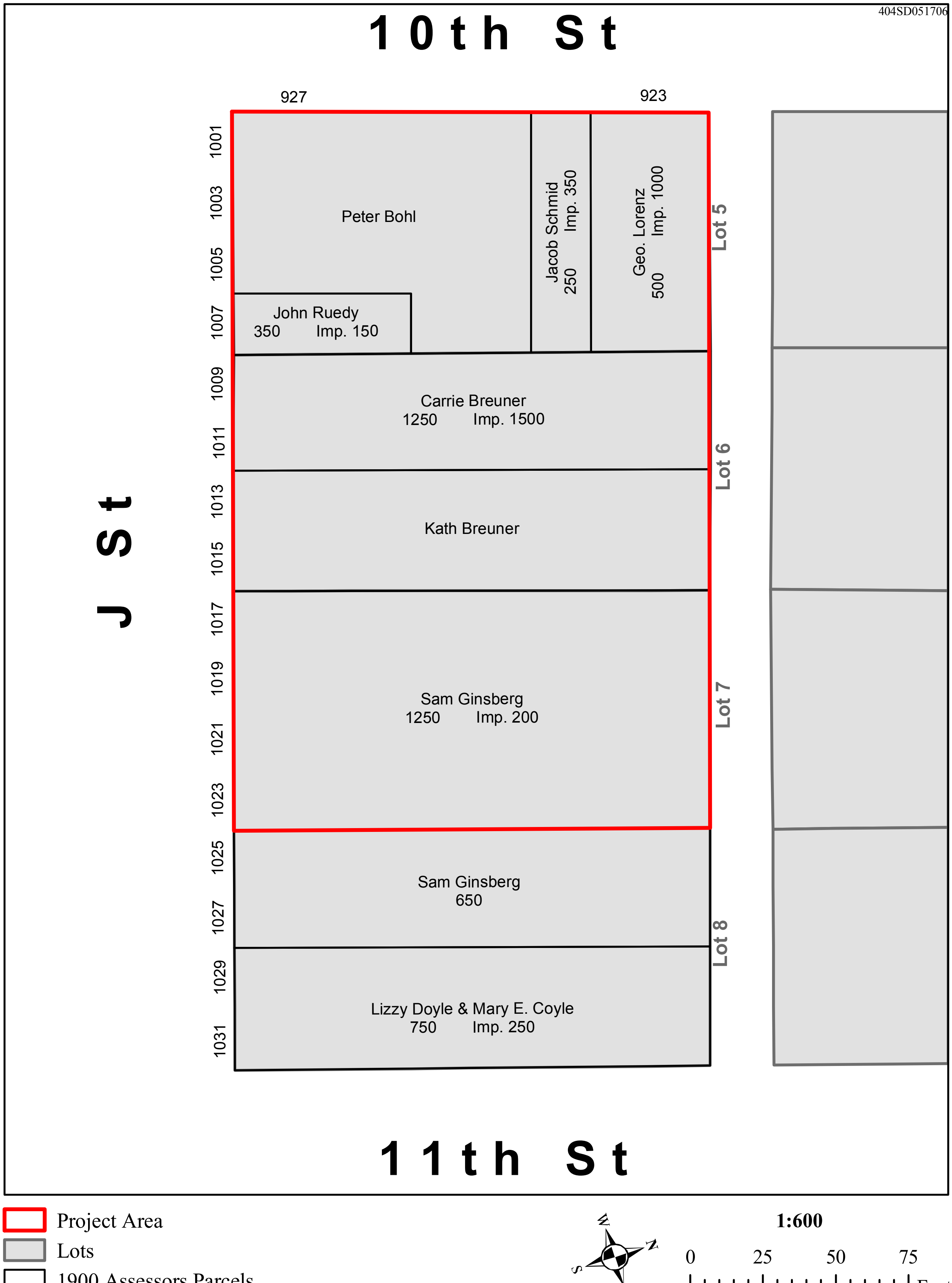

Figure 23. 1900 Assessors Map Parcels.

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own Lot 7 and the western half of Lot 8. The eastern half of Lot 8 has changed hands, now owned by Lizzie Doyle and Mary E. Coyle.

<u>1905</u> (see Figure 24)

In 1905, the property owners on the north side of J Street between 10th Street and 11th Street are the same as were noted five years earlier with the exception of the parcel fronting 11th Street which is now owned by Coyle and O'Neil.

<u>1910</u> (see Figure 25)

By 1910, many of the properties have changed hands. The Improved Order of Red Men has assumed ownership of the properties previously belonging to Lorenz and Schmid. The Ruedy property now belongs to L. A. Raffetto. John T. Skelton has acquired the property previously owned by Sam Ginsberg. Lizzie Coyle is the owner of the parcel fronting 11th Street. Carrie and Kath. Breuner continue to share Lot 6. Peter Bohl continues to own the same property on Lot 5 that he has had for more than fifty years.

<u>1915</u> (see Figure 26)

In 1915, Lot 4 continues under the same ownership as noted five years earlier. From the 1915 Sanborn Map (Figure 6), it appears that the Lodge Hall for the Improved Order of Red Men occupies a four-story building located at 919 10th Street. Peter Bohl has three stores fronting J Street and a store fronting 10th Street. Raffetto continues to own a parcel, which appears to be occupied by a three-story building. Carrie Breuner owns two stores fronting J Street with what appears to be an empty lot behind them. Katherine and Caroline Breuner own a property occupied by a store, junk storage, and a junkyard. Skelton Investment Co. owns all of Lot 7 and the western portion of Lot 8 where several stables, a barn, a horse shoeing establishment, two stores, and a cigar factory are located. The Native Son's Hall Association owns the eastern portion of Lot 8. This lot appears to be unimproved except for one vacant two story building on the northeast corner of the lot.

<u>1920</u> (see Figure 27)

At this time, the property previously belonging to Bohl is now the property of J. C. Carly. All of the other properties continue under the same ownership as noted in 1915.

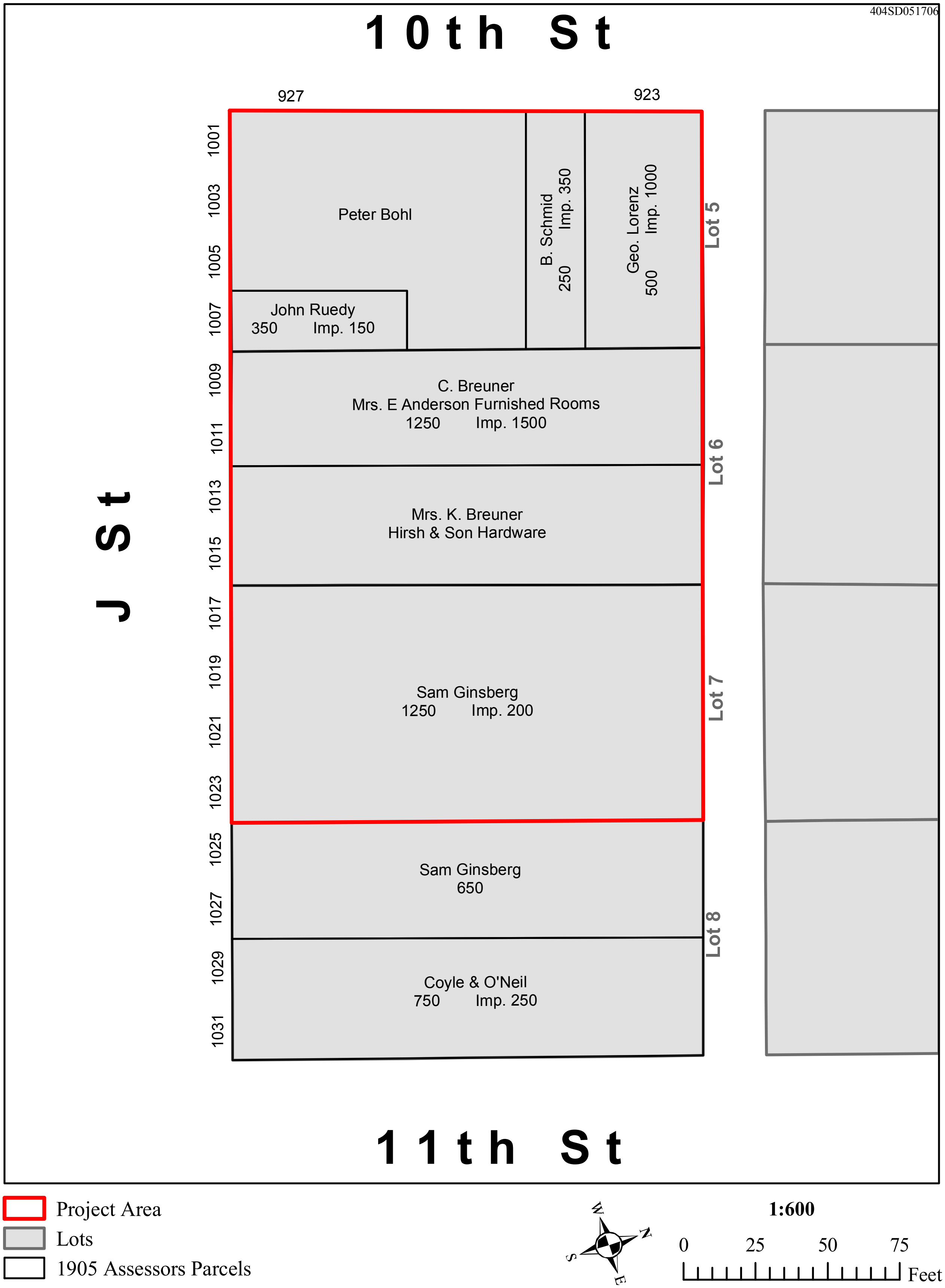


Figure 24. 1905 Assessors Map Parcels.

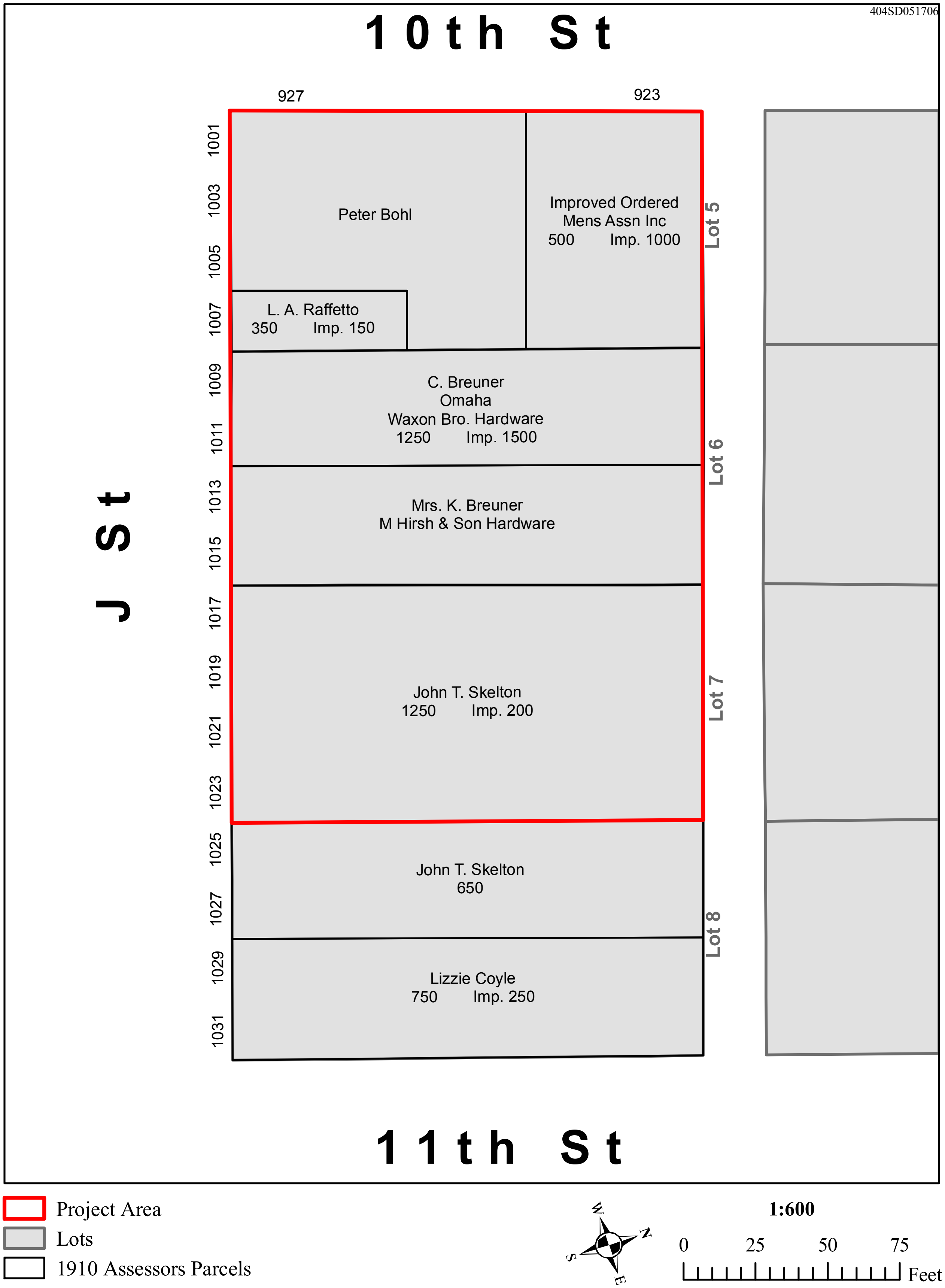
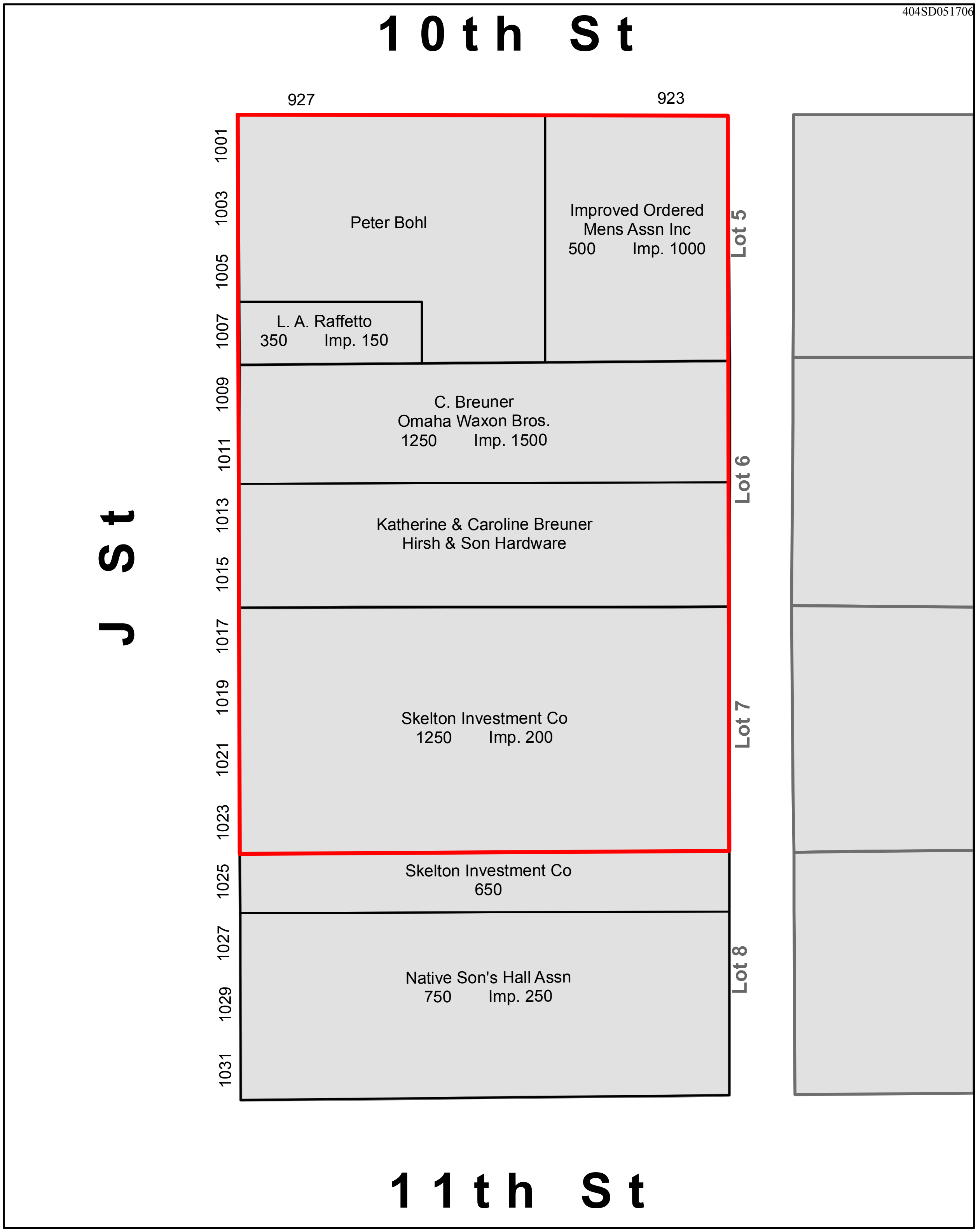


Figure 25. 1910 Assessors Map Parcels.

Tremaine & Associates, Inc.



Project Area
Lots
1915 Assessors Parcels

Figure 26. 1915 Assessors Map Parcels.

Tremaine & Associates, Inc.

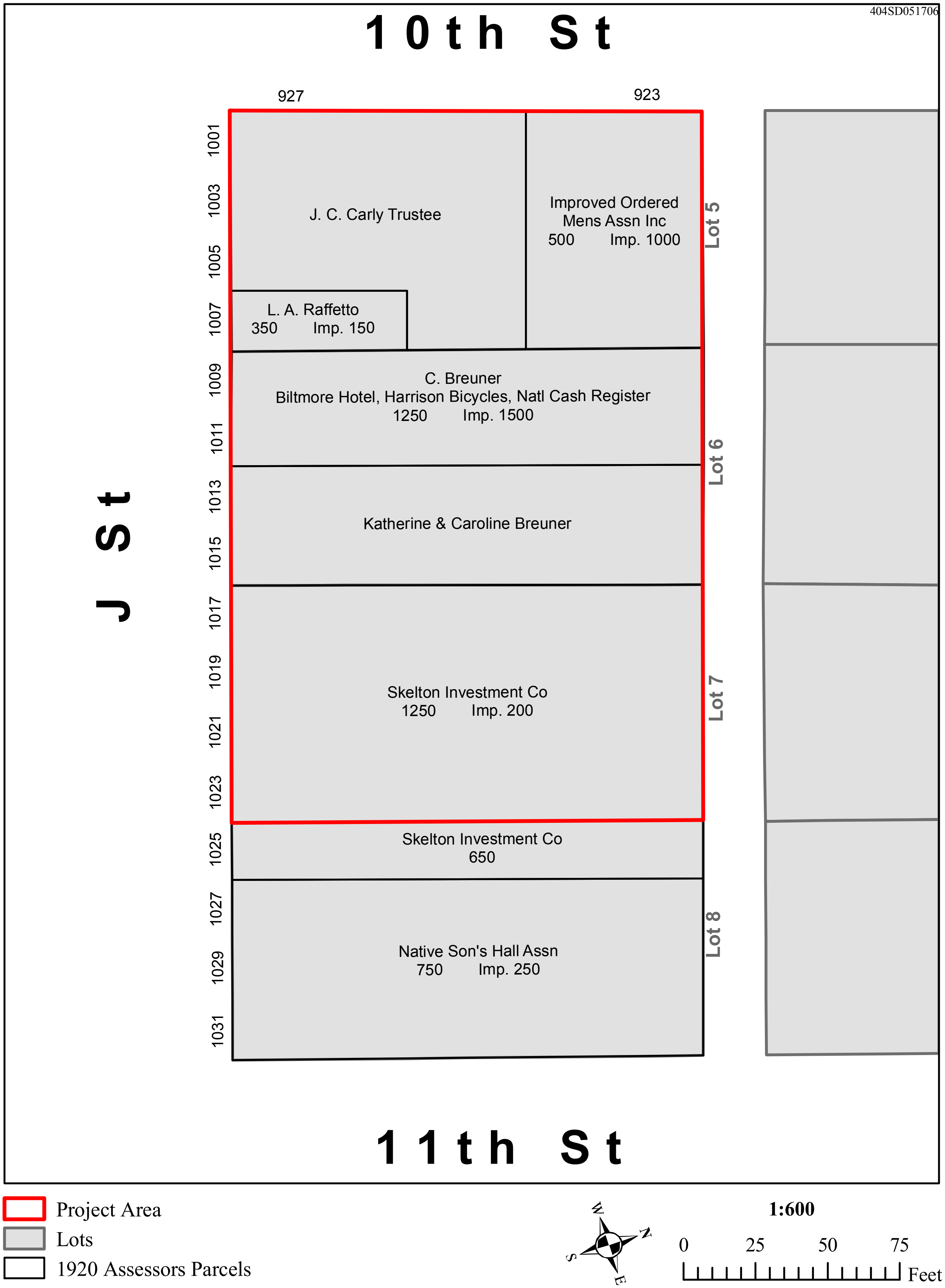


Figure 27. 1920 Assessors Map Parcels.

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1925 (see Figure 28)

By 1925, many of the property owners maintain ownership of the same properties as were recorded five years earlier. However, the parcel previously occupied by the Improved Order of the Red Men is now owned by Arthur L. & Phyllis K. Lamb, Geo. Herndon, and Henry Finnigan. Additionally, the former Carly property is now under the ownership of Wm. E. Kleinsorgo (Kleinsorge).

1930-1931 (see Figure 29)

By this time, Carrie Harris has purchased the northern parcel of Lot 5. Kleinsorge (Kleinsorgo) now shares the southwest portion of Lot 5 with H. B. Drescher. All of the other properties north of J Street between 10th Street and 11th Street continue under the same ownership as noted one half decade ago.

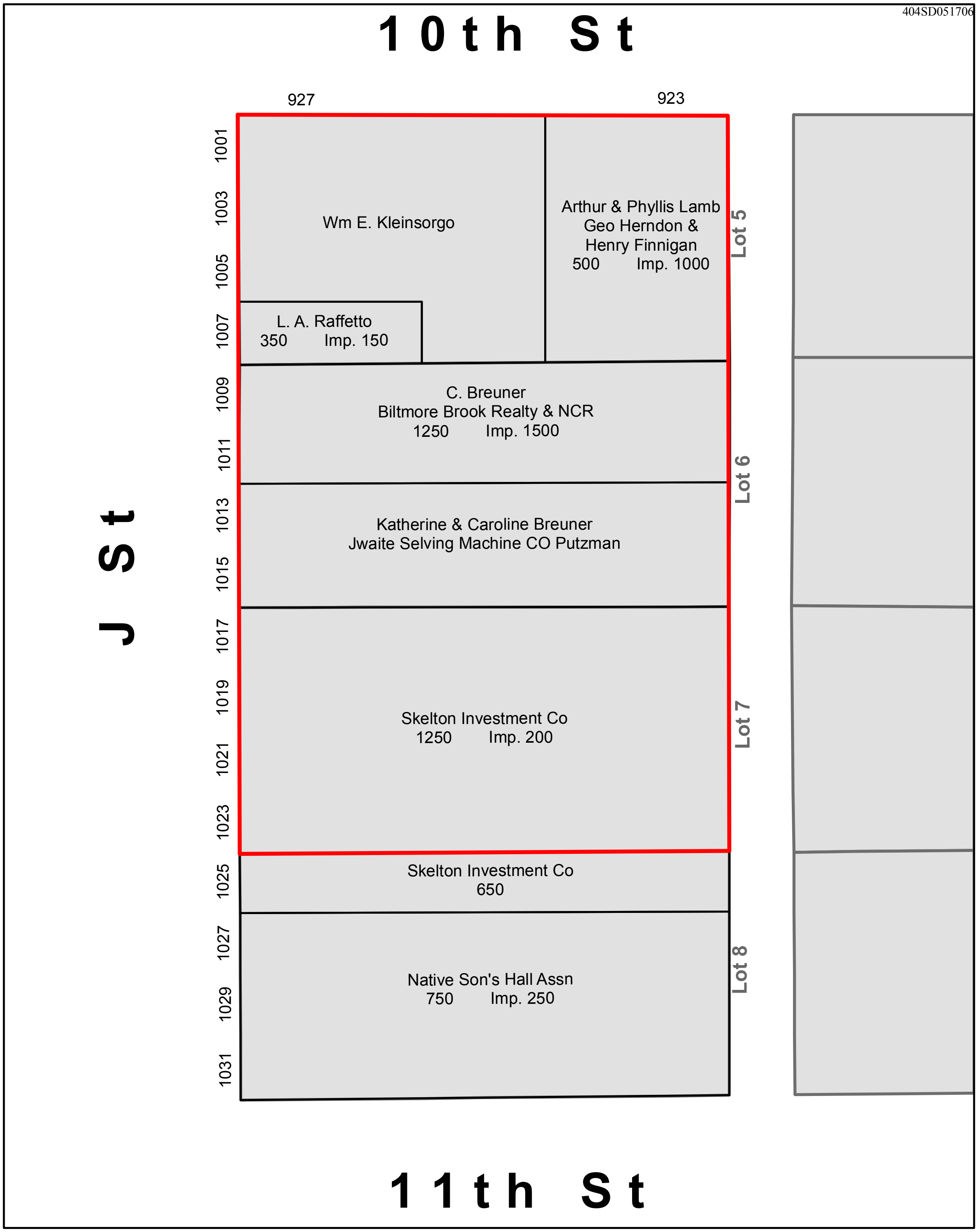
Pattern of Occupation

In the late 1800s, the property along J and 11th streets was mostly commercial consisting of a bakery, stores, a hotel, a laundry, blacksmiths, and stables. However, along 10th Street, most of the buildings appear to be dwellings. Sometime during the early 1900s a shift occurred. While the buildings along J Street remain commercial, consisting of a saloon, stores, a livery, and cigar factory, the homes along 10th Street were demolished. In their place, a hall (Wigwam) for the Improved Order of Red Men was built. Similarly, along 11th Street, the Native Sons [of the Golden West] Hall Association erected a large building for their activities (McGowan et al. 1978:37).

EXPECTATIONS

The proximity of the Metropolitan Project to the previously recorded prehistoric site CA-SAC-38, also known as *Sa'cum* (Figure 30), is particularly noteworthy. The exact boundaries of the site remain unknown as all of it is either under fill or pavement. There is a strong possibility that the site extends to the east and thus may be an impacted resource.

Archival research (i.e., review of assessor's maps) results suggest it is also very likely that trash deposits and foundations from pre-1880s structures may be encountered during subsurface construction activities. From the block study, it is apparent that many of the individuals, such as George Lorenz and Peter Bohl, owned the lots for several decades. Due to the fact that there was no organized trash disposal program, a portion of the lots may have been used by the occupants



Project Area
Lots
1925 Assessors Parcels

W N S E

1:600

0 25 50 75 Feet

Figure 28. 1925 Assessors Map Parcels.

Tremaine & Associates, Inc.

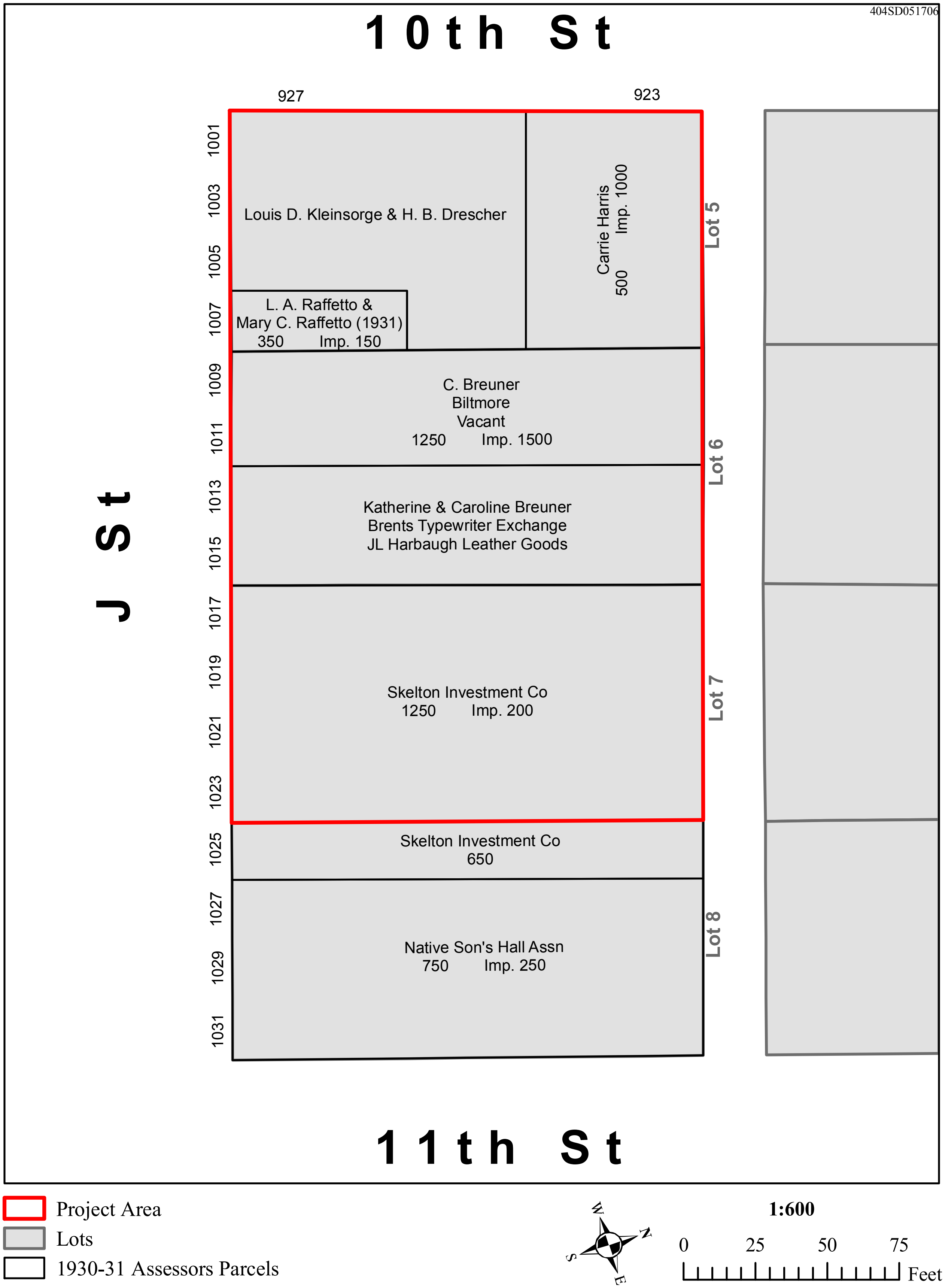


Figure 29. 1930-31 Assessors Map Parcels.

Tremaine & Associates, Inc.

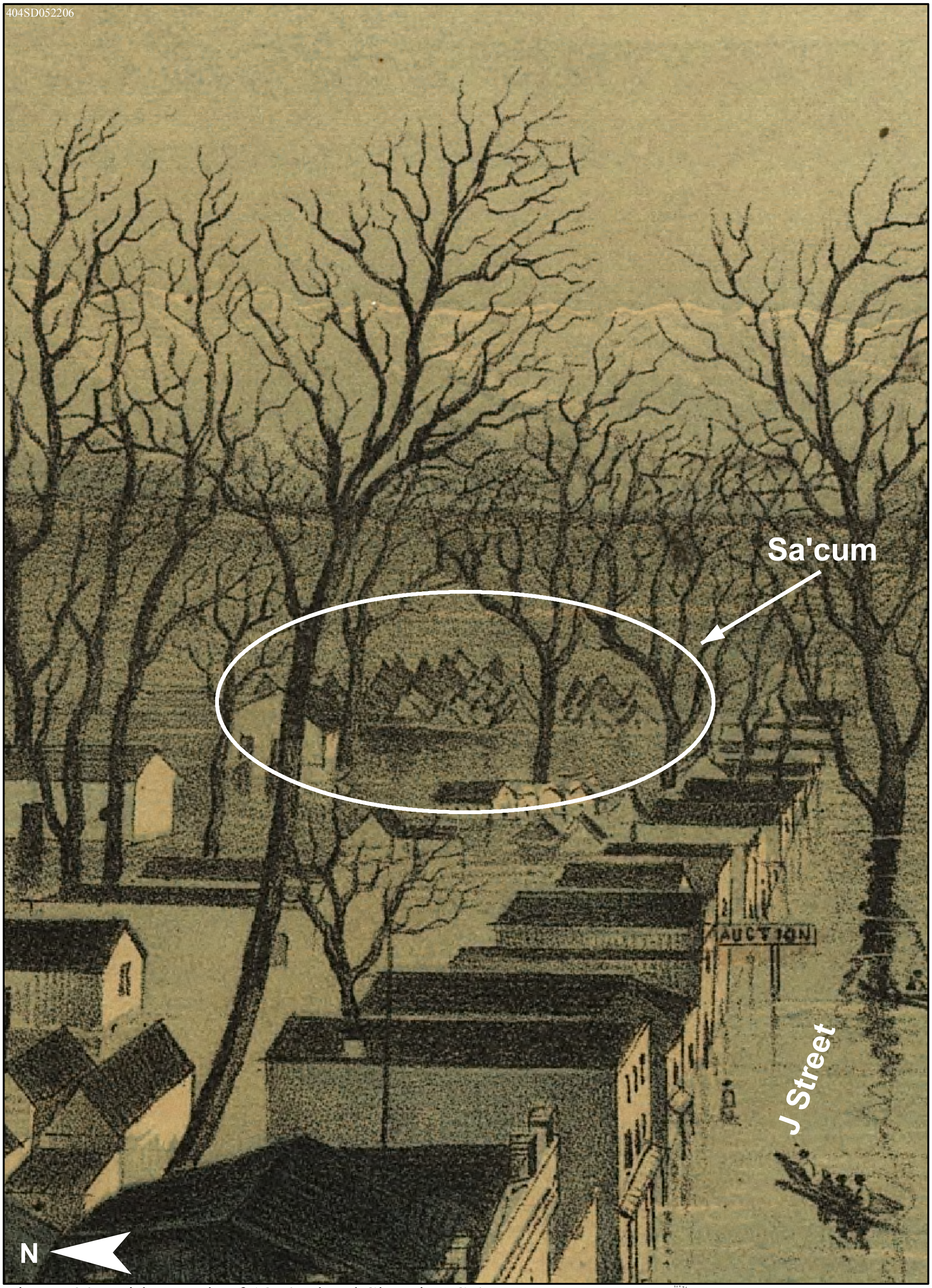


Figure 30. Lithograph of 1850 Flood Showing Sa'cum.

for refuse disposal[1]. As noted above, a few of the lot inhabitants lived there a long time, suggesting that deposits of household and business debris representing several decades of accumulation might be found.

Historic flooding and preventative actions taken probably had an effect on the historic deposits within the project. Shortly after the town was established, in the winter of 1850, nearly eighty percent of the town was inundated with floodwaters reaching depths of four to six feet. Cesar Chavez Plaza was one of the few high spots above water where settlers took refuge. The area surrounding the plaza was probably blanketed with a layer of flood deposit, providing a dateable layer if it survives. Subsequent flood events in 1854 and 1861 probably also left their marks. Attempts to deal with flooding problems included raising the streets. By 1869, J and K streets from Front to 10th streets were raised (Lagomarsino 1969:123). In 1872 the [Cesar Chavez] Plaza, formerly the high spot, was filled five feet above historic grade after the raising of the adjacent streets (Lagomarsino 1969) (Figure 31). Street-raising as well as flood deposits resulted in the burial of historic resources. Furthermore, brick retaining walls, built in order to raise the street levels, created hollow sidewalks that still exist in the project area, along both J Street and 10th Street (Figure 32).

Fire may have had an effect on historic deposits within the project area. The first two devastating fires in Sacramento occurred in 1852 and 1854, but left the area along J Street east of the public square undamaged (Severson 1973:107). Nevertheless, a fire is known to have destroyed the properties at 1009 through 1015 J Street in 1879. This occurred despite the fact that the local fire-house, historically known as Young America Fire Company, was virtually next door, north of the alley fronting 10th Street. The remains of the fire, if observable, can be helpful in documenting the time period (e.g., finds below the burn event should pre-date 1879,those above the burn event should post-date 1879).

SUMMARY & RECOMMENDATIONS

The project area, as discussed above, is considered very sensitive for both prehistoric deposits and historic resources. Given the presence of known ethnographic village, Sa'cum (Casselear and Bainbridge n.d.), directly across the street, it is likely that prehistoric remains exist within the project area. Similarly, due to the extensive historical use of the project area, there is strong potential for

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[1] Left up to the individuals, most trash in nineteenth century America was deposited in backyard privies, alleys, and in other low lying areas, such as lakes, sloughs, and ponds (Strasser 1999). A formal disposal center with crematory was not established in Sacramento until 1895, and an organized form of garbage disposal was not initiated until well into the twentieth century (Sacramento Department of Public Works, 2003). Therefore, prior to the turn of the twentieth century, residents managed their trash through burning and burial, or carting and dumping.

encountering historic subsurface features (e.g., privy pits, refuse dumps, and architectural foundations) associated with the second half of the 19th century as well as material remains from later era occupants from the first half of the 20th century.

The findings presented in the previous section provide a context for predicting where significant archaeological deposits may have survived. It is recommended that this context be used in conjunction with detailed plans of where ground disturbance will occur to develop a testing strategy for locating/identifying buried cultural resources and research design for the evaluation of resources prior to construction.

Testing, as envisioned, would be implemented in three phases. The first phase would consist of geophysical mapping of the near-surface (i.e., just below pavement to greatest depth of anticipated disturbance- ca. 10 feet?) in areas of impact to target buried features and/or deposits. Geophysical results, together with known historic maps, and planned impacts, would serve as the basis for determining where testing occurs. The second phase of testing would consist of ground-truthing through the excavation of a series of backhoe trenches in strategic places, identifying presence/absence of buried cultural deposits or features. The third phase of testing would consist of evaluating discovered resources for eligibility to the California Register of Historic Resources (CRHR)[2]. This would be accomplished through investigations ranging in scope from rapid in-field assessments and documentation (profiling, photographs, etc.) to formal evaluations based on hand excavation.

Following evaluation, those resources found eligible for the CRHR should be assessed to determine whether they would be subject to any substantial adverse affects. If substantial adverse impacts are likely to occur, appropriate mitigation measures will need to be developed and implemented. Mitigation could entail data recovery and/or creation of exhibits for public education. Lastly, archaeological monitoring is recommended during ground-disturbing construction activities to ensure that cultural resources are not inadvertently damaged. Actions that would materially impair the significance of a historic resource are any actions that would demolish or adversely alter those physical characteristics of an historical resource that convey its historical significance and qualify it for inclusion in the California Register of Historic Resources.

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[2] The evaluation criteria for the CRHR are cited in PRC 14, Ch.11.5, Sec. 4852(d). Briefly, an historical resource must be significant under one or more of four criteria, being either resources associated with *events* or *persons* having made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or resources with *distinctive characteristics* representing a type, period, region, or method of construction, or representing the work of a master or possesses high artistic values; or resources having *data potential* (i.e., yielding or having the potential to yield information important to prehistory or history of the local area, state, or nation.

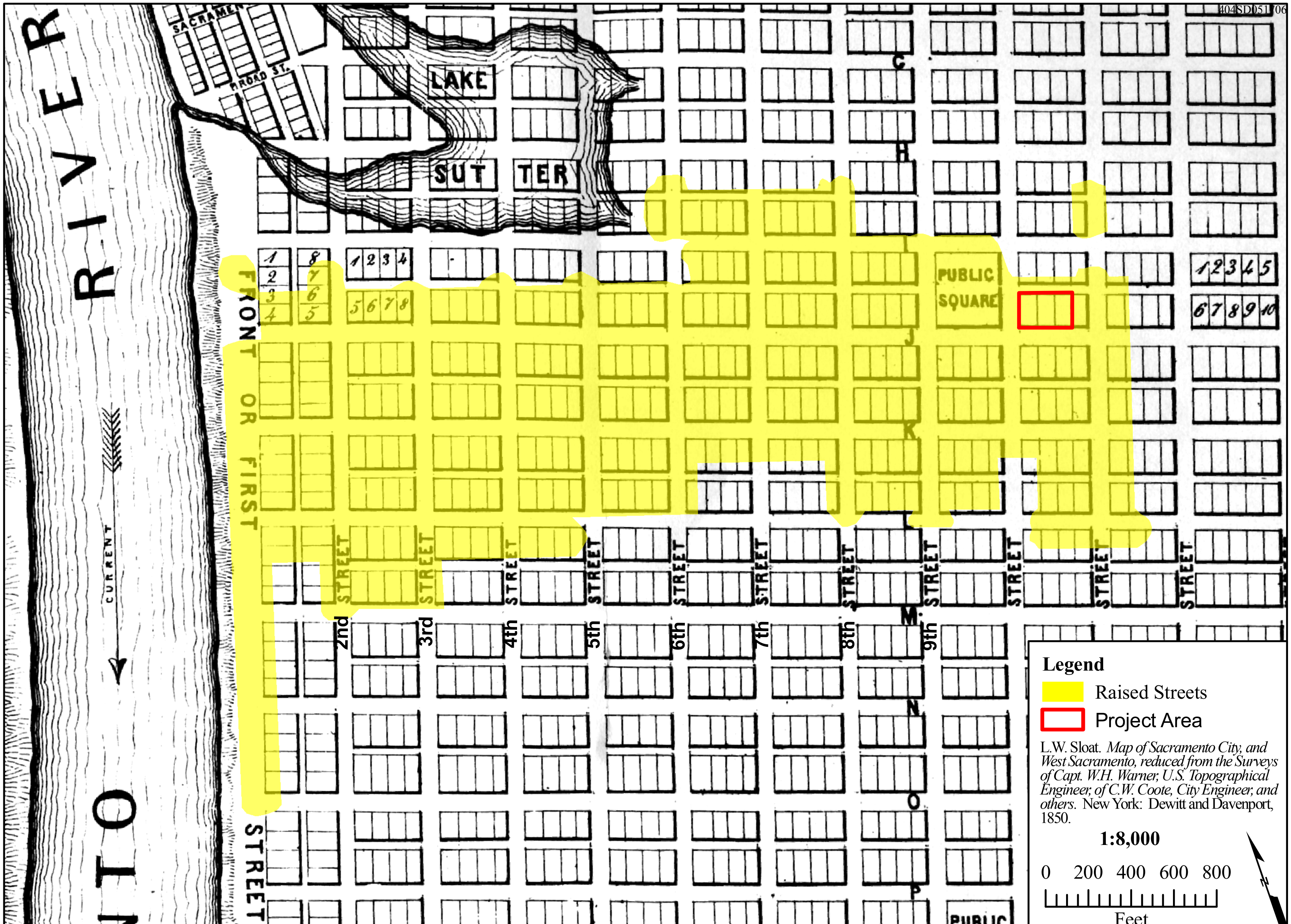

Figure 31. Map Showing Extent of Streets that were Raised (from Lagomarsino, 1969).

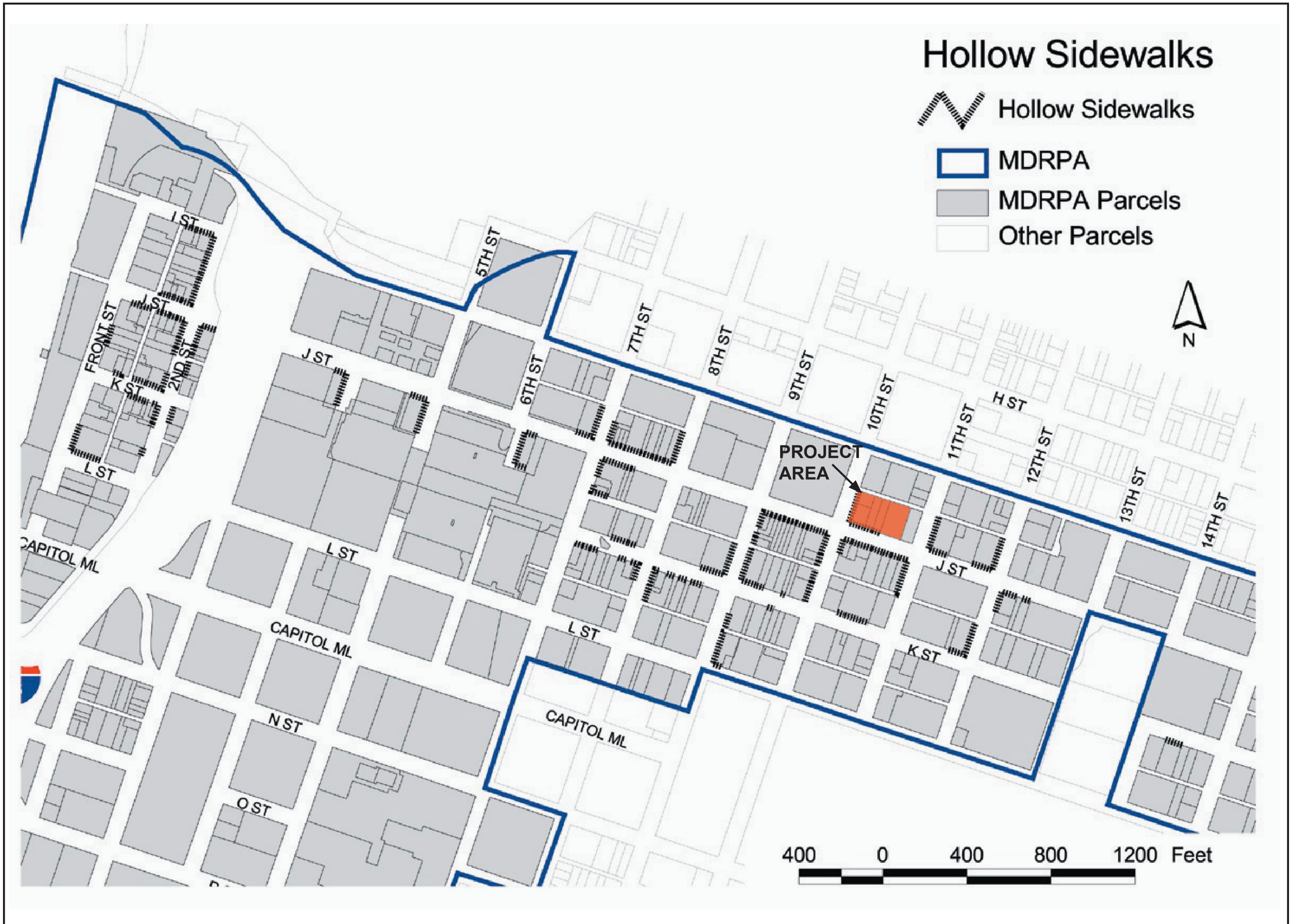

Figure 32. Hollow Sidewalks (Ervin, 2004).

REFERENCES CONSULTED

Briënes, West & Shulz

1981 Overview of Cultural Resources in the Central Business District, Sacramento, California. On file, North Central Information Center, California State University, Sacramento.

California Department of Parks and Recreation

1976 California Inventory of Historic Resources. California Department of Parks and Recreation, Sacramento.

1992 California Points of Historical Interest. California Department of Parks and Recreation, Sacramento.

2005a Directory of Properties in the Historic Property Data File for Sacramento County. California Department of Parks and Recreation, Sacramento.

2005b California Register of Historical Resources. California Department of Parks and Recreation, Sacramento.

California Department of Transportation

2005 California Department of Transportation Bridge Inventory. California Department of Transportation, Sacramento.

Casselear and Bainbridge

n.d. Lithograph of the 1850 Sacramento Flood. California Historical Society, San Francisco, California .

City of Sacramento

2005 City of Sacramento Historic Resources. Preservation Office, Planning and Building Department.

Cultural Resources Unlimited

1998 Pacific Bell Mobile Services: 1001 K Street, Sacramento, Sacramento County- Site #SA-005-08. On file, North Central Information Center, California State University, California.

Elliott, W.W.

1890 Sacramento Around 1890, Panoramic View. Daily Record Union, Sacramento. On file, California State Library.

Heizer, R.

1934a Site Record for CA-SAC-38. On file, North Central Information Center, California State University, Sacramento.

1934b Site Record for CA-SAC-36. On file, North Central Information Center, California State University, Sacramento.

Hider, J. and S. Mikesell
1991 Cultural Resources Evaluation: Plaza Park, Sacramento. On file, North Central Information Center, California State University, Sacramento.

Holman & Associates, Archaeological Consultants
1987 Archaeological Field Inspection of the Proposed Sacramento Community Center Expansion Areas A, B, and C, Sacramento, Sacramento County, California.

Jones & Stokes Associates, Inc.
2001 Cultural Resources Inventory and Monitoring Report for XO California, Inc's Sacramento Area Fiber-Optic Builds, Sacramento and Yolo Counties, California. On file, North Central Information Center, California State University, Sacramento.

Lagomarsino, B.
1969 Early Attempts to Save the Site of Sacramento By Raising its Business District. Thesis on file, California State University, Sacramento.

McGowan, J. A., J. Dominguez, E. Pitti, S. Searcy and C. St. Louis
1978 Report on the Historical Development of City of Sacramento Block Bound by: I and J, 10^{th} and 11^{th} Streets (1850-1920). On file, SAMCC.

National Park Service
1988 National Register of Historic Places – Listed Properties and Determined Eligible Properties. Computer Listings 1966 through 2000. National Park Service.

Nelson, W.
2005 Data Recovery Excavations for the Philadelphia House Hotel (CA-SAC-692H), Sacramento, California. On file, Tremaine & Associates, Dixon, California.

Praetzellis, M., A. Praetzellis and M. R. Brown III
1980 Historical Archaeology at the Golden Eagle Site (CA-SAC-394-H). On file, North Central Information Center, California State University, Sacramento.

Praetzellis, M., A. Praetzellis, D. Bieling and A. Medin
1993 Archaeological Research Design and Identification and Testing Strategies for Two Federal Courthouse Sites, and for the 5^{th} and H

Streets Extension, Sacramento, California. On file, North Central Information Center, California State University, Sacramento.

Praetzellis, M. and A. Praetzellis

1990a Archaeological and Historical Studies at the San Fong Chong Laundry, 814 I Street, Sacramento, California. On file, North Central Information Center, California State University, Sacramento.

1990b Junk! Archaeology of the Pioneer Junk Store, 1877-1908. Anthropological Studies Center, Sonoma State University, Rohnert Park, California.

1992a Archaeological Studies of the Newman's Hen House, 123 K Street, Sacramento, California. Anthropological Studies Center, Sonoma State University, Rohnert Park, California.

1992b Beneath Mrs. Hudson's House: Archaeological and Historical Studies of 1408 J Street, Sacramento, California. Anthropological Studies Center, Sonoma State University, Rohnert Park, California.

1993 Archaeological Resources at 8th and J Streets, Sacramento, California. On file, North Central Information Center, California State University, Sacramento.

1997 Historical Archaeology of an Overseas Chinese Community in Sacramento, California. On file, North Central Information Center, California State University, Sacramento.

Sacramento City Assessor's Map Book

1850 Sacramento City Assessor's Map, Block KL8/9. On file at the Sacramento Archives and Museum Collection Center, Sacramento, California.

1860 Sacramento City Assessor's Map, Block KL8/9. On file at the Sacramento Archives and Museum Collection Center, Sacramento, California.

1870-1871 Sacramento City Assessor's Map, Block KL8/9. On file at the Sacramento Archives and Museum Collection Center, Sacramento, California.

1879-1880 Sacramento City Assessor's Map, Block KL8/9. On file at the Sacramento Archives and Museum Collection Center, Sacramento, California.

1890 Sacramento City Assessor's Map, Block KL8/9. On file at the Sacramento Archives and Museum Collection Center, Sacramento, California.

1900 Sacramento City Assessor's Map, Block KL8/9. On file at the Sacramento Archives and Museum Collection Center, Sacramento, California.

1910 Sacramento City Assessor's Map, Block KL8/9. On file at the Sacramento Archives and Museum Collection Center, Sacramento, California.

1920 Sacramento City Assessor's Map, Block KL8/9. On file at the Sacramento Archives and Museum Collection Center, Sacramento, California.

Sacramento Department of Public Works
2003 Timeline of City of Sacramento's Department of Public Works. On file at the Sacramento Archives and Museum Collection Center.

Sanborn Map Company
1895 Sacramento, California. Microfilm. On file, California State Library.
1915 Sacramento, California. Microfilm. On file, California State Library.
1915-1951 Sacramento, California. Microfilm. On file, California State Library.

Severson, Thor
1973 Sacramento, An Illustrated History: 1839 to 1874. California Historical Society.

Strasser, S.
1999 Waste and Want: a Social History of Trash. Henry Holt and Company, New York.

Tremaine, Kim
2006 Personal Communication.

U.S. Geological Survey
1992 Sacramento East 7.5' Series Topographic Quadrangle. 1:24,000.
1992 Sacramento West 7.5' Series Topographic Quadrangle. 1:24,000.

APPENDIX E

HISTORICAL RESOURCES ASSESSMENT

10th and J Streets Development Project

Prepared for
Gail Ervin Consulting

May 30, 2006

by
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5420 Home Court
Carmichael, California

Table of Contents

Proposed Project

The Proposed Project encompasses the removal of five buildings in the northeast corner of the intersection of 10th and J Streets, and the construction of new buildings on the combined site parcels. The Project will house residential, office and commercial uses in the new high-rise buildings. The purpose of this Report is to describe, discuss the history of each building, evaluate its architectural and historic significance, and determine the potential for each to meet criteria for listing on the Sacramento Register, the California Register or the National Register of Historic Places. The description and evaluation of significance of the portion of the alley flanked by the buildings and the integrity of the area under the sidewalks is also included.

Summary and Recommendations

The five buildings that will be affected by the Proposed Project are those at the following addresses, all but one of which is older than 50 years:

921 10th Street, Plaza Building, formerly Redman's Lodge and Hotel
927 10th Street, former Retail Credit Association Building
1009 J Street , former Biltmore Hotel
1013-15 J Street, former Broiler Restaurant

The building at 1021 J Street is not described and evaluated as it is less than 50 years of age and is not considered historic.

None of the buildings are listed on the Sacramento Register, the California Register of Historical Resources, or the National Register of Historic Places. In 2001, the Design Review/Preservation Board determined to consider 1009 J Street and 1013-1015 J Street buildings as possible contributors to a potential future Downtown District. Further action to create a merged Downtown District with these and nearby buildings as contributors was not taken.

The Plaza Building at 921 10th Street was built about 1907, has been substantially altered approximately three times and no longer resembles its original image or the one created in 1923 by Sacramento architect Arthur Lamb. The area beneath the sidewalk has been modified and no longer fully represents the original brick bulwark and brick barrel vault configuration, but the sidewalk has retained a pair of probably original metal doors that access the basement. The alley image has been modified by infill of original brick arched openings and its contribution to a nineteenth century alley character is weak.

The RCA Building at 927 10th Street, originally designed by Sacramento architect Harry Devine in 1940 has been substantially altered and its image modified. The area beneath the sidewalk has been altered and does not strongly reflect the original sidewalk construction configuration. The alley is not readily accessible to the rear of this building because it stands on a corner and is blocked from the alley by the Biltmore and former Redmen's Lodge.

The façade of the Biltmore Hotel at 1009 J Street, built in 1882, has been altered and the interior has become substantially deteriorated. While the interior still retains its original configuration, it has substantially deteriorated subsequent to its vacancy. The area beneath the sidewalk has been modified and no longer reflects the original configuration of the original sidewalk support system. The alley elevation contains some character-defining alley elements but is substantially altered at the street level. The original brick chimneys are visible projecting from the east and west sides of the roof.

The Broiler at 1013 J Street has been modified on both the interior and the exterior. The second floor, which once was part of the Biltmore and somewhat resembled it in the interior, is substantially deteriorated. The ground floor interior is altered. The alley elevation contains some of the character-defining alley elements but is altered at the alley level and its contribution to the alley image is limited.

The building at 1021 J Street is less than fifty years old, and is not historic. The area beneath the sidewalk has been partially filled in with dirt and a deep narrow ditch extending the width of the building has been excavated adjacent to the earth infill. It also lacks the brick barrel-vaulted support of the sidewalk above. The rear elevation of the building does not contribute to the historic image of the alley.

None of the buildings proposed for demolition as a result of the proposed project possess adequate physical integrity, architectural distinction, or historical significance to meet criteria for listing on the Sacramento Register, the California Register for Historical Resources, or the National Register of Historic Places.

Historic Overview

Sacramento began with the settlement established by John Sutter near the banks of the American River in 1839. After exploring other sites along the American and Feather Rivers, he chose a little knoll on the land now designated as 26th to 28th Streets, between K and L Streets. This was the first permanent settlement in the area, and Sutter built his fort, constructed a flour mill, developed an irrigation system for his pastures, erected a distillery, and organized extensive hunting and trapping expeditions. When an employee discovered gold at Sutter's sawmill in Coloma in 1848, the news created an international Gold Rush to Sacramento and the foothill areas to the north and east. Overnight, Sacramento was transformed from its beginnings as a fort and agricultural settlement, to a busy new city.

At that time, the American River entered the Sacramento near the current Water Filtration Plant and I-5. The flow of the river deposited a sand bar just below the mouth of the river, significantly raising the bed of the river and diminishing its depth. Ocean-going ships coming up the Sacramento River could get no closer to the Gold fields and were forced to unload their cargo and passengers along Front Street on Sutter’s embarcadero. This area became the critical point of entry to Sacramento and Gold Rush sites and grew quickly, outdistancing the growth of both Sutter’s Fort and Sutter’s planned settlement further south near the river and current Land Park, called Suttertown.

The first growth took place along the Sacramento River, (presently the site of Old Sacramento) encouraged by the coming and going of river traffic that tied the new city to the bay area and the sea. The Old City area of Sacramento was laid out in 1848 at John Sutter Jr.’s request, by Captain W. Warner and then-Lt. William Tecumseh Sherman. It extended from the Sacramento River east to the current Alhambra Boulevard, and from the railroad levee on the north of downtown to just south of the X Street (Highway 50 freeway) on the south. The street pattern included a numbering system from Front Street (1st) to 30th Street with north/south running streets, and from the Railroad levee (B Street) through the alphabet to Broadway, running from east to west. Each block of lots within this rectangle contained eight 80’ by 160’ lots, with an alley running between the four lots on the north side of the alley and the four on the south of it. (The one exception to this pattern is the strip of larger blocks between 12th and 13th Streets, which held ten 80’ by 160’ lots, with the east/west alley separating five on the north and five on the south.)

The City expanded to the east, with J Street becoming a major path to and from the gold fields of the north. At 12th Street, the path split, with one road continuing along J Street toward Hangtown [Placerville] and Coloma, and the other branching toward Auburn and Marysville. As the principal route to the gold fields for wagon trains, suppliers and gold seekers, as well as the way back from the mines, J Street served as a conduit bringing millions of dollars worth of gold into Sacramento over time. As a result, the block faces on J and nearby K Street became occupied with buildings early before much other construction had taken place. By 1854, the City extended down J Street to 12th Street. There was some construction in Alkali Flat and south of M Street, but J Street was the commercial focus.

Flooding was a major problem throughout the nineteenth century, with most businesses, residences and farms devastated at one time or another by extensive floods. In the early twentieth century, the Natomas Consolidated Company initiated the first major efforts to reclaim flood plain lands and open the area just north of Sacramento to wider agricultural use. Efforts to control the flooding of Sacramento City began earlier.

The original geographical configuration of the American River in this area was different than today. The American River originally approached within a few hundred feet of the Sacramento and then turned south. It emptied into the Sacramento River through Sutter Slough, near the present location of the Southern Pacific Railroad Depot.

Disastrous floods occurred in Sacramento in 1850, 1852, and the winter of 1861-62, raising questions about the retention of the capital in a city so prone to problems. In order to support the retention and alleviate some of the flooding problems, the City made the decision to move the American River channel and raise the levels of all the streets by about fourteen feet along J and K to the east.

In 1868, another new channel for the river was created by deepening the slough north of the original location, and blocking the original channel. The bend was filled in and a spur levee built to deflect the current. When the river was relocated farther to the north, a flood plain area between it and the City was created.

The general effort to raise the level of downtown Sacramento began in 1869. Some merchants jacked their buildings up and put new foundations and storerooms underneath them in order to have the main floor of the building at the new street level. Others added floors on top of the structure already in place. A few remnants of this early Sacramento era still remain in downtown Sacramento today, and are referred to as the ‘Underground.’

During the early years of Sacramento’s history (1850s-1860s) the main business area of Sacramento was to the northwest of the Capitol Area. In the latter half of the 1850s and early 1860s, California began a transition from a mining economy to an agriculturally based economy. This development, coupled with the permanent establishment of Sacramento as the site for the State Agricultural Fair helped produce growth in Sacramento. In 1860, construction began on the Capitol Building, just southeast of the main business district at that time. Single-family residences, many large and imposing, and as well as multi-family buildings and residential rooming houses comprised most of the neighborhood around Capitol Park during this era.

Sacramento’s largest employer was the Southern Pacific Railroad, originally the Central Pacific Railroad. The rail yards, located near the former Sutter’s Lake just south of the original American River bed, grew to be the largest such working/manufacturing railyard west of the Mississippi, and manufactured rail cars, locomotives, and everything that went into the cars, including wheels, trucks, upholstery, steam boilers, table service silver plating, engine blocks, etc. The yards contained giant forges, stamp mills, blacksmith shop, lumber mill, electrical and brake shops, paint shops, hospital, etc. and was essentially a city unto itself. There are still many Sacramentans whose families were part of the railroad production and who remember the connection with interest and warmth.

The completion of the transcontinental railroad in 1869 and the location of the Central Pacific railroad shops on the north side of the business district, brought a great deal of commercial activity and growth to Sacramento. The development of streetcar lines and eventually the automobile, gave residents the ability to live further away from the place where they worked. This also influenced growth to the east and southeast of the business district.

After the turn of the century, an atmosphere of prosperity and energy seemed to engulf the nation. The promise of a new century, economic health, a certain maturation of “frontier towns” into stable established settlements with some history of prosperity, and a national self-awareness generated a surge of interest in enhancing cities and towns both physically and functionally. Construction boomed, particularly of civic buildings, parks, monuments, and other public facilities. In example, the Sacramento City Hall, Memorial Auditorium, Elks Building, California State Life Building (926 J Street), Masonic Hall, Bank of D.O. Mills, Federal Building/Post Office, and Central Library were all constructed between 1912 and the early 1932. This atmosphere also generated a mass of new consumers, interested in improving their life styles and domestic comforts. In answer to these calls, the department store, already evolving, became an important retail instrument. Stores, large and small, proliferated providing more and more choices to the fledgling crop of consumers which included the large number of Southern Pacific railyard and railroad workers, and many employed in one aspect or another of agriculture.

One of the most significant factors leading to the growth of Sacramento in the Capitol Area was the building of the State Capitol between L and N Street east of 10th Street, and the ensuing addition of other government buildings in the area. This led to another major effect on the Capitol Area - the growth of the state government itself. By the mid 1910s the state government needed additional office space. In 1913 the City of Sacramento voted to spend $700,000 to purchase property for an expanded Capitol area. The next year the State approved a $300,000,000 bond measure for construction of the new property. Subsequently, the Jesse Unruh Building (formerly known as Office Building 1) and the Library and Courts Building were built in the 1920s. During the mid 1930s, two more office buildings were added across N Street from the Capitol; the Public Works Building and the Department of Motor Vehicles (DMV) Building.

During the 1920s and 1930s, the Capitol and State government grew more active as many statewide issues gained in importance, and political activities increased. Legislators drew more attention, and key issues had an ever greater impact throughout the state. A number of notable hotels for visitors to the legislature, lobbyists, and businessmen, were built downtown, and the core of the City was an active, attractive, and economically successful area. The presence of the State Capitol, Capitol grounds, and accompanying classical and impressive sister buildings contributed stature, elegance and stability to the downtown area of the City.

Sacramento downtown was no exception to this atmosphere of growth, and former mining outfitters evolved into millinery shops, haberdasheries, and furniture stores.

David Lubin opened a very small and crude Mechanic’s Store in Sacramento about 1875. He was soon joined by his half-brother, Harris Weinstock, and by 1888, the flourishing business had expanded, now catering to family trade as well as workers. Hale’s began in 1876 and by 1880 had stores in several central California locations. Over time the small market stores were sold off and Hale’s focused their business on the larger retail markets in Sacramento, San Jose, Stockton, San Francisco and Oakland. By 1921, a J.C. Penney’s chain store joined the list of downtown retail enterprises. Weinstock’s and Hale’s continued, with Hale’s purchasing a controlling share of Weinstock’s stock in 1926.

In a July 2, 1927 article the *Sacramento Bee* noted how Sacramento had become a retail magnet drawing shoppers from around the region because, “The Capitol City’s six department stores form one reason why residents of nearby communities come to Sacramento to do their shopping...” The major department stores listed in the article were; Weinstock-Lubin, John Breuner’s [furniture], Hale Brothers, the Nonpareil, Charles P. Nathan, and Rosenthal’s. Several new stores were added by 1930, which included: Gardiner’s, Garfinkles, Montgomery Ward, Sears Roebuck, Tregalis, and the Non-Pareil. In 1940, Enos’ opened, as did D.P. Fletcher and National Dollar Stores, another chain. In 1950, the list of stores represented in downtown Sacramento had almost doubled.

During World War II, building construction slowed dramatically, with building materials were conserved for the war effort. After the War, architectural styles largely imported from Europe and/or generated in California, such as the International Style became popular and were introduced to Sacramento. The local interpretation of the style tended to create building images that eschewed ornamentation, and were directed toward plain unornamented cement plaster surfaces and simple rectangular planes. This type of construction design was also less expensive. The adoption of such imagery generated considerable renovation of downtown Sacramento and the removal of much ornamentation from existing buildings to “bring them up to date.” The many upper floor angled bay windows so popular in earlier times were largely removed and replaced with blank, “clean,” wall surfaces, substantially changing the downtown image.

Due to the “flight to the suburbs” that occurred after the war, the above-mentioned efforts to retain downtown customers by modernizing buildings was not enough. Not even accommodating the expanded age of the auto with parking meters and garages helped. The area became less inviting to shoppers and dwellers, and the downtown area began to decline. This decline in activity, the introduction of a number of new buildings accommodating State workers and daytime offices, and the popularity of free parking at suburban shopping centers, combined to create a downtown less friendly to residential uses. It lacked schools and was fairly deserted on evenings and weekends. Streetcar service ended in 1947.

The downtown and mid-town continued to decline and in the 1960s and early 1970s many fine residences were turned into boarding houses and others were demolished so small apartment building could be constructed. Mortgage lenders began to “red line” the entire central district and home loans could not be secured. However, in the early 1970s the loss of the Alhambra Theater and the publishing of the book Vanishing Victorians began to galvanize a growing preservation community. A preservation ordinance was passed in 1975 and new state laws prohibiting the practice of “red lining” certain areas of a community were also passed.

Since that time, major efforts on the part of the City of Sacramento and Sacramento Housing and Redevelopment Agency resulted in the creation of an attractive new Downtown Plaza shopping area, a panoply of regenerative activities including night markets and weekly farmer’s markets, and a renewed interest in downtown lifestyles and activities. Current programs focus on this goal, and many buildings downtown have been rehabilitated or renovated and returned to a useful contemporary life, taking a positive role in the regeneration of this critical “heart of the city.”

Alley Resources

When the Old City area of Sacramento was laid out in 1848, numbered streets were laid out running north and south, with lettered streets running east and west. Alleys between the blocks were laid out running east and west dividing the blocks into north and south half-blocks. The old city area extended from the Sacramento River east to the current Alhambra Boulevard, and from the railroad levee on the north of downtown to just south of X Street (Highway 50 freeway) on the south.

As the City expanded from the Sacramento River to the east, J Street became the principal route to and from the gold fields of the north. As a result, the block faces on J and nearby K Street became occupied with buildings first, before much other construction had taken place. By 1854, the City extended down J Street to 12th Street. There were saloons, hotels, businesses that outfitted wagon trains or individuals for the trek to gold country along J Street as well as stables and livery stores.

During these early years of Sacramento’s development, there were many small buildings constructed along the alley ways as well as the main downtown streets. There were barns and stables to serve the only means of general transportation at that time – some mode of horse travel. An occasional brick structure was built, and a number of small houses, some built carefully and some shacks that seemed temporary and hastily built. They were essentially constructed at the rear of lots that contained businesses, commercial buildings, and also private residences along the street face.

Flooding was a major problem in Sacramento from the beginning of its establishment. Most businesses, residences and farms were devastated at one time or another by extensive floods. Some were so extensive that it took months afterward for businesses to recover. After particularly disastrous floods in Sacramento in 1850, 1852 and the winter of 1861-62, the city decided to move the path of the American River further away from Sacramento, and raise the levels of all the streets by fourteen feet along J and K from the waterfront east to about 12th Street.

The general effort to elevate the levels of the streets began in 1869 and lasted several years.
While the street-raising project raised the facing street levels one story, the alleys retained their original lower ground level, as did the rear facades of buildings facing the elevated streets. At the east and west ends of the alleys, the alley street descended to original street level and then back up to the new level. The changes in elevation at each end of the alleys also caused the removal of many of the small wooden buildings, barns and stables that had grown up along the original alley levels, altering an accepted image of the downtown that had existed since the 1850s. Over time, the main street-face businesses often expanded their buildings back toward the alleys, contributing to the removal of often flimsy alley structures in the process. Their removal revealed the rear elevations of the more substantial brick buildings that fronted on the streets. Retention of original levels of the buildings in the middle of the blocks facilitated the delivery and loading of goods and provided basement access and storage for businesses, hotels and other tenants whose principal facades stood on the street facades.

Character-defining features of the alley buildings include brick construction, segmented arched windows with brick sills and arched door openings, flat arches in windows and doors, stepped brick parapets, brick chimney stacks along the periphery of buildings, and some patterned brick areas. Building setbacks from the edge of the alley are varied according to the depth of the building. Many of the alley-level building doors are metal. There are occasional volunteer trees or bushes, some cobble-stone surfaced alleys, and some angled bays projecting from buildings over the alley. Spaces on lots whose buildings do not extend completely back to the alley are often used for parking and business or delivery access.

Over time, many of the street facades of downtown buildings have been altered, but often the alley elevation, with its purely utilitarian function, has remained less modified. As a result, some of the more intact nineteenth century building facades remaining in the downtown area are those located in the alleys. These alley facades thus often provide a better image of the post Gold Rush era of Sacramento than downtown street-face facades. Some groupings of remaining alley elevations convey a strong sense of time and place reflecting late Gold Rush and mid to late nineteenth century construction. As such, they provide valuable visual information of Sacramento's early years. These groupings contribute significantly to the character and image of Sacramento's historic downtown, its important heritage, and its evolution over time.

Further, the alley configuration also provides an otherwise limited opportunity to view and understand that unique aspect of the city's history when its streets were raised to their current level. Sacramento's unusual underground level is highlighted by the alley configuration with its lower original mid-block level, and slope up to current street levels on each end. The form and image of the downtown alleys is a critical character-defining feature of downtown Sacramento and its historic districts.

There are a few groups of alley buildings remaining in the downtown that reflect the character of alleys from the nineteenth century. One of these representative alleys occurs on the east end of the alley between 10th and 11th Streets, and J to K Streets, Copenhagen Alley. The group of alley elevations of buildings at the following addresses is a good representative of a downtown alley district: 1016-18 J Street, 1020 J Street, 1024 J Street, 1030 J Street, 1027-31 K Street.

Other alley portions of interest in the downtown area include the Greyhound Alley District which is comprised of the alley elevations of 708 K, 712-714 K, 716 K, 720 K and 724 K Street, located on the north side of the alley between 7th and 8th Streets. The back of the Greyhound Bus Depot is opposite these elevations on the south.

The western portion of the alley between I and J, 10th and 11th Streets accesses the Proposed Project buildings at 921 10th Street, 927 10th Street, 1009 J Street, 1013-15 J Street.   This portion of the alley possesses some elements of character-defining alley features with its rear brick elevations and nineteenth century building scale. However, the rear elevations of the Broiler and Biltmore Hotel, 1009 J Street and 1013-15 J Street have been substantially altered. The rear of the RCA building, 927 10th Street, stands on the corner of 10th and J Streets and has little alley exposure. The building at 921 10th Street contains some standard rear elevation elements in terms of brick arched openings that have been painted and/or filled in, but does not reflect nineteenth century building origins. Overall, the alley image has been diminished due to alterations and does not convey its late nineteenth century character as strongly as other downtown alley resources mentioned above.

Underground Resources

As stated, flooding was a major problem in Sacramento from its inception. The construction of levees along the rivers in these early years proved inadequate to protect the city from major floods in 1850 and 1852, and particularly damaging floods that occurred in the winter of 1861-62. Some flooding may have been responsible for the severe cholera outbreak that killed hundreds of Sacramentans in the 1850s.   The floods contributed to statewide questions that perhaps the Capitol of the state should not be located in such a problematical region. In order to dispel such questions, the City determined to change the path of the American River and raise the levels of all the streets by twelve to fourteen feet along J and K to the east.

The general effort to elevate the levels of the streets began in 1869 and lasted several years. Individual merchants or building owners were responsible for the treatment of their buildings to meet the new street level. Some merchants jacked their buildings up and put new foundations and storerooms underneath them in order to have the main floor of the building at the new street level. Others added floors on top of the structure already in place. These individual 'improvements' were accomplished by building owners at their own pace, creating an extremely awkward up and down pedestrian level along the street face that depended on each owner's progress. On a dark night, many an unwary pedestrian found themselves suddenly, and occasionally fatally, at the bottom of the old street.

The City constructed brick bulwarks supporting a brick wall on each side of the streets along the outer edge of the sidewalks, and filled in the center with dirt to reach the new street level. This left a gap between the wall holding the center of the street and the front of the buildings. Former windows and doors at the original level now faced a brick wall on the other side of their former sidewalks. The gap was covered by a new sidewalk supported by a series of steel I beams extending between the bulwarks and the buildings at their new ground floor. A series of brick barrel vaults between the beams filled in the space between the beams and supported flat new street sidewalks above the space between the bulwarks and the new level of the buildings.

This created long corridors beneath the sidewalks - between the bulwarks and wall containing the street infill, and the old fronts of buildings on the original ground level. When completed, one could walk from one end of the block to the other beneath the sidewalk. Over time, in order to secure individual basements from entry, brick walls were erected under the sidewalks between buildings, providing each with a 'room' or space the width of the sidewalk and the length of the building. This area has become known as the 'Underground' of downtown Sacramento.

The space was accessed in many instances by metal elevators in the sidewalk that rose to street surface for the loading or unloading of goods and then lowered to basement level under the sidewalk of various businesses. Filtered light from above was often provided to the space by the insertion of sections of thick small glass blocks in the sidewalk. There were also a few instances of portions of the sidewalk left open adjacent to buildings that still retained businesses on the original ground level. There were stairways that extended from the new sidewalk level down to the lower level under the sidewalk, providing access to basement businesses or offices. While none of these have remained to the present, the shadow patterns of stairways on the existing walls of a few buildings indicate their former existence.

While this project raised the facing street levels one story, the alleys retained their original ground level, as did the rear facades of buildings facing the streets. At the east and west ends of the alleys, the alley street descended to original street level and then back up to the new level. This facilitated the delivery and loading of goods and provided basement access to businesses, hotels and other tenants.

Over time, most of the original underground sidewalk construction configuration has been modified or removed by the city through encapsulation by concrete or stabilization by metal or timber supports, in order to strengthen sidewalks that often had been supported only by crumbling nineteenth century brick.

The areas under the sidewalks associated with the Proposed Project buildings have been modified. The remaining brick bulwarks have been partially buried, or concrete poured to create ledges along the street side walls. The original brick barrel vaults have been removed and/or plastered over with concrete.

Historical Overview of the Project Area

Since J Street served as the primary route to the northern gold fields, the property uses along the street tended to complement that purpose and were primarily related to transportation and lodging. Hundreds of teamsters with huge freight wagons streamed up and down J Street every day. Businesses sprang up along the street, particularly between 8th and 13th Streets, to service this trade.

In the 1850s the 927 J Street site appears to have held a bakery. In the 1850s and 60s the 1009 J Street site was the Illinois House hotel while the 1013-15 site was a blacksmith and wagon maker. In the 1850s the 1021 site was occupied by a boarding house and a blacksmith and in the later 1800s it was the site was the Central Livery Stables—which also housed a blacksmith shop. In the 1870s both 1009 and 1013-15 were a wagon and plow works operated by W.B. Ready. In the mid-1870s they were incorporated as the Sacramento Plow Factory. In 1879 the plow factory became bankrupt and the buildings on both sites burned in the summer of that year. In December of 1882 the Russ House hotel was completed by John Bruener on the 1009 J Street site and is basically the building that occupies the site today. At about the same time he also built 1013-15 J Street which was initially occupied by Ingram Carriage Works, and by 1889 it was the home of Marcus Hirsch, Junk Dealer. In 1884 Peter Bohl built a three story business building at 927 10th Street, with ground floor retail and two floors of lodging.

In the 1895 Sanborn Map, the 921 10th Street site contained three single family dwellings. Peter Bohl acquired one of the single family dwellings at the rear of his 927 10th Street building in the late 1890s constructing an addition to his building at the rear and remodeling the exterior of the building. The hotel at 1009 J Street was operating as The Rhein, and 1013-15 was still occupied by Marcus Hirsch's junk operation. In 1897 a restaurant was opened in the ground floor of the hotel. The Central Livery Stables were still at 1021 J Street.

Two trends began to affect the project area at the turn of the 19th to 20th century. One was the advent of the automobile which not only revolutionized transportation, but also brought an abrupt end to the horse and wagon era. While the project area had its share of wagon makers, stables and blacksmiths the need for their services dwindled rapidly between 1910-20 and their buildings and spaces were converted to other uses. Another trend was the move of the retail center away from Old Sacramento and further out J and K Streets. A good example was the Public Market in 1923 which was erected at 13th and J Street. Mrs. Elizabeth Glide worked with renowned architect Julia Morgan to build the beautiful Beaux Arts building which housed dozens of retailers and service providers. It also brought Sacramento's first example of the technical innovation of refrigerated display cases for grocers and butchers. The Public Market building replaced the old Telegraph Stables a complex which included a barn, brick carriage house, combination wood frame hotel and restaurant, and a horse shoer all built in the 1860s to service the teamsters. In 1925, Weinstock-Lubin & Company opened its elegant new department store at 12th & K Street, thus moving up from 4th & K Streets. Events like these created more value for real estate in the project area and it encouraged owners to remodel their properties and to find new uses for them.

In 1906 the Redman's Lodge Hall and Hotel was constructed on the 921 10th Street. In 1923 the building's owner was architect Arthur Lamb who converted the building to offices in a remodel that brought it to its current appearance, and renamed it the Plaza Building. In the early teens the residential units above 1013-15 J Street were incorporated into the hotel at 1009 ½ J Street. In 1917 the hotel and 1013-15 were vacant during a remodeling performed on the hotel and 1013-15 J Street that brought these two buildings to their current appearance. A second retail outlet was added to the ground floor of the hotel and it became known as the Biltmore. Hirsch & Son Plumbing Supplies moved to the 1021 J Street building that formerly housed the livery stable and the 1013-15 building had two retail outlets installed in its ground floor.

In 1940, the building at 927 J Street was demolished and the building that presently occupies the site was constructed. Its initial tenant was the Retail Credit Association. In 1949, The Antecevich Restaurant occupied the 1013-15 J Street building and it became known as The Broiler. The Broiler occupied half of that building until the late 1990s.

Although it was remodeled for new uses, the old Central Livery Stables stayed intact until it was demolished and replaced in 1962-63 by the office building which currently occupies the site.

Buildings affected by the Proposed Project

The addresses of buildings that will be affected by this project include the following:

921 10th Street,
927 10th Street,
1009 J Street,
1013-15 J Street.

921 10th Street
Redman's Lodge

Description:

Constructed of brick and surfaced with stucco, the façade of the seven story building contains five vertical window banks flanked by a quoined corner treatment of scored stucco. Three of the banks contain double windows, separated by banks of single windows. The doubled ones also are divided horizontally by paneled spandrels on the third, fifth and seventh floors. Fourth and sixth floor windows have projecting sills. The alley (north) elevation contains a number of both arched and rectangular windows. There are two large and similar openings, and one taller one of the ground floor, the more horizontal ones holding large windows. The upper south elevation contains former openings that have been filled in. The street façade, including the ground floor, has been altered. There has been an addition to the roof.

The structure has experienced alterations that have substantially changed its original appearance. The building was altered to an unknown degree in 1923, and again after the City of Sacramento assumed ownership in the 1970s, experiencing substantial changes to the design of the façade that have modified its earlier and original image. The original windows have since been replaced. The building no longer reflects its 1907 or early 1920s design.

History and Significance:

The Red Men's Lodge Hall was designed in the spring of 1906 by E.B. Wilson and construction began. The building was completed in the spring of 1907. Although it has seven bands of horizontal windows, the building was originally four stories with two bands of horizontal windows providing illumination for lodge halls with 19' ceilings.

By the early 1920s the lodge hall was owned by Arthur Lamb and his wife. Lamb was an architect with Woolett & Lamb and he redesigned the building inside and out changing its use to an office building and converting it from its original four story configuration with each floor containing lodge rooms with 19' ceilings, to a seven story building. Lamb also altered much of the original building's exterior. In its original version, each floor contained two horizontal banks of windows. These were flanked by fluted pilasters topped by Ionic capitals. The pilasters appeared to support a classical horizontal pediment. The ground floor exterior surface was finished to look like rusticated stone. The bracketed cornice was decorated with classical dentals. Lamb removed all these details except the cornice. He added the quoined corner treatments of scored stucco. He also added an incised decorative spandrels between the paired windows between the 2nd -3rd , 4th -5th and 6th -7th floors. The retail exterior on the ground floor which had contained two pairs of narrow vertical windows, were changed to two large plate glass show windows. The formerly rusticated surface was changed to a smooth surface. When the city acquired the building in the 1960s or 1970s the cornice was removed, the windows were changed to tripartite aluminum frame, and the show windows were changed to a nine part 3x3 window with the tinted glass panels separated by black metal muntins. This may have been when the marble and tile were removed from the lobby.

The structure has experienced alterations that have substantially changed its original appearance. Its primary importance as a resource is due to its past cultural and historical associations as the Redman's Wigwam, and the site of a session of the State Legislature.

Due to substantial modifications and limited architectural values, the building does not appear to meet criteria for listing in the National Register of Historic Places.

927 10th Street
<u>Retail Credit Association Building</u>

Description:

The three-story building is sited on the corner of 10th and J Streets, opposite Cesar Chavez Plaza. A reinforced concrete building with a stucco/plaster surface, its image reflects an early interpretation of International style. The current appearance of the building is a modification of its original 1940s design. The re-modeling has added Moderne elements in its softening of the hard edges of the vertical projecting strips that divide the elevations into ten window bays on the west and eight window bays on the south elevation by adding an extra indentation on the sides, and to the corner of the building with additional vertical modulation. The windows are comprised of two vertical lights above a single horizontal light, framed in aluminum. The illusion that the vertical divisions are stepped pilasters is enhanced by the current painting scheme that carries the vertical image to the roof. The original building façade was monochromatic. The building's original design contained office or shop spaces flush with the exterior of the building surface on the street level.

The building has experienced several alterations. The decorative shallow belt course originally projecting at the base of the second floor level has been removed. The original upper light has been covered on all of the windows. The street level now contains large bays filled with ceramic tile panels framed with dark angled glass planes. An original entrance to the building on J Street has been removed.

History and Significance

The building was originally designed by prominent local architect Harry Devine, and built by Frank Maloney Co., contractor. The building was completed for Louise Kleinsorge & H. Bernard Drescher for $ 125,000 in 1940. The first major tenant was the Retail Credit Association. Mrs. Kleinsorge's husband was a prominent local attorney and Drescher was a well known wholesale grocer. It was remodeled in 1955 for the First Western Bank. It was subsequently again remodeled for use as Sacramento City offices, probably in the late 1970s. The current appearance of the building reflects these modifications.

The building does not appear to be individually eligible for listing in the National Register of Historic Places, due to alterations. Even though the building was designed by a prominent local architect in a style that was important to Sacramento's architectural evolution, that image has been modified. While the building reflects a significant era in the city's architectural heritage, the alterations, particularly those on the ground floor, have limited its eligibility for Sacramento Register listing, and the National Register of Historic Places. The building does not appear to meet criteria for eligibility for listing in the Sacramento Register, the California Register of Historical Resources, or the National Register of historic Places.

1009 J Street
Biltmore Hotel: formerly the Russ Hotel, Omaha Hotel, Rhein Hotel, The Pleasant

Description

The Biltmore Hotel building stands on the north side of J Street, near Cesar Chavez Plaza, in the core area of the downtown business district in Sacramento. The structure is a wood frame and brick building three stories tall, and contains rooms and apartments clustered around a central, three story, open stairwell. The upper two stories of the building are surfaced with painted cement plaster, and the ground floor is surfaced with green ceramic tile. There are three ground floor entrances. Two entries adjacent to boarded-up show windows lead to former commercial spaces and stand on east and west sides of the building. There is a third and central entry to the rooms above. The entries are framed with aluminum sash and contain glass panels. Green tile flanks the central entry, and covers the show window bases and wall surfaces on either side on the ground floor of the building. A fire escape extends between the second and third floors.

The upper two stories contain aluminum sash casement windows; two single eight-light casement windows on each floor, flank central double casement windows that open to the fire escape. The windows on the third floor are surmounted by fixed, two-light transoms, while those areas on the second floor windows have been filled-in. The windows closest to the central double windows on each floor have been modified to incorporate small air-conditioning units, as has one of the central windows on the second floor. The original cornice has been modified and its current configuration includes a horizontal panel on the building’s top surface, created by the application of wood or concrete plaster members. The rear of the building, the north elevation, reveals more of the building’s original appearance, with segmented arched windows on the upper two floors, and brick surface. Two covered and balustraded balconies project from the rear at the second and third floor levels. A door on each floor accesses the interior hallway and rooms. The rear of the ground floor has been enclosed and modified. A stepped parapet and brick chimney stacks are visible along the edge of the building at the rear and sides.

The interior of the building contains two commercial office or shop areas on either side of the central stairway and stairwell to rooms above. The second floor contains rooms clustered around the oblong-shaped stairwell lined with a balustrade containing turned balusters. There is a deeper landing area at the front of the building, adjacent to the double casement windows and fire escape access. There are additional rooms on either side of a hallway that extends to the rear of the building (north), and opens onto a covered balcony facing the alley. The hallway walls are surfaced with plaster and painted, and the doors are paneled wood. Original transom windows above the hallway doors have been closed and covered. The walls and ceilings of the oblong stairwell space are coved, and a picture rail molding encircles the walls just above the room doorways.

An opening to the east on the second floor, just off the main central stairway, extends another hallway into the building next door and accesses additional rooms on its second floor. This hall continues past an interior light well between the two buildings, and then splits into two other halls; one extends directly to the front (south) of the Broiler building with rooms off the hall, the other extends further to the east and then to a north/south hall on the other side of the Broiler building, accessing additional rooms.

The rear of the building, the north elevation, reveals more of the building’s original appearance, with segmented arched windows on the upper two floors, and brick surface. Two covered and balustraded balconies project from the rear at the second and third floor levels. A door on each floor accesses the interior hallway and rooms. The rear of the ground floor has been enclosed and modified. A stepped parapet and brick chimney stacks are visible along the edge of the building at the rear and sides.

Alterations include the resurfacing and modification of the entire façade, including the commercial shop areas on the ground floor flanking the central stairwell. The casement windows on the façade have replaced the original windows. The ground floor of the rear of the building has been extended to the north and enclosed. The interior hotel stairway balustrades have been heightened at the base, and the newel posts have been made taller in order to meet building code requirements. Original community bathrooms have experienced modifications and lack of maintenance. All of the original transom windows above the apartment doors have been covered, and several of the doors have been replaced. The balustrades on the rear elevation have been modified, and some of the rear windows have been closed and covered.

A connecting passage between the Biltmore and Broiler buildings was created on the second floor to allow access to the rooms above the Broiler through the Biltmore Hotel when the Broiler's second floor became part of the hotel.

History and Significance:

The two lots that contain the properties occupied by the now vacant Biltmore (w ½) and the Broiler (e ½) are the two halves of Lot 7 on the block bounded by 10th, 11th, I, and J Streets. The first recorded owner of these lots was one of Sacramento's founders and leading pioneer merchants, Sam Brannan, in 1850. At that time the Assessor records showed that there was some $1,000 in improvements on the property and these probably represented two wood-frame commercial buildings, one on each half of the lot. The 1851 City Directory showed the merchant house of H.A. Fairman & Co. on the west ½ (297 J), and the grocery of J. Chenoworth on the east ½ (303 J Street).

In 1849-50 most of the businesses in Sacramento were clustered along either side of J and K Streets from Front Street east to about 9th Street. By late 1852 additional development extended as far as 9th Street. Businesses extended further east on J Street, due to its use as a principal road to the gold fields. At twelfth street the road split into two directions, with one branch continuing due east to the American River and the other one angling off to the northeast to connect with a ferry crossing of the American River at about where the 16th Street bridge now crosses the river. The point at which the road split became a nexus for transportation related businesses such as teamsters, hay yards, stables, blacksmiths, wagon makers and small hotel/restaurants. By 1853 the 297 J site was owned and occupied by John Merker who was the proprietor of the Illinois House hotel. The Sacramento map of 1854 showed a bldg. Approximately 40' wide by 25' deep. The hotel continued to operate on that site until about 1865. Assessor's records showed a value for these improvements of $500 in 1852 and $700 in 1860. This building was probably a single story wood frame structure.

By 1853 the 303 J site was occupied by Marshall & Nye, blacksmith and wagon makers. The Sacramento map of 1854 showed a building approximately 40' in width and 50' in depth. The City Directory for 1854-55 indicates that this building was 2-story and made of brick. John Merker owned this lot as well until he sold it to Sylvester Marshall in1856. Marshall served a two-year term as Sacramento Sheriff (1860-61) and he sold the property to R.T. Edwards at that time. In 1860-61 the improvements on the lot were valued by the Assessor at $2,800. The 1861 City Directory listed Cronkite & Beebe, blacksmith and wagon makers at 303 J Street. In 1867 W.B Ready, a blacksmith at Cronkite's (City Directory) purchased both lots and operated a business of wagon and plow making.

Ready was an inventive blacksmith and he was issued a U.S. Patent in 1861 for his Little Giant Gang Plow (advertisement 1873 City Directory). This device was the main product of Ready, who also made wagons and other farm implements. According to Thompson & West's History of Sacramento County, in 1875 Ready incorporated and the firm of Ready & Clark raised some $70,000 in capital that was invested in buildings and machinery. The business was not successful and was taken over by Capital Savings Bank in 1877. The bank sold most of the equipment to Baker & Hamilton in the spring of 1879 and "Two months after this sale, the building in which the factory had been situated was burnt down" [Thompson & West].

Famed Sacramento furniture dealer John Breuner was the owner of record in 1882. It appears that Breuner began almost immediately to rebuild on the site and that he probably reused portions of existing structures on the site. By December 27, 1882 an advertisement appeared in the Sacramento Bee for the "newly built brick building" that houses the Russ House Hotel (1009 J - w ½ of Lot 7). The advertisement indicates that the hotel had a saloon, billiards parlor and cigar & tobacco store located in it. At this time the first floor space was probably devoted to these uses, as well as a hotel lobby. Ingram & Co., Carriage & Wagon Makers, occupied the e ½ of Lot 7 by 1883, and was listed in the directory at 1013-15 J Street.

In its first three listings in the City Directory (1883-85) the Russ House was listed as 1009-1015 J Street. This indicates that the second story units at 1013-15 were part of the hotel. Future listings appear to show that these second story units were probably not interconnected to the hotel via a hallway as they are today, but probably had their own separate entrances. It also appears that 1013 and 1015 on the second story were each occupied by a single resident. In 1889 the first floor shops of 1013-15 were rented by Marcus Hirsh, a junk dealer.

In 1892 John Breuner died and possession of the properties passed to his estate. Bruener had two sons and three daughters, and it was the daughters (Katherine, Caroline and Carrie) that inherited the lots. Katherine and Caroline got the Broiler (303 J renumbered to 1013-15) lot and Carrie inherited the lot with the hotel in 1896, (297 J Street, renumbered to 1009-11 J Street). Immediately following the death of Breuner in 1892, the hotel changed proprietors. The 1895 Sanborn Fire Insurance Map showed the two buildings in much the same configuration as they are currently. The hotel site shows a 3-story brick building with basement. Two stores are indicated on the first floor and the building is approximately 40' wide by 80' deep. At the 1013-15 J Street address, the Sanborn map indicated a 2-story brick building with a basement that was approximately 40'x 50.'

After John Breuner's death, John Reudy became the proprietor of the Hotel and it was operated as The Rhein from 1892-95. John Breuner's estate first passed the hotel property to Katherine Breuner in 1894, and then from Katherine to Carrie in 1896. During this period, some important changes were made in the hotel. Evidently the bar, billiards and cigar operations disappeared and the space was devoted to a restaurant. The 1897 City Directory also showed the A.B. Keaton had a restaurant (1009 J) operating out of the hotel.

By 1896-97 the hotel was being operated by Mrs. Balinger as The Omaha House (1011 J). After this time the hotel space was no longer listed in City Directories as a hotel, but as either a Lodging House or as Furnished Rooms. By the time the City Directories began including a *House Guide* (in 1913), it showed that the residents of The Omaha were all women. This leads one to speculate that this change to an all-women lodging house probably took place originally in 1896-97 with the advent of The Omaha. This would also explain the disappearance of the saloon, billiards and cigar store and their replacement with a restaurant.

A restaurant remained as the retail tenant of the Biltmore (1009 J) until 1910 when the 1011 unit, which had once been part of the hotel lobby, became the space for Waxon Bros. Hardware, and the 1009 unit was renumbered 1009 ½, becoming the address for The Omaha. In 1916 the hotel changed its name to The Hotel Pleasant, but by 1917 it was vacant and the 1011 store was occupied by Harrison Bicycles. In 1918 the two street level stores were occupied by retail tenants, Harrison Bicycles, at 1009, and National Cash Register (NCR) at 1011. The hotel was named The Biltmore and its address was 1009 ½. Since 1918, when it became The Biltmore, the hotel has remained in continuous use as a residential hotel until it was vacated in May of 2001.

The 1940s photograph shows tall arched windows on the front façade that are double hung with wooden sash. However the façade was altered from its original look and much of the 1880s ornamentation was removed. These changes reflect the architectural style of the late teens and twenties and the façade was probably changed when the hotel was modernized and reopened as The Biltmore in 1918. It was probably at this time that the residential units at 1013 and 1015 were incorporated into the hotel proper and the space remodeled into a group of hotel rooms. It may also be that it was at this time that the hallway was created uniting the hotel with the space above 1013-15.

NCR stayed at 1011 until the early 1930s and then it was taken over by Harry Taloff Electrical Fixtures in 1935. A real estate firm, Mossman Land Co., moved into the 1009 unit in 1921 and Brooke Realty took over in 1924 and they remained there until the outbreak of the Depression in 1929-30. Eastburn Realty moved into the space in 1935 and by 1939 it had become the home of Capital Music Co.

During the 1940's the 1011 unit was the home of R.G. Potter, Leather Goods. In the early 1940's, Fortune Cash register occupied 1009 and on 1/5/43 a member of the Breuner family took out a building permit to refit the store for a pharmacy. The pharmacy remained for several years and on 1/3/52 a new owner, Wright & Kimbrough, took out a building permit for alterations and repairs. This was probably when the façade of the building was changed from the look shown in a 1940s photo to its current appearance. In 1952 the tenants were: 1009, Coldwell Banker Real Estate; 1009 ½, The Biltmore; 1011, Lewis Women's Apparel. The 1009 unit remained as a real estate office for various firms from then until the early 1980s. From that time until the present the unit has seen a variety of small retail and office space uses punctuated by periods of vacancy. The 1011 unit became the home of a Sewing Machine outlet in 1958 and it remained in that use until 1963 when it became the office of architect Thomas Campbell. In 1967 it was vacant and the next tenant was Copy Products of Sacramento around 1970. Copy Products occupied the unit until the early 1980's. Since that time it has seen a variety of uses as well as periods of vacancy.

The Biltmore Hotel building has served a variety of important housing and commercial functions that reflected the evolution of downtown Sacramento from the late 1800s until 2001, a period of approximately 118 years. The property was owned by John Breuner, who became a well-known local businessman, managing the primary furniture store in Sacramento for many years. The building possesses some degree of local importance as an example of an important building type for its era, and as the longtime property of the locally prominent Breuner family.

Physically, the Hotel has been completely altered from its original exterior appearance. Nevertheless, the central stairway and landings of the second and third floors have still retained some degree of their original character and detail. The balusters that encircle the stairwell are turned, and partly original, partly heightened to meet building code requirements. The heightening of the balustrades has been carefully executed, as has the raising of the second floor newel posts to match their height, but they have been modified. The hallways and most of the simple paneled room doors have retained much of their early character, although the transoms have been covered. A notable interior feature is the three-story stairwell space. An original wainscoting molding reflects what was probably the height of the original wainscoting, but the wainscoting material has been removed. The halls and doors above The Broiler are somewhat more varied, but are similar to those of the Biltmore. A hall between the two buildings on the second floor still exists, providing access to both buildings at the second floor level.

While the interior does suggest a feeling of time and place that belong to an early era, and reflects a remnant of a building type and environment that was once an important of Sacramento's life style, even it has experienced alterations that detract from its originality. Associations of the building with its notable owner are of limited significance since the Breuners owned other property and never used this site as a dwelling. Additionally, the façade no longer reflects its period of significance or era. Due to a lack of integrity, the building does not appear to meet criteria for listing on the National Register of Historic Places. When the building was still occupied, it may have met listing criteria for the Sacramento Register or the California Register of Historical Resources based on the rarity of its interior building type. However, the interior of the building has substantially deteriorated since its vacancy, diminishing its eligibility.

1013 J Street
<u>Broiler Restaurant</u>

Description:

The "Broiler" is a two story brick building with commercial and former restaurant spaces on the ground level, and rooms on the second floor. It is commonly referred to as "The Broiler," because it housed a long-time Sacramento restaurant by that name. The upper façade of the building is currently surfaced with a cement stucco. The street level shops divide the façade into two equal shop areas; the one on the west was The Broiler restaurant and the one on the east held a variety of businesses. The two shop areas at street level contain glass show windows with a base and surrounds of ceramic tile, beneath retractable awnings. The ceramic-tiled base of the restaurant show window is taller than that of the adjacent commercial shop/store front, and is green with yellow accents, while the tile enframing the two shop areas is white.

The upper façade contains a strip of aluminum-sash casement windows, connected at the top and bottom by a projecting horizontal header and sill. The slightly recessed casement windows contain four lights on each side. Two small air conditioning units have been inserted into two of the windows, and a small fire escape platform has been installed outside the easternmost window. A shallow projecting sill extends across the façade above the street level shop awnings. The façade above the windows is unbroken to the cornice. The second floor of the building contains lodging rooms that were connected to and accessed through the adjacent Biltmore Hotel.

The former restaurant interior has not been demolished though vacant. The adjacent shop space does not contain significant character-defining architectural features. The interior of the second floor holds rooms accessed by hallways without distinctive design features, but with transomed doors and simple moldings. Access to the second floor is through a hall and stairway from the Biltmore Hotel.

History and Significance:

The properties occupied by the Biltmore (w ½) and the former Broiler (e ½) are the two halves of Lot 7 on the block bounded by 10th, 11th, I, and J Streets. The first recorded owner of this lot was one of Sacramento's founders and leading pioneer merchants, Sam Brannan, in 1850. At that time the Assessor records indicated some $1,000 in improvements on the property, probably representing two wood-frame commercial buildings, one on each half of the lot. The 1851 City Directory showed the merchant house of H.A. Fairman & Co. on the west ½ (297 J Street), and the grocery of J. Chenoworth on the east ½ (303 J Street).

In 1849-50 most of the businesses in Sacramento were clustered along either side of J and K Streets from Front Street to about 4th Street. By late 1852 additional development extended as far as 9th Street. There were businesses further east on J Street due to it being the main road to the northern gold fields. At about twelfth street the road split in two with one branch continuing due east to the American River and the other angling off to the northeast until arriving at a ferry crossing of the American River, about where the 16th Street bridge now crosses the river. The point at which the road split became a nexus for transportation related businesses such as teamsters, hay yards, stables, blacksmith's, wagon makers and small hotel/restaurants.

By 1853 the 297 J Street site (now 1009-1011 J Street) was owned and occupied by John Merker who was the proprietor of the Illinois House hotel. The Sacramento map of 1854 showed a building approximately 40' wide by 25' deep. The hotel continued to operate on that site until about 1865. Assessor's records showed a value for these improvements of $500 in 1852 and $700 in 1860. This building was probably a single story wood frame structure.

By 1853 the 303 J Street site (now 1013-1015 J Street) was occupied by Marshall & Nye, blacksmith and wagon makers. The Official Sacramento City Map of 1854 shows a building on that site that was approximately 40' in width and 50' in depth. The City Directory for 1854-55 indicates that this building was 2-stories tall and made of brick. John Merker owned this lot as well until he sold it to Sylvester Marshall in 1856. Marshall served a two-year term as Sacramento Sheriff (1860-61) at which time he sold the property to R.T. Edwards. In 1860-61 the improvements on the lot were valued by the Assessor at $2,800. The 1861 City Directory listed Cronkite & Beebe, blacksmith and wagon makers at 303 J Street. In 1867 W.B Ready, a blacksmith at Cronkite's (City Directory) purchased both lots and operated a business of wagon and plow making.

Ready was an inventive blacksmith and he was issued a U.S. Patent in 1861 for his Little Giant Gang Plow (advertisement 1873 City Directory). This device was the main product of Ready, who also made wagons and other farm implements. According to Thompson & West's 1880 *History of Sacramento County*, in 1875 Ready incorporated and the firm of Ready & Clark raised some $70,000 in capital that was invested in buildings and machinery. The business was not successful and was taken over by Capital Savings Bank in 1877. The bank sold most of the equipment to Baker & Hamilton in the spring of 1879 and "Two months after this sale, the building in which the factory had been situated was burnt down." [Thompson & West]

Sacramento furniture dealer John Breuner was the owner of record in 1882. It appears that Breuner began almost immediately to rebuild on the site and that he probably reused portions of existing structures on the site. By December 27, 1882 an advertisement appeared in the Sacramento Bee for the "newly built brick building" that houses the Russ House Hotel (1009 J - w ½ of Lot 7). The advertisement indicates that the hotel contained a saloon, billiards parlor and cigar & tobacco store. At this time the first floor space was probably devoted to these uses, as well as a hotel lobby. Ingram & Co., Carriage & Wagon Makers, occupied the e ½ of Lot 7 by 1883, and was listed in the directory at 1013-15 J Street.

In its first three listings in the City Directory (1883-85), the Russ House was listed as 1009-1015 J Street. This indicates that the second story units at 1013-15 were part of the hotel at that time. In 1889, the first floor shops of 1013–1015 were rented by Marcus Hirsh, a junk dealer. In 1892, John Breuner died and possession of these properties passed to his daughters. Immediately after his death, the hotel changed proprietors, and by 1896 had changed to a Lodging House called The Omaha House, which it remained until 1916.

M. Hirsh & Son also continued in tenancy at 1013-1015 J Street, gradually upgrading the business to stoves and tinware, then hardware, and by 1916, a listing in the directory as Plumbing Suppliers.

The 1913 City Directory, the first to include a Home Guide which listed residents chronologically by street and street number, showed the second story residential units as such: 1013 ½ Mrs. Effie Hughes, and 1015 ½ Mrs. M.F. Lee. As mentioned earlier, each was occupied by a single occupant.

Both the hotel and the 1013-1015 units were vacant in 1917 and they were probably remodeled at that time to match their exterior appearance as shown in a photograph taken in the 1940s. The interior was probably also remodeled at this time because there was a definite upgrade in the quality in tenants in the first floor retail space after 1917.

In 1918 the Directory listed E.O. Putnam, Sporting Goods at the 1013 address. Putnam (1015 J Street) was joined by J. White, Sewing Machines (1013 Street) in 1924. By 1927 the building got a whole new line-up of tenants with Brent's Typewriter Exchange, White Sewing Machine's, and T&D Enterprises listed at 1013 and 1015 was vacant. In 1930 the 1013 unit was inhabited only by Brent's Typewriter Exchange and the 1015 unit had J.L. Harbaugh, Leather Goods. Although in 1935-39 White Sewing Machine's was again listed at 1013 (which makes one think they never left) and 1015 was vacant.

During the 1940's 1015 was occupied by Sig Silverman's Music Store. During the first half of that decade 1013 was vacant and in the second half of the 1940s it was occupied by Sacramento-Stockton Poultry.

In April of 1950, the owner of the property, Wright & Kimbrough, took out a $6,000 building permit for alterations and repairs, at which time the building was reconfigured to accommodate a restaurant. Later that year, the 1013 J Street unit was occupied by the Anticevich's Restaurant which had been located in the Hotel Berry during the 1940s. Another building permit was issued in 6/26/52 for $4,000 for repairs. It was at the time of one of these permits in the early 1950s that the façade of the building was changed to its current appearance. The Anticevich restaurant later became known as The Broiler. The restaurant stayed in that location for many years until only recently when it moved to the 1201 K Building.

The 1015 unit was occupied for a few years in the early 1950's by the Pacific Telephone Installation Depot. In 1955 the unit turned over to Beneficial Finance, which stayed there for the next 20 some years until around 1977 when the unit became vacant and stayed that way for several years. Between 1982 and the present time the 1015 unit has seen a succession of small retail and office tenants punctuated by periods of vacancy. The building is currently vacant.

While The Broiler restaurant has served as a Sacramento cultural landmark for many years, the building has experienced substantial modification. Its exterior appearance has changed several times according to its various uses, and the building has lost integrity as a result. This loss of integrity has diminished its significance as a representative of its era, style or building type. Due to loss of integrity and limited architectural and historic values, the property does not appear to meet eligibility criteria for listing in the National Register of Historic Places, or the Sacramento Register.

References

Calif. State Library Photo Collection

City of Sacramento Building Permits

Davis, Winfield, *An Illustrated History of Sacramento County*, Lewis Publishing Co., Chicago, IL, 1890.

McGowan, Joseph, *History of the Sacramento Valley*, Lewis Historic Publishing Co., New York, 1961.

Mellon, Steve, *Sacramento Then and Now*, Scripps Howard Publishers, Inc., Gibsonia, PA, 1994.

Mimms, Julie E. and Mevin M., *Sacramento a Pictorial History of California's Capital,* The Conning Co., Virginia Beach, VA, 1981.

Neasham, V. Aubrey, and Henley, James E., *City of the Plain*, Sacramento Pioneer Foundation, Sacramento, CA, 1969.

Official Map of Sacramento, 1854

Sacramento Archive and Museum Collection Center, Photo Collection

Sacramento Bee: December 29, 1882, December 15, 1923.

Sacramento City Directories 1851-1982

Sacramento City/County Assessors Records 1850-1925

Sacramento Survey of Non-Residential Buildings, 1980, Historic Environment Consultants

City of Sacramento, *Official Listing of Structures and Preservation Areas,* March 2005.

Sacramento Survey Update, 2001, Historic Environment Consultants

Sacramento Union: January 1,1883; June 22,1906, pp.1,4; April 29,1907, p. 10;May 9,1907, p. 11.

Sanborn Fire Insurance Maps, 1895, 1915, 1952

Severson, Thor, *Sacramento, An Illustrated History: 1839 to 1874*, California Historical Society, San Francisco, CA, 1975 edition.

Thompson, Thomas and West, Albert A., *History of Sacramento County*, Howell-North edition, Berkeley, CA, 1960, p. 153

Willis, William L., *A History of Sacramento County*, Historic Records Co., Los Angeles, CA, 1913.

Source: Historic Environment Consultants; 2006

FIGURE 1
921 10TH STREET HOLLOW SIDEWALKS

Source: Historic Environment Consultants; 2006

FIGURE 2
927 10TH STREET HOLLOW SIDEWALK

Source: Ervin Consulting; 2006

FIGURE 3
1013-1015 J STREET HOLLOW SIDEWALK

Source: Ervin Consulting; 2006

FIGURE 4
1021 J STREET HOLLOW SIDEWALK

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #____________________________________
HRI #____
Trinomial____________________________________
NRHP Status Code______________________________
Other Listings____
Review Code________ **Reviewer**__Paul Boghosian______ **Date**_June 2001____

Page of **Resource Name or #:** Plaza Building
P1. Other Identifier: Redman's Lodge
***P2. Location: *a. County:** Sacramento
b. Address: 921 10th Street **City:** Sacramento **Zip:** 95814
***e. Other Locational Data: APN#:** 006-0044-012

***P3a. Description:**
Constructed of brick and surfaced with stucco, the façade of the seven story building contains five vertical window banks flanked by a quoined corner treatment of scored stucco. Three of the banks contain double windows, separated by banks of single windows. The doubled ones also are divided horizontally by paneled spandrels on the third, fifth and seventh floors. Fourth and sixth floor windows have projecting sills. The alley (north) elevation contains a number of both arched and rectangular windows. There are two large and similar openings, and one taller one of the ground floor, the more horizontal ones holding large windows. The upper south elevation contains former openings that have been filled in. The street façade, including the ground floor, has been altered. There has been an addition to the roof.

The structure has experienced alterations that have substantially changed its original 1907 appearance. The building was altered to an unknown degree in 1923, and again after the City of Sacramento assumed ownership in the 1970s, experiencing substantial changes to the design of the façade that have modified its earlier and original image. The original windows have since been replaced. The building no longer reflects its 1907 or early 1920s design.

P5b. Description of Photo:
View to the southeast
May 2006

***P6. Date Constructed/Age and Source:** ■Historic ☐Prehistoric ☐Both
1906-07 – Union, 5/9/1907 p. 11

***P7. Owner and Address:**
Sacramento City Finance Authority
Attn: Michael Bacon
555 Capitol Mall, #1200
Sacramento, CA 95814

***P8. Recorded by:**
Paula Boghosian
Historic Environment Cons.
5420 Home Court
Carmichael, CA 95608

***P9. Date Recorded:**
May 2006

***P10. Survey Type:** Intensive

P11. Report Citation*: Architectural/Historic Survey Non-Residential Buildings, Historic Environment Consultants, 1980-81

***Attachments:** ☐NONE ☐Location Map Sketch Map ☐Continuation Sheet ■Building, Structure, and Object Record ☐Linear Resource Record ☐Archaeological Record ☐District Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List)

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 1 **of** ***NRHP Status Code** **Map Reference No.**

***Resource Address:** 921 10th Street **County:** Sacramento

B1. Historic Name: Redman's Lodge

B2. Common Name: Plaza Building

B3. Original Use: Lodge Hall **B4. Present Use:** City Offices

***B5. Architectural Style:** Classical influences

***B7. Moved?** ☒No ☐Yes ☐Unknown **Date:** **Original Location:**

***B8. Related Features:** None

B9a. Architect: E.B. Wilson **b. Builder:** Unknown

***B10. Significance: Theme**: Commercial Development Area: Downtown Sacramento

Period of Significance: 1906-1956 **Property Type:** Office Building **Applicable Criteria:** n/a

The Red Men's Lodge Hall was designed in the spring of 1906 by E.B. Wilson and construction began. The building was completed in the spring of 1907. Although it has seven bands of horizontal windows, the building was originally four stories with two bands of horizontal windows providing illumination for lodge halls with 19' ceilings.

By the early 1920s the lodge hall was owned by Arthur Lamb and his wife. Lamb was an architect with Woolett & Lamb and he redesigned the building inside and out changing its use to an office building and converting it from its original four story configuration with each floor containing lodge rooms with 19' ceilings, to a seven story building. Lamb also altered much of the original building's exterior. In its original version, each floor contained two horizontal banks of windows. These were flanked by fluted pilasters topped by Ionic capitals. The pilasters appeared to support a classical horizontal pediment. The ground floor exterior surface was finished to look like rusticated stone. The bracketed cornice was decorated with classical dentals. Lamb removed all these details except the cornice. He added the quoined corner treatments of scored stucco. He also added an incised decorative spandrels between the paired windows between the 2nd -3rd , 4th -5th and 6th -7th floors. The retail exterior on the ground floor which had contained two pairs of narrow vertical windows, were changed to two large plate glass show windows. The formerly rusticated surface was changed to a smooth surface. When the city acquired the building in the 1960s or 1970s the cornice was removed, the windows were changed to tripartite aluminum frame, and the show windows were changed to a nine part 3x3 window with the tinted glass panels separated by black metal muntins. This may have been when the marble and tile were removed from the lobby.

The structure has experienced alterations that have substantially changed its original appearance. Its primary importance as a resource is due to its past cultural and historical associations as the Redman's Wigwam, and the site of a session of the State Legislature. It does not appear eligible for listing in the National Register of Historic Places.

B11. Additional Resource Attributes: HP13--Social Hall, HP7--Commercial Building

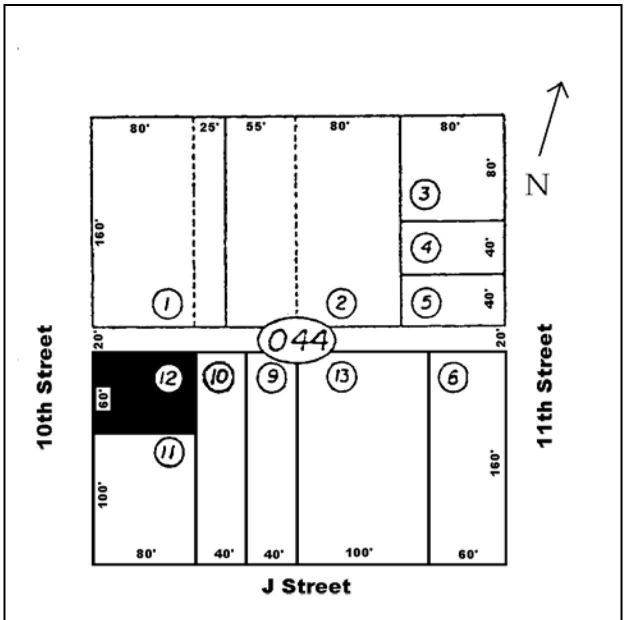
***B12. References:**

Calif. State Library Photo Collection
City of Sacramento Building Permits
Sacramento Archive and Museum Collection Center, Photo Collection
Sacramento City/County Assessors Records 1850-1925
Sacramento City Directories 1851-1982
Sacramento Union: June 22, 1906, pp. 1, 4; April 29, 1907, p. 10; May 9, 1907, p. 11

B13. Remarks:

***B14. Evaluator:** Paula Boghosian, Historic Env. Consultants

***Date of Evaluation:** May 2006



(This space reserved for official comments.)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #____________________
HRI #____________________
Trinomial____________________
NRHP Status Code____________________

Other Listings____________________
Review Code________ Reviewer____________________ Date____________

Page 1 of 1 ***Resource Name or #:** 927 10th Street (1001-1007 J Street)

P1. Other Identifier: RCA (Retail Credit Association) Building

***P2. Location: *a. County:** Sacramento

b. Address: 927 10th Street/1001-1007 J Street **City** Sacramento **Zip:** 95814

***c. USGS 7.5' Quad:** Sacramento East **Date:** 1992

***e. Other Locational Data: APN#:** 006-0044-011

***P3a. Description:**

The three-story building is sited on the corner of 10th and J Streets, opposite Cesar Chavez Plaza. A reinforced concrete building with a stucco/plaster surface, its image reflects an early interpretation of International style. The current appearance of the building is a modification of its original 1940s design. The re-modeling has added Moderne elements in its softening of the hard edges of the vertical projecting strips that divide the elevations into ten window bays on the west and eight window bays on the south elevation by adding an extra indentation on the sides, and to the corner of the building with additional vertical modulation. The illusion that the vertical divisions are stepped pilasters is enhanced by the current painting scheme that carries the vertical image to the roof. The original building façade was monochromatic. The decorative shallow belt course originally projecting at the base of the second floor level has been removed. The windows are comprised of two vertical lights above a single horizontal light, framed in aluminum. The original upper light has been covered on all of the windows. The street level now contains large bays with prominent posts mounted in large-footed foundations. The bays are filled with ceramic tile framed with dark angled glass planes. The building's original design contained office or shop spaces flush with the exterior of the building surface. An original entrance to the building on J Street has been removed.

***P3b. Resource Attributes:** HP 6

***P4. Resources Present:** ■ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5b. Description of Photo: View to northeast, May 2006.

***P6. Date Constructed/Age and Source:** ■ Historic ☐ Prehistoric ☐ Both
1940 State Library Photo, Neg. #2932

***P7. Owner and Address:**
Saca Revocable Trust
Saca Commercial Properties
77 Cadillac Drive #210
Sacramento, CA 95825

***P8. Recorded by:**
Paula Boghosian, Historic Environment Consultants, 5420 Home Court,Carmichael, CA 95608

***P9. Date Recorded:**
May 2006

***P10. Survey Type:** Reconnaisance/construction date research

P11. Report Citation*: Sacramento Historic Architecture Survey Update 2001

***Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ■ Building, Structure, and Object Record ☐ Linear Resource Record ☐ Archaeological Record ☐ District Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (List)____________________

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #__________________
HRI#__________________

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 5D1

***Resource Address:** 1001-1007 JStreet/927 10th Street

B1. Historic Name: RCA (Retail Credit Association) Building

B2. Common Name: Sacramento Public Works Department

B3. Original Use: Commercial office building **B4. Present Use:** Vacant

***B5. Architectural Style:** Moderne and International influences

***B7. Moved?** ■No ☐Yes ☐Unknown **Date:** **Original Location:**

***B8. Related Features:**
none

B9a. Architect: Harry Devine **b. Builder:** Frank Maloney

***B10. Significance: Theme** Commercial Development **Area** Downtown Sacramento

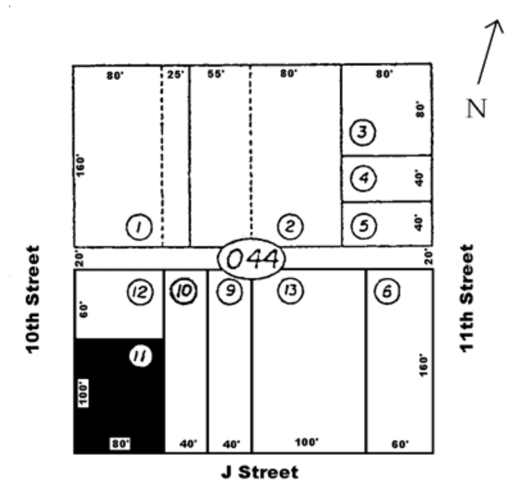
Period of Significance 1940-1956 **Property Type:** Office building **Applicable Criteria:** n/a

The building was originally designed by prominent local architect Harry Devine, and built by Frank Maloney Co., contractor. The building was completed for Louise Kleinsorge & H. Bernard Drescher for $ 125,000 in 1940. The first major tenant was the Retail Credit Association. Mrs. Kleinsorge's husband was a prominent local attorney and Drescher was a well known wholesale grocer. It was remodeled in 1955 for the First Western Bank. It was subsequently again remodeled for use as Sacramento City offices, probably in the late 1970s. The current appearance of the building reflects these modifications.

The building does not appear to be individually eligible for listing in the National Register of Historic Places, due to alterations. Even though the building was designed by a prominent local architect in a style that was important to Sacramento's architectural evolution, that image has been modified. While the building reflects a significant era in the city's architectural heritage, the alterations, particularly those on the ground floor, have limited its eligibility to qualify for City Register listing, and the National Register of Historic Places.

B11. Additional Resource Attributes: HP6--Commercial Building

***B12. References:**
Sacramento Building Permits
Sacramento City Directories
Sacramento Archives and Museum Collection Center;
Records and photograph collection



B13. Remarks:

***B14. Evaluator:** Paula Boghosian, Historic Environment Cons.

***Date of Evaluation:** May 2006.

(This space reserved for official comments.)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #________________
HRI #________________
Trinomial________________
NRHP Status Code 6

Other Listings________________
Review Code________ Reviewer____________ Date______

 Resource Name or #: The Biltmore Hotel, 1009 ½ J Street

P1. Other Identifier: The Russ House/ The Omaha

***P2. Location: *a. County** Sacramento

b. Address: 1009 ½ J Street **City:** Sacramento **Zip:** 95814

***e. Other Locational Data: APN#:** 002-0044-010

***P3a. Description:**

The Biltmore Hotel building stands on the north side of J Street, near Cesar Chavez Plaza, in the core area of the downtown business district in Sacramento. The structure is a wood frame and brick building three stories tall, and contains rooms and apartments clustered around a central, three story, open stairwell. The upper two stories of the building are surfaced with painted cement plaster, and the ground floor is surfaced with green ceramic tile. There are three ground floor entrances. Two entries adjacent to boarded-up show windows lead to former commercial spaces and stand on east and west sides of the building. There is a third and central entry to the rooms above. The entries are framed with aluminum sash and contain glass panels. Green tile flanks the central entry, and covers the show window bases and wall surfaces on either side on the ground floor of the building. A fire escape extends between the second and third floors.

The upper two stories contain aluminum sash casement windows; two single eight-light casement windows on each floor, flank central double casement windows that open to the fire escape. The windows on the third floor are surmounted by fixed, two-light transoms, while those areas on the second floor windows have been filled-in. The windows closest to the central double windows on each floor have been modified to incorporate small air-conditioning units, as has one of the central windows on the second floor. The original cornice has been modified

(Please see Continuation Sheet)

***P3b. Resource Attributes:** HP5--Hotel, HP6—Commercial Building

***P4. Resources Present:** ■ Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5b. Description of Photo:
View to northeast

***P6. Date Constructed/Age and Source:** ■ Historic ☐Prehistoric ☐Both
1882-Newspaper Advertisement, Bee 12/29/1882

***P7. Owner and Address:**
Saca Revocable Trust
Saca Commercial Properties
77 Cadillac Drive, #210
Sacramento, CA 95825

***P8. Recorded by:**
Paula Boghosian
Historic Environment Cons.
5420 Home Court
Carmichael, CA 95608

***P9. Date Recorded:**
May 2006.

***P10. Survey Type:**
Intensive

P11. Report Citation*:
Sacramento Survey Update, 2001

***Attachments:** ☐NONE ☐Location Map ☐Sketch Map ■ Continuation Sheet ■Building, Structure, and Object Record ☐ Linear Resource Record ☐Archaeological Record ☐District Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List)

 ***Resource Name:** Biltmore Hotel

P3a. Description: (continued)

and its current configuration includes a horizontal panel on the building's top surface, created by the application of wood or concrete plaster members. The rear of the building, the north elevation, reveals more of the building's original appearance, with segmented arched windows on the upper two floors, and brick surface. Two covered and balustraded balconies project from the rear at the second and third floor levels. A door on each floor accesses the interior hallway and rooms. The rear of the ground floor has been enclosed and modified. A stepped parapet and brick chimney stacks are visible along the edge of the building at the rear and sides.

The interior of the building contains two commercial office or shop areas on either side of the central stairway and stairwell to rooms above. The second floor contains rooms clustered around the oblong-shaped stairwell lined with a balustrade containing turned balusters. There is a deeper landing area at the front of the building, adjacent to the double casement windows and fire escape access. There are additional rooms on either side of a hallway that extends to the rear of the building (north), and opens onto a covered balcony facing the alley. The hallway walls are surfaced with plaster and painted, and the doors are paneled wood. Original transom windows above the hallway doors have been closed and covered. The walls and ceilings of the oblong stairwell space are coved, and a picture rail molding encircles the walls just above the room doorways.

An opening to the east on the second floor, just off the main central stairway, extends another hallway into the building next door and accesses additional rooms on its second floor. This hall continues past an interior light well between the two buildings, and then splits into two other halls; one extends directly to the front (south) of the Broiler building with rooms off the hall, the other extends further to the east and then to a north/south hall on the other side of the Broiler building, accessing additional rooms.

The rear of the building, the north elevation, reveals more of the building's original appearance, with segmented arched windows on the upper two floors, and brick surface. Two covered and balustraded balconies project from the rear at the second and third floor levels. A door on each floor accesses the interior hallway and rooms. The rear of the ground floor has been enclosed and modified. A stepped parapet and brick chimney stacks are visible along the edge of the building at the rear and sides.

Alterations include the resurfacing and modification of the entire façade, including the commercial shop areas on the ground floor flanking the central stairwell. The casement windows on the façade have replaced the original windows. The ground floor of the rear of the building has been extended to the north and enclosed. The interior hotel stairway balustrades have been heightened at the base, and the newel posts have been made taller in order to meet building code requirements. Original community bathrooms have experienced modifications and lack of maintenance. All of the original transom windows above the apartment doors have been covered, and several of the doors have been replaced. The balustrades on the rear elevation have been modified, and some of the rear windows have been closed and covered.

A connecting passage between the Biltmore and Broiler buildings was created on the second floor to allow access to the rooms above the Broiler through the Biltmore Hotel when the Broiler's second floor became part of the hotel.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary #________________________________
HRI#___________________________________

BUILDING, STRUCTURE, AND OBJECT RECORD

 ***NRHP Status Code** 6

***Resource Address:** 1009 ½ J Street

B1. Historic Name: The Biltmore Hotel

B2. Common Name: same

B3. Original Use: Hotel, saloon, billiards **B4. Present Use:** Vacant

***B5. Architectural Style:**
Original building façade substantially altered to a vernacular version of International/Moderne styles

***B7. Moved?** ☒**No** ☐**Yes** ☐**Unknown** **Date:** **Original Location:**

***B8. Related Features:**
Broiler Restaurant; adjacent building serving as part of the Biltmore Hotel at different periods.

B9a. Architect: Unknown **b. Builder:** Unknown

***B10. Significance:** - **Theme** Commercial Property **Area:** Downtown Sacramento
Period of Significance 1882-1956 **Property Type**: Hotel **Applicable Criteria** HP5--Hotel, HP6—Commercial Building

The two lots that contain the properties occupied by the now vacant Biltmore (w ½) and the Broiler (e ½) are the two halves of Lot 7 on the block bounded by 10th, 11th, I, and J Streets. The first recorded owner of these lots was one of Sacramento's founders and leading pioneer merchants, Sam Brannan, in 1850. At that time the Assessor records showed that there was some $1,000 in improvements on the property and these probably represented two wood-frame commercial buildings, one on each half of the lot. The 1851 City Directory showed the merchant house of H.A. Fairman & Co. on the west ½ (297 J), and the grocery of J. Chenoworth on the east ½ (303 J Street).

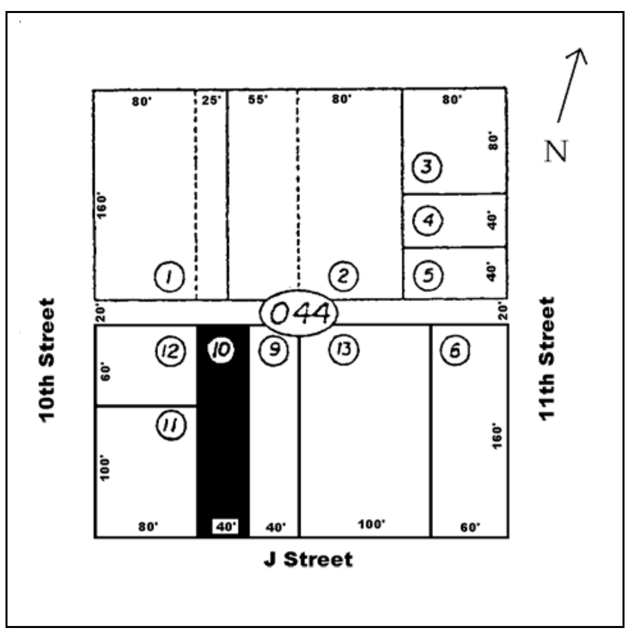
In 1849-50 most of the businesses in Sacramento were clustered along either side of J and K Streets from Front Street east to about 9th Street. By late 1852 additional development extended as far as 9th Street. Businesses extended further east on J Street, due to its use as a principal road to the gold fields. At twelfth street the road split into two directions, with one branch continuing due east to the American River and the other one angling off to the northeast to connect with a ferry crossing of the American River at about where the 16th Street bridge now crosses the river. The point at which the road split became a nexus for transportation related businesses such as teamsters, hay yards, stables, blacksmiths, wagon makers and small hotel/restaurants.

(Please see Continuation Sheet)

B11. Additional Resource Attributes: n/a

***B12. References:**

Calif. State Library Photo Collection
City of Sacramento Building Permits
Sacramento Bee: December 29, 1882.
Sacramento City Directories 1851-1982
Sacramento City/County Assessors Records 1850-1925
Sacramento Survey of Non-Residential Buildings, 1980
Sacramento Union: January 1, 1883.



Page _4__ **of** _6__***Resource Name** __Biltmore Hotel__

B10. Significance: (continued)

By 1853 the 297 J site was owned and occupied by John Merker who was the proprietor of the Illinois House hotel. The Sacramento map of 1854 showed a bldg. Approximately 40' wide by 25' deep. The hotel continued to operate on that site until about 1865. Assessor's records showed a value for these improvements of $500 in 1852 and $700 in 1860. This building was probably a single story wood frame structure.

By 1853 the 303 J site was occupied by Marshall & Nye, blacksmith and wagon makers. The Sacramento map of 1854 showed a building approximately 40' in width and 50' in depth. The City Directory for 1854-55 indicates that this building was 2-story and made of brick. John Merker owned this lot as well until he sold it to Sylvester Marshall in1856. Marshall served a two-year term as Sacramento Sheriff (1860-61) and he sold the property to R.T. Edwards at that time. In 1860-61 the improvements on the lot were valued by the Assessor at $2,800. The 1861 City Directory listed Cronkite & Beebe, blacksmith and wagon makers at 303 J Street. In 1867 W.B Ready, a blacksmith at Cronkite's (City Directory) purchased both lots and operated a business of wagon and plow making.

Ready was an inventive blacksmith and he was issued a U.S. Patent in 1861 for his Little Giant Gang Plow (advertisement 1873 City Directory). This device was the main product of Ready, who also made wagons and other farm implements. According to Thompson & West's History of Sacramento County, in 1875 Ready incorporated and the firm of Ready & Clark raised some $70,000 in capital that was invested in buildings and machinery. The business was not successful and was taken over by Capital Savings Bank in 1877. The bank sold most of the equipment to Baker & Hamilton in the spring of 1879 and "Two months after this sale, the building in which the factory had been situated was burnt down" [Thompson & West].

Famed Sacramento furniture dealer John Breuner was the owner of record in 1882. It appears that Breuner began almost immediately to rebuild on the site and that he probably reused portions of existing structures on the site. By December 27, 1882 an advertisement appeared in the Sacramento Bee for the "newly built brick building" that houses the Russ House Hotel (1009 J - w ½ of Lot 7). The advertisement indicates that the hotel had a saloon, billiards parlor and cigar & tobacco store located in it. At this time the first floor space was probably devoted to these uses, as well as a hotel lobby. Ingram & Co., Carriage & Wagon Makers, occupied the e ½ of Lot 7 by 1883, and was listed in the directory at 1013-15 J Street.

In its first three listings in the City Directory (1883-85) the Russ House was listed as 1009-1015 J Street. This indicates that the second story units at 1013-15 were part of the hotel. Future listings appear to show that these second story units were probably not interconnected to the hotel via a hallway as they are today, but probably had their own separate entrances. It also appears that 1013 and 1015 on the second story were each occupied by a single resident. In 1889 the first floor shops of 1013-15 were rented by Marcus Hirsh, a junk dealer.

In 1892 John Breuner died and possession of the properties passed to his estate. Bruener had two sons and three daughters, and it was the daughters (Katherine, Caroline and Carrie) that inherited the lots. Katherine and Caroline got the Broiler (303 J renumbered to 1013-15) lot and Carrie inherited the lot with the hotel in 1896, (297 J Street, renumbered to 1009-11 J Street). Immediately following the death of Breuner in 1892, the hotel changed proprietors. The 1895 Sanborn Fire Insurance Map showed the two buildings in much the same configuration as they are currently. The hotel site shows a 3-story brick building with basement. Two stores are indicated on the first floor and the building is approximately 40' wide by 80' deep. At the 1013-15 J Street address, the Sanborn map indicated a 2-story brick building with a basement that was approximately 40'x 50.'

After John Breuner's death, John Reudy became the proprietor of the Hotel and it was operated as The Rhein from 1892-95. John Breuner's estate first passed the hotel property to Katherine Breuner in 1894, and then from Katherine to Carrie in 1896. During this period, some important changes were made in the hotel. Evidently the bar, billiards and cigar operations disappeared and the space was devoted to a restaurant. The 1897 City Directory also showed the A.B. Keaton had a restaurant (1009 J) operating out of the hotel. By 1896-97 the hotel was being operated by Mrs. Balinger as The Omaha House (1011 J). After this time the hotel space was no longer listed in City Directories as a hotel, but as either a Lodging House or as Furnished Rooms. By the time the City Directories began including a *House Guide* (in 1913), it showed that the residents of The Omaha were all women. This leads one to speculate that this change to an all-women lodging house probably took place originally in 1896-97 with the advent of The Omaha. This would also explain the disappearance of the saloon, billiards and cigar store and their replacement with a restaurant.

A restaurant remained as the retail tenant of the Biltmore (1009 J) until 1910 when the 1011 unit, which had once been part of the hotel lobby, became the space for Waxon Bros. Hardware, and the 1009 unit was renumbered 1009 ½, becoming the address for The Omaha. In 1916 the hotel changed its name to The Hotel Pleasant, but by 1917 it was vacant and the 1011 store was occupied by Harrison Bicycles. In 1918 the two street level stores were occupied by retail tenants, Harrison Bicycles, at 1009, and National Cash Register (NCR) at 1011. The hotel was named The Biltmore and its address was 1009 ½. Since 1918, when it became The Biltmore, the hotel has remained in continuous use as a residential hotel until it was vacated in May of 2001.

The 1940s photograph shows tall arched windows on the front façade that are double hung with wooden sash. However the façade was altered from its original look and much of the 1880s ornamentation was removed. These changes reflect the architectural style of the late teens and twenties and the façade was probably changed when the hotel was modernized and reopened as The Biltmore in 1918. It was probably at this time that the residential units at 1013 and 1015 were incorporated into the hotel proper and the space remodeled into a group of hotel rooms. It may also be that it was at this time that the hallway was created uniting the hotel with the space above 1013-15.

NCR stayed at 1011 until the early 1930s and then it was taken over by Harry Taloff Electrical Fixtures in 1935. A real estate firm, Mossman Land Co., moved into the 1009 unit in 1921 and Brooke Realty took over in 1924 and they remained there until the outbreak of the Depression in 1929-30. Eastburn Realty moved into the space in 1935 and by 1939 it had become the home of Capital Music Co.

During the 1940's the 1011 unit was the home of R.G. Potter, Leather Goods. In the early 1940's, Fortune Cash register occupied 1009 and on 1/5/43 a member of the Breuner family took out a building permit to refit the store for a pharmacy. The pharmacy remained for several years and on 1/3/52 a new owner, Wright & Kimbrough, took out a building permit for alterations and repairs. This was probably when the façade of the building was changed from the look shown in a 1940s photo to its current appearance. In 1952 the tenants were: 1009, Coldwell Banker Real Estate; 1009 ½, The Biltmore; 1011, Lewis Women's Apparel. The 1009 unit remained as a real estate office for various firms from then until the early 1980s. From that time until the present the unit has seen a variety of small retail and office space uses punctuated by periods of vacancy. The 1011 unit became the home of a Sewing Machine outlet in 1958 and it remained in that use until 1963 when it became the office of architect Thomas Campbell. In 1967 it was vacant and the next tenant was Copy Products of Sacramento around 1970. Copy Products occupied the unit until the early 1980's. Since that time it has seen a variety of uses as well as periods of vacancy.

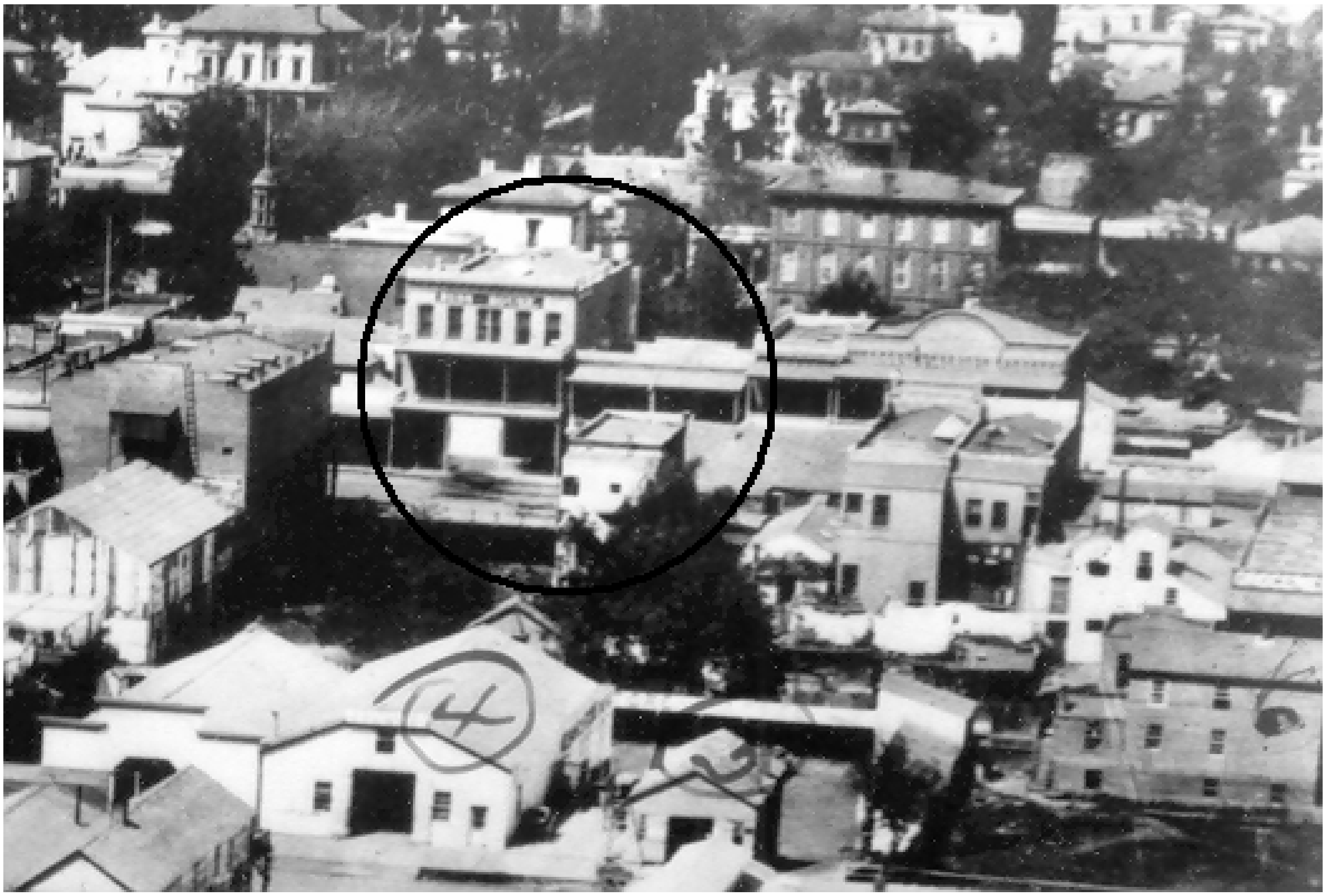
The Biltmore Hotel building has served a variety of important housing and commercial functions that reflected the evolution of downtown Sacramento from the late 1800s until 2001, a period of approximately 118 years. The property was owned by John Breuner, who became a well-known local businessman, managing the primary furniture store in Sacramento for many years. The building possesses some degree of local importance as an example of an important building type for its era, and as the longtime property of the locally prominent Breuner family.

Physically, the Hotel has been completely altered from its original exterior appearance. Nevertheless, the central stairway and landings of the second and third floors have still retained some degree of their original character and detail. The balusters that encircle the stairwell are turned, and partly original, partly heightened to meet building code requirements. The heightening of the balustrades has been carefully executed, as has the raising of the second floor newel posts to match their height, but they have been modified. The hallways and most of the simple paneled room doors have retained much of their early character, although the transoms have been covered. A notable interior feature is the three-story stairwell space. An original wainscoting molding reflects what was probably the height of the original wainscoting, but the wainscoting material has been removed. The halls and doors above The Broiler are somewhat more varied, but are similar to those of the Biltmore. A hall between the two buildings on the second floor still exists, providing access to both buildings at the second floor level.

While the interior does suggest a feeling of time and place that belong to an early era, and reflects a remnant of a building type and environment that was once an important of Sacramento's life style, even it has experienced alterations that detract from its originality. Associations of the building with its notable owner are of limited significance since the Breuners owned other property and never used this site as a dwelling. Additionally, the façade no longer reflects its period of significance or era. Due to a lack of integrity, the building does not appear to meet criteria for listing on the National Register of Historic Places. When the building was still occupied, it may have met listing criteria for the Sacramento Register based on the rarity of its interior building type. However, the interior of the building has substantially deteriorated since its vacancy.

DEPARTMENT OF PARKS AND RECREATION
State of California — The Resources Agency **Primary #**______________________________
PHOTO CONTINUATION SHEET page_____ **HRI#**______________________________

Page _6_ **of** _6_ ***Resource Name** __Biltmore Hotel__



Biltmore and Broiler in the spring or summer of 1883 when the Biltmore was known as the Russ House. The blurred image on the street is of a buggy passing in front of the hotel. View to the north. The view is a segment of a photo from the California State Library, Negative #6731.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #__________
HRI #__________
Trinomial__________
NRHP Status Code__________
Other Listings__________
Review Code_____ Reviewer__________ Date__________

 Resource Name or #: 1013-1015 J Street
P1. Other Identifier: The Broiler/Breuner Property
***P2. Location: *a. County** Sacramento
b. Address: 1013-1015 J Street **City** Sacramento **Zip** 95814
***e. Other Locational Data: APN#:** 002-0044-009

***P3a. Description:**

The “Broiler” is a two story brick building with commercial and former restaurant spaces on the ground level, and rooms on the second floor. It is commonly referred to as “The Broiler,” because it housed a long-time Sacramento restaurant by that name. The upper façade of the building is currently surfaced with a cement stucco. The street level shops divide the façade into two equal shop areas; the one on the west was The Broiler restaurant and the one on the east held a variety of businesses. The two shop areas at street level contain glass show windows with a base and surrounds of ceramic tile, beneath retractable awnings. The ceramic-tiled base of the restaurant show window is taller than that of the adjacent commercial shop/store front, and is green with yellow accents, while the tile enframing the two shop areas is white.

The upper façade contains a strip of aluminum-sash casement windows, connected at the top and bottom by a projecting horizontal header and sill. The slightly recessed casement windows contain four lights on each side. Two small air conditioning units have been inserted into two of the windows, and a small fire escape platform has been installed outside the easternmost window. A shallow projecting sill extends across the façade above the street level shop awnings. The façade above the windows is unbroken to the cornice. The second floor of the building contains lodging rooms that were connected to and accessed through the adjacent Biltmore Hotel.

The former restaurant interior has not been demolished though vacant. The adjacent shop space does not contain significant character-defining architectural features. The interior of the second floor holds rooms accessed by hallways without distinctive design features, but with transomed doors and simple moldings. Access to the second floor is through a hall and stairway from the Biltmore Hotel

***P3b. Resource Attributes:** HP5, HP6
***P4. Resources Present:** ■ Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5b. Description of Photo:
View to north
***P6. Date Constructed/Age and Source:** ■ Historic ☐Prehistoric ☐Both
1883

***P7. Owner and Address:**
Saca Revocable Trust
Saca Commercial Properties
77 Cadillac Drive, #210
Sacramento, CA 95825

***P8. Recorded by:**
Paula Boghosian
Hist. Environment Cons.
5420 Home Court
Carmichael, CA 95608

***P9. Date Recorded:**
May 2006

***P10. Survey Type:** intensive

P11. Report Citation*:
Sacramento City Historic Architecture Survey 2001

***Attachments:** ☐NONE ☐Location Map ☐Sketch Map ■Continuation Sheet ■ Building, Structure, and Object Record ☐Linear Resource Record ☐Archaeological Record ☐District Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary #___________________________________
HRI#______________________________________

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 5S3

***Resource Address:** 1013-1015 J Street

B1. Historic Name: Hirsh Junk Dealer

B2. Common Nam: The Broiler

B3. Original Use: Hardware/Plumbing supply business **B4. Present Use:** vacant

***B5. Architectural Style:**
Moderne, International Style influences in its remodeling. Current appearance is not original.

***B7. Moved?** ■No ☐Yes ☐Unknown **Date:** **Original Location:**

***B8. Related Features:**
The Biltmore Hotel is connected to The Broiler building at the second floor of each building.

B9a. Architect: unknown **b. Builder:** unknown

***B10. Significance: Theme**: Commercial Property **Area:** Downtown Sacramento

Period of Significance: 1883-1956 - **Property Type:** Retail Store **Applicable Criteria:** n/a

The properties occupied by the Biltmore (w ½) and the former Broiler (e ½) are the two halves of Lot 7 on the block bounded by 10th, 11th, I, and J Streets. The first recorded owner of this lot was one of Sacramento's founders and leading pioneer merchants, Sam Brannan, in 1850. At that time the Assessor records indicated some $1,000 in improvements on the property, probably representing two wood-frame commercial buildings, one on each half of the lot. The 1851 City Directory showed the merchant house of H.A. Fairman & Co. on the west ½ (297 J Street), and the grocery of J. Chenoworth on the east ½ (303 J Street).

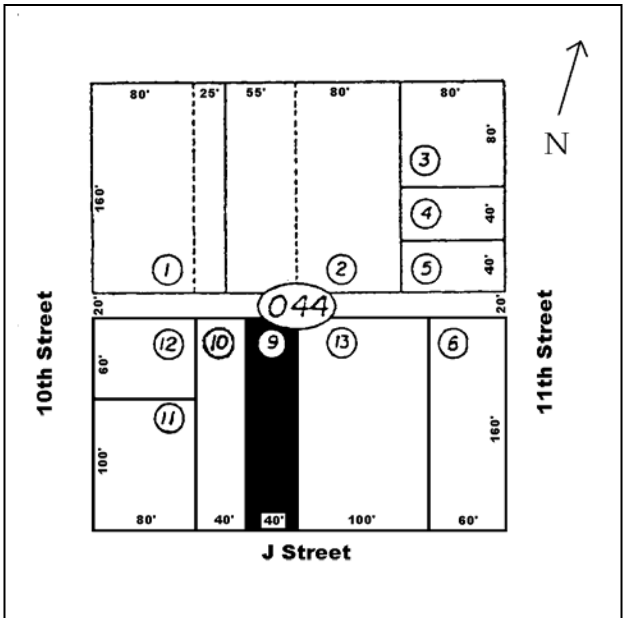
In 1849-50 most of the businesses in Sacramento were clustered along either side of J and K Streets from Front Street to about 4th Street. By late 1852 additional development extended as far as 9th Street. There were businesses further east on J Street due to it being the main road to the northern gold fields. At about twelfth street the road split in two with one branch continuing due east to the American River and the other angling off to the northeast until arriving at a ferry crossing of the American River, about where the 16th Street bridge now crosses the river. The point at which the road split became a nexus for transportation related businesses such as teamsters, hay yards, stables, blacksmith's, wagon makers and small hotel/restaurants.

By 1853 the 297 J Street site (now 1009-1011 J Street) was owned and occupied by John Merker who was the proprietor of the Illinois House hotel. The Sacramento map of 1854 showed a building approximately 40' wide by 25' deep. The hotel continued to operate on that site until about 1865. Assessor's records showed a value for these improvements of $500 in 1852 and $700 in 1860. This building was probably a single story wood frame structure.

(Please see Continuation Sheet)

B11. Additional Resource Attributes: Second floor hotel room associated with hotel next door at 1009 ½ J Street.

***B12. References:**
Sacramento City Directories 1851-1982
Sacramento City/County Assessors Records 1850-1925
Calif. State Library Photo Collection
City of Sacramento Building Permits
Sacramento Survey of Non-Residential Buildings, 1980



B13. Remarks:

***B14. Evaluator:** Paula Boghosian

***Date of Evaluation:** May 2006

(This space reserved for official comments.)

***B. 10 (continued)**

By 1853 the 303 J Street site (now 1013-1015 J Street) was occupied by Marshall & Nye, blacksmith and wagon makers. The Official Sacramento City Map of 1854 shows a building on that site that was approximately 40' in width and 50' in depth. The City Directory for 1854-55 indicates that this building was 2-stories tall and made of brick. John Merker owned this lot as well until he sold it to Sylvester Marshall in 1856. Marshall served a two-year term as Sacramento Sheriff (1860-61) at which time he sold the property to R.T. Edwards. In 1860-61 the improvements on the lot were valued by the Assessor at $2,800. The 1861 City Directory listed Cronkite & Beebe, blacksmith and wagon makers at 303 J Street. In 1867 W.B Ready, a blacksmith at Cronkite's (City Directory) purchased both lots and operated a business of wagon and plow making.

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Sacramento furniture dealer John Breuner was the owner of record in 1882. It appears that Breuner began almost immediately to rebuild on the site and that he probably reused portions of existing structures on the site. By December 27, 1882 an advertisement appeared in the Sacramento Bee for the "newly built brick building" that houses the Russ House Hotel (1009 J - w ½ of Lot 7). The advertisement indicates that the hotel contained a saloon, billiards parlor and cigar & tobacco store. At this time the first floor space was probably devoted to these uses, as well as a hotel lobby. Ingram & Co., Carriage & Wagon Makers, occupied the e ½ of Lot 7 by 1883, and was listed in the directory at 1013-15 J Street.

In its first three listings in the City Directory (1883-85), the Russ House was listed as 1009-1015 J Street. This indicates that the second story units at 1013-15 were part of the hotel at that time. In 1889, the first floor shops of 1013–1015 were rented by Marcus Hirsh, a junk dealer.

In 1892, John Breuner died and possession of these properties passed to his daughters. Immediately after his death, the hotel changed proprietors, and by 1896 had changed to a Lodging House called The Omaha House, which it remained until 1916.

M. Hirsh & Son also continued in tenancy at 1013-1015 J Street, gradually upgrading the business to stoves and tinware, then hardware, and by 1916, a listing in the directory as Plumbing Suppliers.

The 1913 City Directory, the first to include a Home Guide which listed residents chronologically by street and street number, showed the second story residential units as such: 1013 ½ Mrs. Effie Hughes, and 1015 ½ Mrs. M.F. Lee. As mentioned earlier, each was occupied by a single occupant.

Both the hotel and the 1013-1015 units were vacant in 1917 and they were probably remodeled at that time to match their exterior appearance as shown in a photograph taken in the 1940s. The interior was probably also remodeled at this time because there was a definite upgrade in the quality in tenants in the first floor retail space after 1917.

In 1918 the Directory listed E.O. Putnam, Sporting Goods at the 1013 address. Putnam (1015 J Street) was joined by J. White, Sewing Machines (1013 Street) in 1924. By 1927 the building got a whole new line-up of tenants with Brent's Typewriter Exchange, White Sewing Machine's, and T&D Enterprises listed at 1013 and 1015 was vacant. In 1930 the 1013 unit was inhabited only by Brent's Typewriter Exchange and the 1015 unit had J.L. Harbaugh, Leather Goods. Although in 1935-39 White Sewing Machine's was again listed at 1013 (which makes one think they never left) and 1015 was vacant.

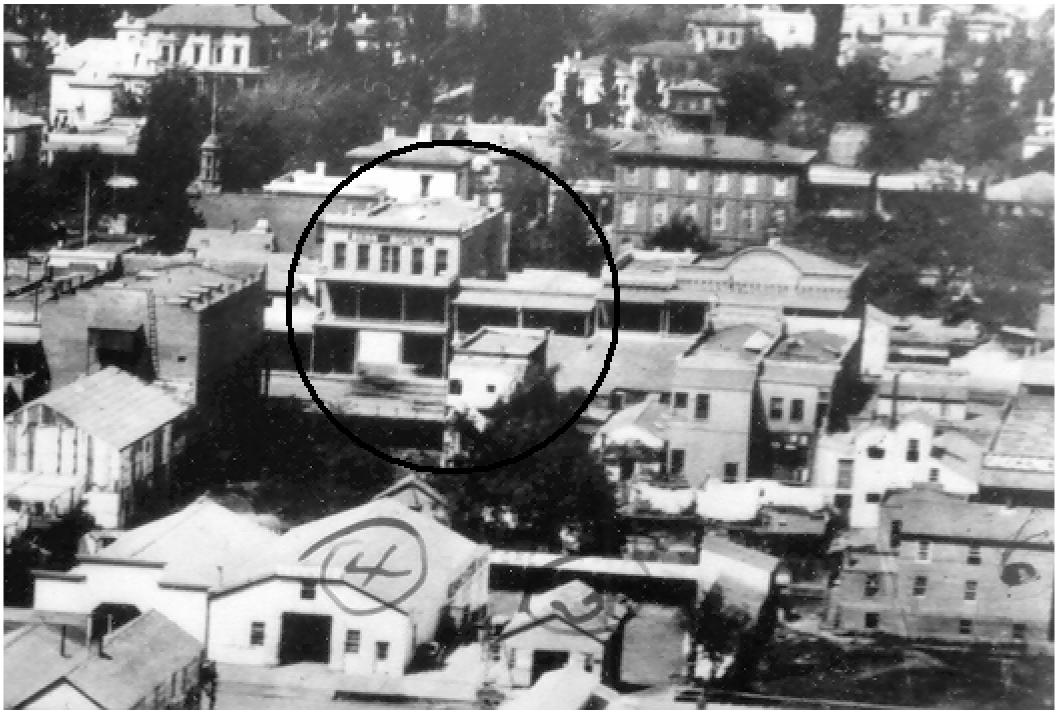
During the 1940's 1015 was occupied by Sig Silverman's Music Store. During the first half of that decade 1013 was vacant and in the second half of the 1940s it was occupied by Sacramento-Stockton Poultry.

In April of 1950, the owner of the property, Wright & Kimbrough, took out a $6,000 building permit for alterations and repairs, at which time the building was reconfigured to accommodate a restaurant. Later that year, the 1013 J Street unit was occupied by the Anticevich's Restaurant which had been located in the Hotel Berry during the 1940s. Another building permit was issued in 6/26/52 for $4,000 for repairs. It was at the time of one of these permits in the early 1950s that the façade of the building was changed to its current appearance. The Anticevich restaurant later became known as The Broiler. The restaurant stayed in that location for many years until only recently when it moved to the 1201 K Building.

The 1015 unit was occupied for a few years in the early 1950's by the Pacific Telephone Installation Depot. In 1955 the unit turned over to Beneficial Finance, which stayed there for the next 20 some years until around 1977 when the unit became vacant and stayed that way for several years. Between 1982 and the present time the 1015 unit has seen a succession of small retail and office tenants punctuated by periods of vacancy. The building is currently vacant.

While The Broiler restaurant has served as a Sacramento cultural landmark for many years, the building has experienced substantial modification. Its exterior appearance has changed several times according to its various uses, and the building has lost integrity as a result. This loss of integrity has diminished its significance as a representative of its era, style or building type. Due to loss of integrity and limited architectural and historic values, the property does not appear to meet eligibility criteria for listing in the National Register of Historic Places, or the Sacramento Register.

 ***Resource Name** Broiler



Biltmore and Broiler in the spring or summer of 1883 when the Broiler housed Marcus Hirsch's junk shop. The blurred image on the street is of a buggy passing in front of the Biltmore and the Broiler is on the right. View to the north. The view is a segment of a photo from the California State Library, Negative #6731.

The Sacramento Underground beneath the sidewalks at The Broiler 1013-15 J Street.

APPENDIX F

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL APPENDICES

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	3rd & J	West	38,340	83		17	2	2	35	50	
2	3rd & J	North	2,080	83		17	2	2	35	50	
3	3rd & L	North	7,540	83		17	2	2	35	50	
4	3rd & Capitol Mall	North	6,510	83		17	2	2	35	50	
5	3rd & Capitol Mall	West	7,670	83		17	2	2	35	50	
6	3rd & N	North	6,290	83		17	2	2	35	50	
7	3rd & N	West	5,040	83		17	2	2	35	50	
8	3rd & P	North	3,360	83		17	2	2	35	50	
9	3rd & P	West	8,010	83		17	2	2	35	50	
10	3rd & Q	North	3,310	83		17	2	2	35	50	
11	3rd & Q	South	6,390	83		17	2	2	35	50	
12	3rd & Q	West	23,050	83		17	2	2	35	50	
13	5th & I	North	8,330	83		17	2	2	35	50	
14	5th & I	West	9,010	83		17	2	2	35	50	
15	5th & J	North	9,400	83		17	2	2	35	50	
16	5th & J	West	31,010	83		17	2	2	35	50	
17	5th & L	West	6,880	83		17	2	2	35	50	
18	5th & Capitol Mall	North	8,250	83		17	2	2	35	50	
19	5th & Capitol Mall	East	5,470	83		17	2	2	35	50	
20	5th & Capitol Mall	West	10,670	83		17	2	2	35	50	
21	5th & N	North	6,820	83		17	2	2	35	50	
22	5th & N	East	7,160	83		17	2	2	35	50	
23	5th & N	West	5,860	83		17	2	2	35	50	
24	5th & P	North	11,190	83		17	2	2	35	50	
25	5th & P	West	5,910	83		17	2	2	35	50	

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consultants in acoustics

Appendix A-1: Sheet 2 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
26	5th & P	East	6,500	83		17	2	2	35	50	
27	5th & Q	North	8,710	83		17	2	2	35	50	
28	5th & Q	West	21,930	83		17	2	2	35	50	
29	5th & Q	South	3,600	83		17	2	2	35	50	
30	5th & Q	East	16,820	83		17	2	2	35	50	
31	7th & I	West	9,190	83		17	2	2	35	50	
32	7th & I	North	4,840	83		17	2	2	35	50	
33	7th & J	West	22,660	83		17	2	2	35	50	
34	7th & J	North	5,100	83		17	2	2	35	50	
35	7th & L	North	5,090	83		17	2	2	35	50	
36	7th & L	West	8,370	83		17	2	2	35	50	
37	7th & L	South	5,220	83		17	2	2	35	50	
38	8th & I	North	4,550	83		17	2	2	35	50	
39	8th & I	West	9,720	83		17	2	2	35	50	
40	8th & J	North	5,600	83		17	2	2	35	50	
41	8th & J	West	21,360	83		17	2	2	35	50	
42	8th & L	North	4,730	83		17	2	2	35	50	
43	8th & L	West	8,510	83		17	2	2	35	50	
44	8th & L	South	4,190	83		17	2	2	35	50	
45	9th & I	North	4,060	83		17	2	2	35	50	
46	9th & I	West	10,450	83		17	2	2	35	50	
47	9th & J	North	3,470	83		17	2	2	35	50	
48	9th & J	West	17,060	83		17	2	2	35	50	
49	9th & L	North	4,010	83		17	2	2	35	50	
50	9th & L	West	11,150	83		17	2	2	35	50	

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Appendix A-1: Sheet 3 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
51	9th & L	South	5,190	83		17	2	2	35	50	
52	9th & P	North	5,910	83		17	2	2	35	50	
53	9th & P	West	7,250	83		17	2	2	35	50	
54	9th & Q	North	5,600	83		17	2	2	35	50	
55	9th & Q	West	14,010	83		17	2	2	35	50	
56	9th & Q	South	5,040	83		17	2	2	35	50	
57	10th & I	North	6,400	83		17	2	2	35	50	
58	10th & I	West	9,630	83		17	2	2	35	50	
59	10th & J	North	7,420	83		17	2	2	35	50	
60	10th & J	West	15,320	83		17	2	2	35	50	
61	10th & L	North	9,560	83		17	2	2	35	50	
62	10th & L	West	12,640	83		17	2	2	35	50	
63	10th & L	South	9,290	83		17	2	2	35	50	
64	10th & P	North	14,450	83		17	2	2	35	50	
65	10th & P	West	6,490	83		17	2	2	35	50	
66	10th & P	East	5,190	83		17	2	2	35	50	
67	10th & Q	North	12,510	83		17	2	2	35	50	
68	10th & Q	West	14,580	83		17	2	2	35	50	
69	10th & Q	South	9,670	83		17	2	2	35	50	
70	10th & Q	East	11,740	83		17	2	2	35	50	
71	12th & H	North	15,480	83		17	2	2	35	50	
72	12th & H	West	4,590	83		17	2	2	35	50	
73	12th & H	East	6,870	83		17	2	2	35	50	
74	12th & I	North	11,600	83		17	2	2	35	50	
75	12th & I	West	9,830	83		17	2	2	35	50	

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Appendix A-1: Sheet 4 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
76	12th & J	North	8,260	83		17	2	2	35	50	
77	12th & J	West	14,420	83		17	2	2	35	50	
78	12th & L	North	7,030	83		17	2	2	35	50	
79	12th & L	West	12,970	83		17	2	2	35	50	
80	15th & H	North	5,900	83		17	2	2	35	50	
81	15th & H	West	5,550	83		17	2	2	35	50	
82	15th & J	North	7,440	83		17	2	2	35	50	
83	15th & J	West	11,050	83		17	2	2	35	50	
84	15th & L	North	8,200	83		17	2	2	35	50	
85	15th & L	West	10,190	83		17	2	2	35	50	
86	15th & P	North	6,980	83		17	2	2	35	50	
87	15th & P	West	11,110	83		17	2	2	35	50	
88	15th & Q	North	6,610	83		17	2	2	35	50	
89	15th & Q	West	6,880	83		17	2	2	35	50	
90	15th & Q	South	6,700	83		17	2	2	35	50	
91	15th & W	North	6,040	83		17	2	2	35	50	
92	15th & W	West	8,900	83		17	2	2	35	50	
93	15th & X	North	6,860	83		17	2	2	35	50	
94	15th & X	West	11,550	83		17	2	2	35	50	
95	15th & X	South	4,830	83		17	2	2	35	50	
96	16th & H	North	11,780	83		17	2	2	35	50	
97	16th & H	West	3,980	83		17	2	2	35	50	
98	16th & H	East	3,150	83		17	2	2	35	50	
99	16th & I	North	9,960	83		17	2	2	35	50	
100	16th & I	West	9,510	83		17	2	2	35	50	

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Appendix A-1: Sheet 5 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
101	16th & I	East	8,050	83		17	2	2	35	50	
102	16th & J	North	14,930	83		17	2	2	35	50	
103	16th & J	West	11,970	83		17	2	2	35	50	
104	16th & J	East	11,390	83		17	2	2	35	50	
105	16th & L	North	13,420	83		17	2	2	35	50	
106	16th & L	West	8,700	83		17	2	2	35	50	
107	16th & L	East	7,560	83		17	2	2	35	50	
108	16th & P	North	15,040	83		17	2	2	35	50	
109	16th & P	West	10,670	83		17	2	2	35	50	
110	16th & P	East	10,240	83		17	2	2	35	50	
111	16th & Q	North	15,450	83		17	2	2	35	50	
112	16th & Q	West	7,780	83		17	2	2	35	50	
113	16th & Q	South	13,150	83		17	2	2	35	50	
114	16th & Q	East	5,480	83		17	2	2	35	50	
115	16th & W	North	17,580	83		17	2	2	35	50	
116	16th & W	West	8,980	83		17	2	2	35	50	
117	16th & W	East	15,420	83		17	2	2	35	50	
118	16th & X	North	11,140	83		17	2	2	35	50	
119	16th & X	West	13,380	83		17	2	2	35	50	
120	16th & X	South	13,050	83		17	2	2	35	50	
121	16th & X	East	15,290	83		17	2	2	35	50	
122	29th & J	North	13,390	83		17	2	2	35	50	
123	29th & J	West	8,180	83		17	2	2	35	50	
124	29th & J	South	11,160	83		17	2	2	35	50	
125	30th & J	North	5,190	83		17	2	2	35	50	

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
126	30th & J	West	9,360	83		17	2	2	35	50	
127	30th & J	South	5,680	83		17	2	2	35	50	
128	30th & J	East	9,850	83		17	2	2	35	50	
129	11th & I	North	1,880	83		17	2	2	35	50	
130	11th & I	West	8,450	83		17	2	2	35	50	
131	11th & J	North	2,020	83		17	2	2	35	50	
132	11th & J	West	15,870	83		17	2	2	35	50	

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
1	3rd & J	West	70.2	63.1	68.3	72.8
2	3rd & J	North	57.5	50.4	55.6	60.2
3	3rd & L	North	63.1	56.0	61.2	65.8
4	3rd & Capitol Mall	North	62.5	55.4	60.6	65.1
5	3rd & Capitol Mall	West	63.2	56.1	61.3	65.8
6	3rd & N	North	62.3	55.2	60.4	65.0
7	3rd & N	West	61.4	54.2	59.4	64.0
8	3rd & P	North	59.6	52.5	57.7	62.2
9	3rd & P	West	63.4	56.3	61.5	66.0
10	3rd & Q	North	59.5	52.4	57.6	62.2
11	3rd & Q	South	62.4	55.3	60.5	65.0
12	3rd & Q	West	68.0	60.8	66.0	70.6
13	5th & I	North	63.5	56.4	61.6	66.2
14	5th & I	West	63.9	56.8	62.0	66.5
15	5th & J	North	64.1	57.0	62.1	66.7
16	5th & J	West	69.3	62.1	67.3	71.9
17	5th & L	West	62.7	55.6	60.8	65.4
18	5th & Capitol Mall	North	63.5	56.4	61.6	66.1
19	5th & Capitol Mall	East	61.7	54.6	59.8	64.4
20	5th & Capitol Mall	West	64.6	57.5	62.7	67.3
21	5th & N	North	62.7	55.6	60.8	65.3
22	5th & N	East	62.9	55.8	61.0	65.5
23	5th & N	West	62.0	54.9	60.1	64.7
24	5th & P	North	64.8	57.7	62.9	67.5
25	5th & P	West	62.1	54.9	60.1	64.7

Appendix A-2: Sheet 2 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
26	5th & P	East	62.5	55.3	60.5	65.1
27	5th & Q	North	63.7	56.6	61.8	66.4
28	5th & Q	West	67.8	60.6	65.8	70.4
29	5th & Q	South	59.9	52.8	58.0	62.5
30	5th & Q	East	66.6	59.5	64.7	69.2
31	7th & I	West	64.0	56.9	62.0	66.6
32	7th & I	North	61.2	54.1	59.3	63.8
33	7th & J	West	67.9	60.8	66.0	70.5
34	7th & J	North	61.4	54.3	59.5	64.1
35	7th & L	North	61.4	54.3	59.5	64.0
36	7th & L	West	63.6	56.4	61.6	66.2
37	7th & L	South	61.5	54.4	59.6	64.2
38	8th & I	North	60.9	53.8	59.0	63.6
39	8th & I	West	64.2	57.1	62.3	66.9
40	8th & J	North	61.8	54.7	59.9	64.5
41	8th & J	West	67.6	60.5	65.7	70.3
42	8th & L	North	61.1	54.0	59.2	63.7
43	8th & L	West	63.6	56.5	61.7	66.3
44	8th & L	South	60.6	53.4	58.6	63.2
45	9th & I	North	60.4	53.3	58.5	63.1
46	9th & I	West	64.5	57.4	62.6	67.2
47	9th & J	North	59.7	52.6	57.8	62.4
48	9th & J	West	66.7	59.5	64.7	69.3
49	9th & L	North	60.4	53.3	58.4	63.0
50	9th & L	West	64.8	57.7	62.9	67.5

Appendix A-2: Sheet 3 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
51	9th & L	South	61.5	54.4	59.6	64.1
52	9th & P	North	62.1	54.9	60.1	64.7
53	9th & P	West	62.9	55.8	61.0	65.6
54	9th & Q	North	61.8	54.7	59.9	64.5
55	9th & Q	West	65.8	58.7	63.9	68.4
56	9th & Q	South	61.4	54.2	59.4	64.0
57	10th & I	North	62.4	55.3	60.5	65.0
58	10th & I	West	64.2	57.1	62.3	66.8
59	10th & J	North	63.0	55.9	61.1	65.7
60	10th & J	West	66.2	59.1	64.3	68.8
61	10th & L	North	64.1	57.0	62.2	66.8
62	10th & L	West	65.4	58.2	63.4	68.0
63	10th & L	South	64.0	56.9	62.1	66.7
64	10th & P	North	65.9	58.8	64.0	68.6
65	10th & P	West	62.5	55.3	60.5	65.1
66	10th & P	East	61.5	54.4	59.6	64.1
67	10th & Q	North	65.3	58.2	63.4	68.0
68	10th & Q	West	66.0	58.9	64.1	68.6
69	10th & Q	South	64.2	57.1	62.3	66.8
70	10th & Q	East	65.0	57.9	63.1	67.7
71	12th & H	North	66.2	59.1	64.3	68.9
72	12th & H	West	61.0	53.8	59.0	63.6
73	12th & H	East	62.7	55.6	60.8	65.4
74	12th & I	North	65.0	57.9	63.1	67.6
75	12th & I	West	64.3	57.1	62.3	66.9

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
76	12th & J	North	63.5	56.4	61.6	66.2
77	12th & J	West	65.9	58.8	64.0	68.6
78	12th & L	North	62.8	55.7	60.9	65.5
79	12th & L	West	65.5	58.4	63.5	68.1
80	15th & H	North	62.1	54.9	60.1	64.7
81	15th & H	West	61.8	54.7	59.9	64.4
82	15th & J	North	63.1	55.9	61.1	65.7
83	15th & J	West	64.8	57.7	62.8	67.4
84	15th & L	North	63.5	56.4	61.6	66.1
85	15th & L	West	64.4	57.3	62.5	67.1
86	15th & P	North	62.8	55.7	60.9	65.4
87	15th & P	West	64.8	57.7	62.9	67.4
88	15th & Q	North	62.5	55.4	60.6	65.2
89	15th & Q	West	62.7	55.6	60.8	65.4
90	15th & Q	South	62.6	55.5	60.7	65.2
91	15th & W	North	62.2	55.0	60.2	64.8
92	15th & W	West	63.8	56.7	61.9	66.5
93	15th & X	North	62.7	55.6	60.8	65.3
94	15th & X	West	65.0	57.8	63.0	67.6
95	15th & X	South	61.2	54.1	59.3	63.8
96	16th & H	North	65.1	57.9	63.1	67.7
97	16th & H	West	60.3	53.2	58.4	63.0
98	16th & H	East	59.3	52.2	57.4	62.0
99	16th & I	North	64.3	57.2	62.4	67.0
100	16th & I	West	64.1	57.0	62.2	66.8

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
101	16th & I	East	63.4	56.3	61.5	66.0
102	16th & J	North	66.1	59.0	64.2	68.7
103	16th & J	West	65.1	58.0	63.2	67.8
104	16th & J	East	64.9	57.8	63.0	67.5
105	16th & L	North	65.6	58.5	63.7	68.3
106	16th & L	West	63.7	56.6	61.8	66.4
107	16th & L	East	63.1	56.0	61.2	65.8
108	16th & P	North	66.1	59.0	64.2	68.8
109	16th & P	West	64.6	57.5	62.7	67.3
110	16th & P	East	64.4	57.3	62.5	67.1
111	16th & Q	North	66.2	59.1	64.3	68.9
112	16th & Q	West	63.3	56.1	61.3	65.9
113	16th & Q	South	65.5	58.4	63.6	68.2
114	16th & Q	East	61.7	54.6	59.8	64.4
115	16th & W	North	66.8	59.7	64.9	69.4
116	16th & W	West	63.9	56.8	61.9	66.5
117	16th & W	East	66.2	59.1	64.3	68.9
118	16th & X	North	64.8	57.7	62.9	67.4
119	16th & X	West	65.6	58.5	63.7	68.2
120	16th & X	South	65.5	58.4	63.6	68.1
121	16th & X	East	66.2	59.1	64.3	68.8
122	29th & J	North	65.6	58.5	63.7	68.2
123	29th & J	West	63.5	56.3	61.5	66.1
124	29th & J	South	64.8	57.7	62.9	67.5
125	30th & J	North	61.5	54.4	59.6	64.1

Appendix A-2: Sheet 6 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
126	30th & J	West	64.1	56.9	62.1	66.7
127	30th & J	South	61.9	54.8	60.0	64.5
128	30th & J	East	64.3	57.2	62.4	66.9
129	11th & I	North	57.1	50.0	55.2	59.7
130	11th & I	West	63.6	56.5	61.7	66.2
131	11th & J	North	57.4	50.3	55.5	60.0
132	11th & J	West	66.3	59.2	64.4	69.0

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
1	3rd & J	West	30	96	302	957	3025
2	3rd & J	North	2	5	16	52	164
3	3rd & L	North	6	19	59	188	595
4	3rd & Capitol Mall	North	5	16	51	162	514
5	3rd & Capitol Mall	West	6	19	61	191	605
6	3rd & N	North	5	16	50	157	496
7	3rd & N	West	4	13	40	126	398
8	3rd & P	North	3	8	27	84	265
9	3rd & P	West	6	20	63	200	632
10	3rd & Q	North	3	8	26	83	261
11	3rd & Q	South	5	16	50	159	504
12	3rd & Q	West	18	58	182	575	1819
13	5th & I	North	7	21	66	208	657
14	5th & I	West	7	22	71	225	711
15	5th & J	North	7	23	74	235	742
16	5th & J	West	24	77	245	774	2447
17	5th & L	West	5	17	54	172	543
18	5th & Capitol Mall	North	7	21	65	206	651
19	5th & Capitol Mall	East	4	14	43	136	432
20	5th & Capitol Mall	West	8	27	84	266	842
21	5th & N	North	5	17	54	170	538
22	5th & N	East	6	18	56	179	565
23	5th & N	West	5	15	46	146	462
24	5th & P	North	9	28	88	279	883
25	5th & P	West	5	15	47	147	466

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
26	5th & P	East	5	16	51	162	513
27	5th & Q	North	7	22	69	217	687
28	5th & Q	West	17	55	173	547	1730
29	5th & Q	South	3	9	28	90	284
30	5th & Q	East	13	42	133	420	1327
31	7th & I	West	7	23	73	229	725
32	7th & I	North	4	12	38	121	382
33	7th & J	West	18	57	179	565	1788
34	7th & J	North	4	13	40	127	402
35	7th & L	North	4	13	40	127	402
36	7th & L	West	7	21	66	209	660
37	7th & L	South	4	13	41	130	412
38	8th & I	North	4	11	36	114	359
39	8th & I	West	8	24	77	242	767
40	8th & J	North	4	14	44	140	442
41	8th & J	West	17	53	169	533	1685
42	8th & L	North	4	12	37	118	373
43	8th & L	West	7	21	67	212	671
44	8th & L	South	3	10	33	105	331
45	9th & I	North	3	10	32	101	320
46	9th & I	West	8	26	82	261	824
47	9th & J	North	3	9	27	87	274
48	9th & J	West	13	43	135	426	1346
49	9th & L	North	3	10	32	100	316
50	9th & L	West	9	28	88	278	880

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Appendix A-3: Sheet 3 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
51	9th & L	South	4	13	41	129	409
52	9th & P	North	5	15	47	147	466
53	9th & P	West	6	18	57	181	572
54	9th & Q	North	4	14	44	140	442
55	9th & Q	West	11	35	111	350	1105
56	9th & Q	South	4	13	40	126	398
57	10th & I	North	5	16	50	160	505
58	10th & I	West	8	24	76	240	760
59	10th & J	North	6	19	59	185	585
60	10th & J	West	12	38	121	382	1209
61	10th & L	North	8	24	75	239	754
62	10th & L	West	10	32	100	315	997
63	10th & L	South	7	23	73	232	733
64	10th & P	North	11	36	114	361	1140
65	10th & P	West	5	16	51	162	512
66	10th & P	East	4	13	41	129	409
67	10th & Q	North	10	31	99	312	987
68	10th & Q	West	12	36	115	364	1150
69	10th & Q	South	8	24	76	241	763
70	10th & Q	East	9	29	93	293	926
71	12th & H	North	12	39	122	386	1221
72	12th & H	West	4	11	36	115	362
73	12th & H	East	5	17	54	171	542
74	12th & I	North	9	29	92	289	915
75	12th & I	West	8	25	78	245	776

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Appendix A-3: Sheet 4 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
76	12th & J	North	7	21	65	206	652
77	12th & J	West	11	36	114	360	1138
78	12th & L	North	6	18	55	175	555
79	12th & L	West	10	32	102	324	1023
80	15th & H	North	5	15	47	147	465
81	15th & H	West	4	14	44	138	438
82	15th & J	North	6	19	59	186	587
83	15th & J	West	9	28	87	276	872
84	15th & L	North	6	20	65	205	647
85	15th & L	West	8	25	80	254	804
86	15th & P	North	6	17	55	174	551
87	15th & P	West	9	28	88	277	877
88	15th & Q	North	5	16	52	165	521
89	15th & Q	West	5	17	54	172	543
90	15th & Q	South	5	17	53	167	529
91	15th & W	North	5	15	48	151	477
92	15th & W	West	7	22	70	222	702
93	15th & X	North	5	17	54	171	541
94	15th & X	West	9	29	91	288	911
95	15th & X	South	4	12	38	121	381
96	16th & H	North	9	29	93	294	929
97	16th & H	West	3	10	31	99	314
98	16th & H	East	2	8	25	79	249
99	16th & I	North	8	25	79	248	786
100	16th & I	West	8	24	75	237	750

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Appendix A-3: Sheet 5 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
101	16th & I	East	6	20	64	201	635
102	16th & J	North	12	37	118	372	1178
103	16th & J	West	9	30	94	299	944
104	16th & J	East	9	28	90	284	899
105	16th & L	North	11	33	106	335	1059
106	16th & L	West	7	22	69	217	686
107	16th & L	East	6	19	60	189	596
108	16th & P	North	12	38	119	375	1187
109	16th & P	West	8	27	84	266	842
110	16th & P	East	8	26	81	255	808
111	16th & Q	North	12	39	122	385	1219
112	16th & Q	West	6	19	61	194	614
113	16th & Q	South	10	33	104	328	1037
114	16th & Q	East	4	14	43	137	432
115	16th & W	North	14	44	139	439	1387
116	16th & W	West	7	22	71	224	708
117	16th & W	East	12	38	122	385	1217
118	16th & X	North	9	28	88	278	879
119	16th & X	West	11	33	106	334	1056
120	16th & X	South	10	33	103	326	1030
121	16th & X	East	12	38	121	381	1206
122	29th & J	North	11	33	106	334	1056
123	29th & J	West	6	20	65	204	645
124	29th & J	South	9	28	88	278	880
125	30th & J	North	4	13	41	129	409

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Existing Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
126	30th & J	West	7	23	74	234	738
127	30th & J	South	4	14	45	142	448
128	30th & J	East	8	25	78	246	777
129	11th & I	North	1	5	15	47	148
130	11th & I	West	7	21	67	211	667
131	11th & J	North	2	5	16	50	159
132	11th & J	West	13	40	125	396	1252

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Appendix B-1: Sheet 1 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	3rd & J	West	41,500	83		17	2	2	35	50	
2	3rd & J	North	2,090	83		17	2	2	35	50	
3	3rd & L	North	8,450	83		17	2	2	35	50	
4	3rd & Capitol Mall	North	10,160	83		17	2	2	35	50	
5	3rd & Capitol Mall	West	11,070	83		17	2	2	35	50	
6	3rd & N	North	7,290	83		17	2	2	35	50	
7	3rd & N	West	5,210	83		17	2	2	35	50	
8	3rd & P	North	4,190	83		17	2	2	35	50	
9	3rd & P	West	8,310	83		17	2	2	35	50	
10	3rd & Q	North	3,310	83		17	2	2	35	50	
11	3rd & Q	South	5,100	83		17	2	2	35	50	
12	3rd & Q	West	29,160	83		17	2	2	35	50	
13	5th & I	North	8,470	83		17	2	2	35	50	
14	5th & I	West	9,460	83		17	2	2	35	50	
15	5th & J	North	9,420	83		17	2	2	35	50	
16	5th & J	West	33,100	83		17	2	2	35	50	
17	5th & L	West	7,520	83		17	2	2	35	50	
18	5th & Capitol Mall	North	7,980	83		17	2	2	35	50	
19	5th & Capitol Mall	East	9,950	83		17	2	2	35	50	
20	5th & Capitol Mall	West	14,700	83		17	2	2	35	50	
21	5th & N	North	7,500	83		17	2	2	35	50	
22	5th & N	East	7,410	83		17	2	2	35	50	
23	5th & N	West	6,110	83		17	2	2	35	50	
24	5th & P	North	10,090	83		17	2	2	35	50	
25	5th & P	West	6,960	83		17	2	2	35	50	

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Appendix B-1: Sheet 2 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
26	5th & P	East	7,630	83		17	2	2	35	50	
27	5th & Q	North	9,310	83		17	2	2	35	50	
28	5th & Q	West	28,040	83		17	2	2	35	50	
29	5th & Q	South	3,600	83		17	2	2	35	50	
30	5th & Q	East	22,330	83		17	2	2	35	50	
31	7th & I	West	9,520	83		17	2	2	35	50	
32	7th & I	North	5,810	83		17	2	2	35	50	
33	7th & J	West	24,660	83		17	2	2	35	50	
34	7th & J	North	5,060	83		17	2	2	35	50	
35	7th & L	North	6,300	83		17	2	2	35	50	
36	7th & L	West	8,770	83		17	2	2	35	50	
37	7th & L	South	7,130	83		17	2	2	35	50	
38	8th & I	North	4,910	83		17	2	2	35	50	
39	8th & I	West	10,050	83		17	2	2	35	50	
40	8th & J	North	6,280	83		17	2	2	35	50	
41	8th & J	West	23,120	83		17	2	2	35	50	
42	8th & L	North	6,720	83		17	2	2	35	50	
43	8th & L	West	9,610	83		17	2	2	35	50	
44	8th & L	South	5,000	83		17	2	2	35	50	
45	9th & I	North	5,300	83		17	2	2	35	50	
46	9th & I	West	10,460	83		17	2	2	35	50	
47	9th & J	North	5,740	83		17	2	2	35	50	
48	9th & J	West	19,960	83		17	2	2	35	50	
49	9th & L	North	5,620	83		17	2	2	35	50	
50	9th & L	West	13,950	83		17	2	2	35	50	

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Appendix B-1: Sheet 3 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
51	9th & L	South	6,700	83		17	2	2	35	50	
52	9th & P	North	8,590	83		17	2	2	35	50	
53	9th & P	West	7,940	83		17	2	2	35	50	
54	9th & Q	North	8,660	83		17	2	2	35	50	
55	9th & Q	West	17,780	83		17	2	2	35	50	
56	9th & Q	South	11,640	83		17	2	2	35	50	
57	10th & I	North	6,500	83		17	2	2	35	50	
58	10th & I	West	10,640	83		17	2	2	35	50	
59	10th & J	North	7,520	83		17	2	2	35	50	
60	10th & J	West	16,640	83		17	2	2	35	50	
61	10th & L	North	9,660	83		17	2	2	35	50	
62	10th & L	West	15,340	83		17	2	2	35	50	
63	10th & L	South	9,930	83		17	2	2	35	50	
64	10th & P	North	15,020	83		17	2	2	35	50	
65	10th & P	West	7,570	83		17	2	2	35	50	
66	10th & P	East	7,910	83		17	2	2	35	50	
67	10th & Q	North	13,450	83		17	2	2	35	50	
68	10th & Q	West	14,810	83		17	2	2	35	50	
69	10th & Q	South	10,610	83		17	2	2	35	50	
70	10th & Q	East	11,970	83		17	2	2	35	50	
71	12th & H	North	17,030	83		17	2	2	35	50	
72	12th & H	West	4,590	83		17	2	2	35	50	
73	12th & H	East	7,070	83		17	2	2	35	50	
74	12th & I	North	13,160	83		17	2	2	35	50	
75	12th & I	West	10,850	83		17	2	2	35	50	

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Appendix B-1: Sheet 4 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
76	12th & J	North	8,810	83		17	2	2	35	50	
77	12th & J	West	15,730	83		17	2	2	35	50	
78	12th & L	North	7,490	83		17	2	2	35	50	
79	12th & L	West	15,130	83		17	2	2	35	50	
80	15th & H	North	5,900	83		17	2	2	35	50	
81	15th & H	West	5,550	83		17	2	2	35	50	
82	15th & J	North	7,440	83		17	2	2	35	50	
83	15th & J	West	13,650	83		17	2	2	35	50	
84	15th & L	North	8,670	83		17	2	2	35	50	
85	15th & L	West	11,890	83		17	2	2	35	50	
86	15th & P	North	7,410	83		17	2	2	35	50	
87	15th & P	West	11,820	83		17	2	2	35	50	
88	15th & Q	North	7,020	83		17	2	2	35	50	
89	15th & Q	West	7,110	83		17	2	2	35	50	
90	15th & Q	South	7,070	83		17	2	2	35	50	
91	15th & W	North	6,410	83		17	2	2	35	50	
92	15th & W	West	8,950	83		17	2	2	35	50	
93	15th & X	North	7,180	83		17	2	2	35	50	
94	15th & X	West	11,550	83		17	2	2	35	50	
95	15th & X	South	4,830	83		17	2	2	35	50	
96	16th & H	North	12,410	83		17	2	2	35	50	
97	16th & H	West	3,980	83		17	2	2	35	50	
98	16th & H	East	3,150	83		17	2	2	35	50	
99	16th & I	North	10,590	83		17	2	2	35	50	
100	16th & I	West	9,520	83		17	2	2	35	50	

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Appendix B-1: Sheet 5 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
101	16th & I	East	8,050	83		17	2	2	35	50	
102	16th & J	North	15,560	83		17	2	2	35	50	
103	16th & J	West	12,910	83		17	2	2	35	50	
104	16th & J	East	11,790	83		17	2	2	35	50	
105	16th & L	North	13,710	83		17	2	2	35	50	
106	16th & L	West	10,350	83		17	2	2	35	50	
107	16th & L	East	8,340	83		17	2	2	35	50	
108	16th & P	North	16,150	83		17	2	2	35	50	
109	16th & P	West	11,360	83		17	2	2	35	50	
110	16th & P	East	11,110	83		17	2	2	35	50	
111	16th & Q	North	16,390	83		17	2	2	35	50	
112	16th & Q	West	8,050	83		17	2	2	35	50	
113	16th & Q	South	14,070	83		17	2	2	35	50	
114	16th & Q	East	5,730	83		17	2	2	35	50	
115	16th & W	North	18,500	83		17	2	2	35	50	
116	16th & W	West	8,980	83		17	2	2	35	50	
117	16th & W	East	16,440	83		17	2	2	35	50	
118	16th & X	North	18,490	83		17	2	2	35	50	
119	16th & X	West	13,700	83		17	2	2	35	50	
120	16th & X	South	13,050	83		17	2	2	35	50	
121	16th & X	East	8,260	83		17	2	2	35	50	
122	29th & J	North	11,250	83		17	2	2	35	50	
123	29th & J	West	8,480	83		17	2	2	35	50	
124	29th & J	South	9,490	83		17	2	2	35	50	
125	30th & J	North	7,040	83		17	2	2	35	50	

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
126	30th & J	West	10,840	83		17	2	2	35	50	
127	30th & J	South	6,670	83		17	2	2	35	50	
128	30th & J	East	10,470	83		17	2	2	35	50	
129	11th & I	North	1,980	83		17	2	2	35	50	
130	11th & I	West	9,460	83		17	2	2	35	50	
131	11th & J	North	2,020	83		17	2	2	35	50	
132	11th & J	West	17,190	83		17	2	2	35	50	

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
1	3rd & J	West	70.5	63.4	68.6	73.2
2	3rd & J	North	57.5	50.4	55.6	60.2
3	3rd & L	North	63.6	56.5	61.7	66.2
4	3rd & Capitol Mall	North	64.4	57.3	62.5	67.0
5	3rd & Capitol Mall	West	64.8	57.7	62.9	67.4
6	3rd & N	North	63.0	55.8	61.0	65.6
7	3rd & N	West	61.5	54.4	59.6	64.1
8	3rd & P	North	60.6	53.4	58.6	63.2
9	3rd & P	West	63.5	56.4	61.6	66.2
10	3rd & Q	North	59.5	52.4	57.6	62.2
11	3rd & Q	South	61.4	54.3	59.5	64.1
12	3rd & Q	West	69.0	61.9	67.1	71.6
13	5th & I	North	63.6	56.5	61.7	66.3
14	5th & I	West	64.1	57.0	62.2	66.7
15	5th & J	North	64.1	57.0	62.2	66.7
16	5th & J	West	69.5	62.4	67.6	72.2
17	5th & L	West	63.1	56.0	61.2	65.7
18	5th & Capitol Mall	North	63.4	56.2	61.4	66.0
19	5th & Capitol Mall	East	64.3	57.2	62.4	67.0
20	5th & Capitol Mall	West	66.0	58.9	64.1	68.7
21	5th & N	North	63.1	56.0	61.2	65.7
22	5th & N	East	63.0	55.9	61.1	65.7
23	5th & N	West	62.2	55.1	60.3	64.8
24	5th & P	North	64.4	57.3	62.5	67.0
25	5th & P	West	62.8	55.6	60.8	65.4

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
26	5th & P	East	63.2	56.0	61.2	65.8
27	5th & Q	North	64.0	56.9	62.1	66.7
28	5th & Q	West	68.8	61.7	66.9	71.5
29	5th & Q	South	59.9	52.8	58.0	62.5
30	5th & Q	East	67.8	60.7	65.9	70.5
31	7th & I	West	64.1	57.0	62.2	66.8
32	7th & I	North	62.0	54.9	60.1	64.6
33	7th & J	West	68.3	61.1	66.3	70.9
34	7th & J	North	61.4	54.3	59.5	64.0
35	7th & L	North	62.3	55.2	60.4	65.0
36	7th & L	West	63.8	56.7	61.8	66.4
37	7th & L	South	62.9	55.8	60.9	65.5
38	8th & I	North	61.3	54.1	59.3	63.9
39	8th & I	West	64.4	57.2	62.4	67.0
40	8th & J	North	62.3	55.2	60.4	65.0
41	8th & J	West	68.0	60.9	66.1	70.6
42	8th & L	North	62.6	55.5	60.7	65.3
43	8th & L	West	64.2	57.0	62.2	66.8
44	8th & L	South	61.3	54.2	59.4	64.0
45	9th & I	North	61.6	54.5	59.7	64.2
46	9th & I	West	64.5	57.4	62.6	67.2
47	9th & J	North	61.9	54.8	60.0	64.6
48	9th & J	West	67.3	60.2	65.4	70.0
49	9th & L	North	61.8	54.7	59.9	64.5
50	9th & L	West	65.8	58.7	63.9	68.4

Appendix B-2: Sheet 3 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
51	9th & L	South	62.6	55.5	60.7	65.2
52	9th & P	North	63.7	56.6	61.8	66.3
53	9th & P	West	63.3	56.2	61.4	66.0
54	9th & Q	North	63.7	56.6	61.8	66.4
55	9th & Q	West	66.8	59.7	64.9	69.5
56	9th & Q	South	65.0	57.9	63.1	67.6
57	10th & I	North	62.5	55.3	60.5	65.1
58	10th & I	West	64.6	57.5	62.7	67.3
59	10th & J	North	63.1	56.0	61.2	65.7
60	10th & J	West	66.6	59.4	64.6	69.2
61	10th & L	North	64.2	57.1	62.3	66.8
62	10th & L	West	66.2	59.1	64.3	68.8
63	10th & L	South	64.3	57.2	62.4	67.0
64	10th & P	North	66.1	59.0	64.2	68.7
65	10th & P	West	63.1	56.0	61.2	65.8
66	10th & P	East	63.3	56.2	61.4	66.0
67	10th & Q	North	65.6	58.5	63.7	68.3
68	10th & Q	West	66.0	58.9	64.1	68.7
69	10th & Q	South	64.6	57.5	62.7	67.2
70	10th & Q	East	65.1	58.0	63.2	67.8
71	12th & H	North	66.7	59.5	64.7	69.3
72	12th & H	West	61.0	53.8	59.0	63.6
73	12th & H	East	62.8	55.7	60.9	65.5
74	12th & I	North	65.5	58.4	63.6	68.2
75	12th & I	West	64.7	57.6	62.8	67.3

Appendix B-2: Sheet 4 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
76	12th & J	North	63.8	56.7	61.9	66.4
77	12th & J	West	66.3	59.2	64.4	68.9
78	12th & L	North	63.1	56.0	61.2	65.7
79	12th & L	West	66.1	59.0	64.2	68.8
80	15th & H	North	62.1	54.9	60.1	64.7
81	15th & H	West	61.8	54.7	59.9	64.4
82	15th & J	North	63.1	55.9	61.1	65.7
83	15th & J	West	65.7	58.6	63.8	68.3
84	15th & L	North	63.7	56.6	61.8	66.4
85	15th & L	West	65.1	58.0	63.2	67.7
86	15th & P	North	63.0	55.9	61.1	65.7
87	15th & P	West	65.1	57.9	63.1	67.7
88	15th & Q	North	62.8	55.7	60.9	65.4
89	15th & Q	West	62.9	55.7	60.9	65.5
90	15th & Q	South	62.8	55.7	60.9	65.5
91	15th & W	North	62.4	55.3	60.5	65.0
92	15th & W	West	63.9	56.7	61.9	66.5
93	15th & X	North	62.9	55.8	61.0	65.5
94	15th & X	West	65.0	57.8	63.0	67.6
95	15th & X	South	61.2	54.1	59.3	63.8
96	16th & H	North	65.3	58.2	63.4	67.9
97	16th & H	West	60.3	53.2	58.4	63.0
98	16th & H	East	59.3	52.2	57.4	62.0
99	16th & I	North	64.6	57.5	62.7	67.2
100	16th & I	West	64.1	57.0	62.2	66.8

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
101	16th & I	East	63.4	56.3	61.5	66.0
102	16th & J	North	66.3	59.1	64.3	68.9
103	16th & J	West	65.5	58.3	63.5	68.1
104	16th & J	East	65.1	57.9	63.1	67.7
105	16th & L	North	65.7	58.6	63.8	68.4
106	16th & L	West	64.5	57.4	62.6	67.1
107	16th & L	East	63.6	56.4	61.6	66.2
108	16th & P	North	66.4	59.3	64.5	69.1
109	16th & P	West	64.9	57.8	63.0	67.5
110	16th & P	East	64.8	57.7	62.9	67.4
111	16th & Q	North	66.5	59.4	64.6	69.1
112	16th & Q	West	63.4	56.3	61.5	66.0
113	16th & Q	South	65.8	58.7	63.9	68.5
114	16th & Q	East	61.9	54.8	60.0	64.6
115	16th & W	North	67.0	59.9	65.1	69.7
116	16th & W	West	63.9	56.8	61.9	66.5
117	16th & W	East	66.5	59.4	64.6	69.1
118	16th & X	North	67.0	59.9	65.1	69.7
119	16th & X	West	65.7	58.6	63.8	68.3
120	16th & X	South	65.5	58.4	63.6	68.1
121	16th & X	East	63.5	56.4	61.6	66.2
122	29th & J	North	64.9	57.7	62.9	67.5
123	29th & J	West	63.6	56.5	61.7	66.3
124	29th & J	South	64.1	57.0	62.2	66.8
125	30th & J	North	62.8	55.7	60.9	65.5

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
126	30th & J	West	64.7	57.6	62.8	67.3
127	30th & J	South	62.6	55.5	60.7	65.2
128	30th & J	East	64.5	57.4	62.6	67.2
129	11th & I	North	57.3	50.2	55.4	59.9
130	11th & I	West	64.1	57.0	62.2	66.7
131	11th & J	North	57.4	50.3	55.5	60.0
132	11th & J	West	66.7	59.6	64.8	69.3

Appendix B-3: Sheet 1 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
1	3rd & J	West	33	104	327	1035	3274
2	3rd & J	North	2	5	16	52	165
3	3rd & L	North	7	21	67	211	667
4	3rd & Capitol Mall	North	8	25	80	253	802
5	3rd & Capitol Mall	West	9	28	87	276	873
6	3rd & N	North	6	18	58	182	575
7	3rd & N	West	4	13	41	130	411
8	3rd & P	North	3	10	33	105	331
9	3rd & P	West	7	21	66	207	656
10	3rd & Q	North	3	8	26	83	261
11	3rd & Q	South	4	13	40	127	402
12	3rd & Q	West	23	73	230	727	2301
13	5th & I	North	7	21	67	211	668
14	5th & I	West	7	24	75	236	746
15	5th & J	North	7	24	74	235	743
16	5th & J	West	26	83	261	826	2611
17	5th & L	West	6	19	59	188	593
18	5th & Capitol Mall	North	6	20	63	199	630
19	5th & Capitol Mall	East	8	25	78	248	785
20	5th & Capitol Mall	West	12	37	116	367	1160
21	5th & N	North	6	19	59	187	592
22	5th & N	East	6	18	58	185	585
23	5th & N	West	5	15	48	152	482
24	5th & P	North	8	25	80	252	796
25	5th & P	West	5	17	55	174	549

Appendix B-3: Sheet 2 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
26	5th & P	East	6	19	60	190	602
27	5th & Q	North	7	23	73	232	735
28	5th & Q	West	22	70	221	700	2212
29	5th & Q	South	3	9	28	90	284
30	5th & Q	East	18	56	176	557	1762
31	7th & I	West	8	24	75	238	751
32	7th & I	North	5	14	46	145	458
33	7th & J	West	19	62	195	615	1946
34	7th & J	North	4	13	40	126	399
35	7th & L	North	5	16	50	157	497
36	7th & L	West	7	22	69	219	692
37	7th & L	South	6	18	56	178	563
38	8th & I	North	4	12	39	122	387
39	8th & I	West	8	25	79	251	793
40	8th & J	North	5	16	50	157	495
41	8th & J	West	18	58	182	577	1824
42	8th & L	North	5	17	53	168	530
43	8th & L	West	8	24	76	240	758
44	8th & L	South	4	12	39	125	394
45	9th & I	North	4	13	42	132	418
46	9th & I	West	8	26	83	261	825
47	9th & J	North	5	14	45	143	453
48	9th & J	West	16	50	157	498	1575
49	9th & L	North	4	14	44	140	443
50	9th & L	West	11	35	110	348	1101

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Appendix B-3: Sheet 3 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
51	9th & L	South	5	17	53	167	529
52	9th & P	North	7	21	68	214	678
53	9th & P	West	6	20	63	198	626
54	9th & Q	North	7	22	68	216	683
55	9th & Q	West	14	44	140	444	1403
56	9th & Q	South	9	29	92	290	918
57	10th & I	North	5	16	51	162	513
58	10th & I	West	8	27	84	265	839
59	10th & J	North	6	19	59	188	593
60	10th & J	West	13	42	131	415	1313
61	10th & L	North	8	24	76	241	762
62	10th & L	West	12	38	121	383	1210
63	10th & L	South	8	25	78	248	783
64	10th & P	North	12	37	118	375	1185
65	10th & P	West	6	19	60	189	597
66	10th & P	East	6	20	62	197	624
67	10th & Q	North	11	34	106	336	1061
68	10th & Q	West	12	37	117	369	1168
69	10th & Q	South	8	26	84	265	837
70	10th & Q	East	9	30	94	299	944
71	12th & H	North	13	42	134	425	1344
72	12th & H	West	4	11	36	115	362
73	12th & H	East	6	18	56	176	558
74	12th & I	North	10	33	104	328	1038
75	12th & I	West	9	27	86	271	856

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
76	12th & J	North	7	22	70	220	695
77	12th & J	West	12	39	124	392	1241
78	12th & L	North	6	19	59	187	591
79	12th & L	West	12	38	119	377	1194
80	15th & H	North	5	15	47	147	465
81	15th & H	West	4	14	44	138	438
82	15th & J	North	6	19	59	186	587
83	15th & J	West	11	34	108	341	1077
84	15th & L	North	7	22	68	216	684
85	15th & L	West	9	30	94	297	938
86	15th & P	North	6	18	58	185	585
87	15th & P	West	9	29	93	295	933
88	15th & Q	North	6	18	55	175	554
89	15th & Q	West	6	18	56	177	561
90	15th & Q	South	6	18	56	176	558
91	15th & W	North	5	16	51	160	506
92	15th & W	West	7	22	71	223	706
93	15th & X	North	6	18	57	179	566
94	15th & X	West	9	29	91	288	911
95	15th & X	South	4	12	38	121	381
96	16th & H	North	10	31	98	310	979
97	16th & H	West	3	10	31	99	314
98	16th & H	East	2	8	25	79	249
99	16th & I	North	8	26	84	264	835
100	16th & I	West	8	24	75	238	751

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Appendix B-3: Sheet 5 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	-------- Distances to Traffic Noise Contours -------- 75	70	65	60	55
101	16th & I	East	6	20	64	201	635
102	16th & J	North	12	39	123	388	1228
103	16th & J	West	10	32	102	322	1019
104	16th & J	East	9	29	93	294	930
105	16th & L	North	11	34	108	342	1082
106	16th & L	West	8	26	82	258	817
107	16th & L	East	7	21	66	208	658
108	16th & P	North	13	40	127	403	1274
109	16th & P	West	9	28	90	283	896
110	16th & P	East	9	28	88	277	877
111	16th & Q	North	13	41	129	409	1293
112	16th & Q	West	6	20	64	201	635
113	16th & Q	South	11	35	111	351	1110
114	16th & Q	East	5	14	45	143	452
115	16th & W	North	15	46	146	462	1460
116	16th & W	West	7	22	71	224	708
117	16th & W	East	13	41	130	410	1297
118	16th & X	North	15	46	146	461	1459
119	16th & X	West	11	34	108	342	1081
120	16th & X	South	10	33	103	326	1030
121	16th & X	East	7	21	65	206	652
122	29th & J	North	9	28	89	281	888
123	29th & J	West	7	21	67	212	669
124	29th & J	South	7	24	75	237	749
125	30th & J	North	6	18	56	176	555

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Baseline Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
126	30th & J	West	9	27	86	270	855
127	30th & J	South	5	17	53	166	526
128	30th & J	East	8	26	83	261	826
129	11th & I	North	2	5	16	49	156
130	11th & I	West	7	24	75	236	746
131	11th & J	North	2	5	16	50	159
132	11th & J	West	14	43	136	429	1356

Appendix C-1: Sheet 1 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	3rd & J	West	41,610	83		17	2	2	35	50	
2	3rd & J	North	2,090	83		17	2	2	35	50	
3	3rd & L	North	8,610	83		17	2	2	35	50	
4	3rd & Capitol Mall	North	10,160	83		17	2	2	35	50	
5	3rd & Capitol Mall	West	11,120	83		17	2	2	35	50	
6	3rd & N	North	7,290	83		17	2	2	35	50	
7	3rd & N	West	5,210	83		17	2	2	35	50	
8	3rd & P	North	4,190	83		17	2	2	35	50	
9	3rd & P	West	8,310	83		17	2	2	35	50	
10	3rd & Q	North	3,310	83		17	2	2	35	50	
11	3rd & Q	South	5,110	83		17	2	2	35	50	
12	3rd & Q	West	29,160	83		17	2	2	35	50	
13	5th & I	North	8,470	83		17	2	2	35	50	
14	5th & I	West	9,800	83		17	2	2	35	50	
15	5th & J	North	9,420	83		17	2	2	35	50	
16	5th & J	West	33,220	83		17	2	2	35	50	
17	5th & L	West	7,660	83		17	2	2	35	50	
18	5th & Capitol Mall	North	8,030	83		17	2	2	35	50	
19	5th & Capitol Mall	East	9,950	83		17	2	2	35	50	
20	5th & Capitol Mall	West	14,750	83		17	2	2	35	50	
21	5th & N	North	7,500	83		17	2	2	35	50	
22	5th & N	East	7,410	83		17	2	2	35	50	
23	5th & N	West	6,110	83		17	2	2	35	50	
24	5th & P	North	10,090	83		17	2	2	35	50	
25	5th & P	West	6,960	83		17	2	2	35	50	

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Appendix C-1: Sheet 2 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
26	5th & P	East	7,630	83		17	2	2	35	50	
27	5th & Q	North	9,310	83		17	2	2	35	50	
28	5th & Q	West	28,040	83		17	2	2	35	50	
29	5th & Q	South	3,600	83		17	2	2	35	50	
30	5th & Q	East	22,330	83		17	2	2	35	50	
31	7th & I	West	9,860	83		17	2	2	35	50	
32	7th & I	North	5,830	83		17	2	2	35	50	
33	7th & J	West	24,820	83		17	2	2	35	50	
34	7th & J	North	5,220	83		17	2	2	35	50	
35	7th & L	North	6,440	83		17	2	2	35	50	
36	7th & L	West	8,910	83		17	2	2	35	50	
37	7th & L	South	7,160	83		17	2	2	35	50	
38	8th & I	North	4,960	83		17	2	2	35	50	
39	8th & I	West	10,530	83		17	2	2	35	50	
40	8th & J	North	6,280	83		17	2	2	35	50	
41	8th & J	West	23,300	83		17	2	2	35	50	
42	8th & L	North	6,730	83		17	2	2	35	50	
43	8th & L	West	9,640	83		17	2	2	35	50	
44	8th & L	South	5,010	83		17	2	2	35	50	
45	9th & I	North	5,300	83		17	2	2	35	50	
46	9th & I	West	10,990	83		17	2	2	35	50	
47	9th & J	North	5,850	83		17	2	2	35	50	
48	9th & J	West	20,150	83		17	2	2	35	50	
49	9th & L	North	5,710	83		17	2	2	35	50	
50	9th & L	West	13,950	83		17	2	2	35	50	

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
51	9th & L	South	6,790	83		17	2	2	35	50	
52	9th & P	North	8,680	83		17	2	2	35	50	
53	9th & P	West	7,940	83		17	2	2	35	50	
54	9th & Q	North	8,750	83		17	2	2	35	50	
55	9th & Q	West	17,780	83		17	2	2	35	50	
56	9th & Q	South	11,730	83		17	2	2	35	50	
57	10th & I	North	6,500	83		17	2	2	35	50	
58	10th & I	West	11,280	83		17	2	2	35	50	
59	10th & J	North	7,800	83		17	2	2	35	50	
60	10th & J	West	16,830	83		17	2	2	35	50	
61	10th & L	North	9,740	83		17	2	2	35	50	
62	10th & L	West	15,340	83		17	2	2	35	50	
63	10th & L	South	9,960	83		17	2	2	35	50	
64	10th & P	North	15,050	83		17	2	2	35	50	
65	10th & P	West	7,570	83		17	2	2	35	50	
66	10th & P	East	7,910	83		17	2	2	35	50	
67	10th & Q	North	13,480	83		17	2	2	35	50	
68	10th & Q	West	14,810	83		17	2	2	35	50	
69	10th & Q	South	10,640	83		17	2	2	35	50	
70	10th & Q	East	11,970	83		17	2	2	35	50	
71	12th & H	North	17,070	83		17	2	2	35	50	
72	12th & H	West	4,650	83		17	2	2	35	50	
73	12th & H	East	7,130	83		17	2	2	35	50	
74	12th & I	North	13,200	83		17	2	2	35	50	
75	12th & I	West	10,940	83		17	2	2	35	50	

Appendix C-1: Sheet 4 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
76	12th & J	North	8,720	83		17	2	2	35	50	
77	12th & J	West	15,980	83		17	2	2	35	50	
78	12th & L	North	7,490	83		17	2	2	35	50	
79	12th & L	West	15,180	83		17	2	2	35	50	
80	15th & H	North	5,900	83		17	2	2	35	50	
81	15th & H	West	5,610	83		17	2	2	35	50	
82	15th & J	North	7,440	83		17	2	2	35	50	
83	15th & J	West	13,890	83		17	2	2	35	50	
84	15th & L	North	8,800	83		17	2	2	35	50	
85	15th & L	West	11,940	83		17	2	2	35	50	
86	15th & P	North	7,540	83		17	2	2	35	50	
87	15th & P	West	11,820	83		17	2	2	35	50	
88	15th & Q	North	7,150	83		17	2	2	35	50	
89	15th & Q	West	7,110	83		17	2	2	35	50	
90	15th & Q	South	7,180	83		17	2	2	35	50	
91	15th & W	North	6,520	83		17	2	2	35	50	
92	15th & W	West	8,950	83		17	2	2	35	50	
93	15th & X	North	7,290	83		17	2	2	35	50	
94	15th & X	West	11,550	83		17	2	2	35	50	
95	15th & X	South	4,830	83		17	2	2	35	50	
96	16th & H	North	12,470	83		17	2	2	35	50	
97	16th & H	West	4,040	83		17	2	2	35	50	
98	16th & H	East	3,150	83		17	2	2	35	50	
99	16th & I	North	10,590	83		17	2	2	35	50	
100	16th & I	West	9,570	83		17	2	2	35	50	

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Appendix C-1: Sheet 5 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
101	16th & I	East	8,050	83		17	2	2	35	50	
102	16th & J	North	15,610	83		17	2	2	35	50	
103	16th & J	West	13,020	83		17	2	2	35	50	
104	16th & J	East	11,900	83		17	2	2	35	50	
105	16th & L	North	13,760	83		17	2	2	35	50	
106	16th & L	West	10,400	83		17	2	2	35	50	
107	16th & L	East	8,380	83		17	2	2	35	50	
108	16th & P	North	16,220	83		17	2	2	35	50	
109	16th & P	West	11,360	83		17	2	2	35	50	
110	16th & P	East	11,120	83		17	2	2	35	50	
111	16th & Q	North	16,450	83		17	2	2	35	50	
112	16th & Q	West	8,070	83		17	2	2	35	50	
113	16th & Q	South	14,130	83		17	2	2	35	50	
114	16th & Q	East	5,750	83		17	2	2	35	50	
115	16th & W	North	18,560	83		17	2	2	35	50	
116	16th & W	West	8,980	83		17	2	2	35	50	
117	16th & W	East	16,500	83		17	2	2	35	50	
118	16th & X	North	18,490	83		17	2	2	35	50	
119	16th & X	West	13,810	83		17	2	2	35	50	
120	16th & X	South	13,050	83		17	2	2	35	50	
121	16th & X	East	8,370	83		17	2	2	35	50	
122	29th & J	North	11,250	83		17	2	2	35	50	
123	29th & J	West	8,490	83		17	2	2	35	50	
124	29th & J	South	9,490	83		17	2	2	35	50	
125	30th & J	North	7,040	83		17	2	2	35	50	

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Appendix C-1: Sheet 6 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
126	30th & J	West	10,850	83		17	2	2	35	50	
127	30th & J	South	6,670	83		17	2	2	35	50	
128	30th & J	East	10,480	83		17	2	2	35	50	
129	11th & I	North	2,080	83		17	2	2	35	50	
130	11th & I	West	9,460	83		17	2	2	35	50	
131	11th & J	North	2,270	83		17	2	2	35	50	
132	11th & J	West	17,190	83		17	2	2	35	50	

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Appendix C-2: Sheet 1 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
1	3rd & J	West	70.5	63.4	68.6	73.2
2	3rd & J	North	57.5	50.4	55.6	60.2
3	3rd & L	North	63.7	56.6	61.8	66.3
4	3rd & Capitol Mall	North	64.4	57.3	62.5	67.0
5	3rd & Capitol Mall	West	64.8	57.7	62.9	67.4
6	3rd & N	North	63.0	55.8	61.0	65.6
7	3rd & N	West	61.5	54.4	59.6	64.1
8	3rd & P	North	60.6	53.4	58.6	63.2
9	3rd & P	West	63.5	56.4	61.6	66.2
10	3rd & Q	North	59.5	52.4	57.6	62.2
11	3rd & Q	South	61.4	54.3	59.5	64.1
12	3rd & Q	West	69.0	61.9	67.1	71.6
13	5th & I	North	63.6	56.5	61.7	66.3
14	5th & I	West	64.3	57.1	62.3	66.9
15	5th & J	North	64.1	57.0	62.2	66.7
16	5th & J	West	69.6	62.4	67.6	72.2
17	5th & L	West	63.2	56.1	61.3	65.8
18	5th & Capitol Mall	North	63.4	56.3	61.5	66.0
19	5th & Capitol Mall	East	64.3	57.2	62.4	67.0
20	5th & Capitol Mall	West	66.0	58.9	64.1	68.7
21	5th & N	North	63.1	56.0	61.2	65.7
22	5th & N	East	63.0	55.9	61.1	65.7
23	5th & N	West	62.2	55.1	60.3	64.8
24	5th & P	North	64.4	57.3	62.5	67.0
25	5th & P	West	62.8	55.6	60.8	65.4

Appendix C-2: Sheet 2 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
26	5th & P	East	63.2	56.0	61.2	65.8
27	5th & Q	North	64.0	56.9	62.1	66.7
28	5th & Q	West	68.8	61.7	66.9	71.5
29	5th & Q	South	59.9	52.8	58.0	62.5
30	5th & Q	East	67.8	60.7	65.9	70.5
31	7th & I	West	64.3	57.2	62.4	66.9
32	7th & I	North	62.0	54.9	60.1	64.6
33	7th & J	West	68.3	61.2	66.4	70.9
34	7th & J	North	61.5	54.4	59.6	64.2
35	7th & L	North	62.4	55.3	60.5	65.1
36	7th & L	West	63.8	56.7	61.9	66.5
37	7th & L	South	62.9	55.8	61.0	65.5
38	8th & I	North	61.3	54.2	59.4	63.9
39	8th & I	West	64.6	57.4	62.6	67.2
40	8th & J	North	62.3	55.2	60.4	65.0
41	8th & J	West	68.0	60.9	66.1	70.7
42	8th & L	North	62.6	55.5	60.7	65.3
43	8th & L	West	64.2	57.1	62.3	66.8
44	8th & L	South	61.3	54.2	59.4	64.0
45	9th & I	North	61.6	54.5	59.7	64.2
46	9th & I	West	64.8	57.6	62.8	67.4
47	9th & J	North	62.0	54.9	60.1	64.7
48	9th & J	West	67.4	60.3	65.5	70.0
49	9th & L	North	61.9	54.8	60.0	64.5
50	9th & L	West	65.8	58.7	63.9	68.4

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
51	9th & L	South	62.7	55.5	60.7	65.3
52	9th & P	North	63.7	56.6	61.8	66.4
53	9th & P	West	63.3	56.2	61.4	66.0
54	9th & Q	North	63.8	56.6	61.8	66.4
55	9th & Q	West	66.8	59.7	64.9	69.5
56	9th & Q	South	65.0	57.9	63.1	67.7
57	10th & I	North	62.5	55.3	60.5	65.1
58	10th & I	West	64.9	57.7	62.9	67.5
59	10th & J	North	63.3	56.1	61.3	65.9
60	10th & J	West	66.6	59.5	64.7	69.2
61	10th & L	North	64.2	57.1	62.3	66.9
62	10th & L	West	66.2	59.1	64.3	68.8
63	10th & L	South	64.3	57.2	62.4	67.0
64	10th & P	North	66.1	59.0	64.2	68.8
65	10th & P	West	63.1	56.0	61.2	65.8
66	10th & P	East	63.3	56.2	61.4	66.0
67	10th & Q	North	65.6	58.5	63.7	68.3
68	10th & Q	West	66.0	58.9	64.1	68.7
69	10th & Q	South	64.6	57.5	62.7	67.3
70	10th & Q	East	65.1	58.0	63.2	67.8
71	12th & H	North	66.7	59.5	64.7	69.3
72	12th & H	West	61.0	53.9	59.1	63.7
73	12th & H	East	62.9	55.8	60.9	65.5
74	12th & I	North	65.5	58.4	63.6	68.2
75	12th & I	West	64.7	57.6	62.8	67.4

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
76	12th & J	North	63.7	56.6	61.8	66.4
77	12th & J	West	66.4	59.3	64.5	69.0
78	12th & L	North	63.1	56.0	61.2	65.7
79	12th & L	West	66.2	59.0	64.2	68.8
80	15th & H	North	62.1	54.9	60.1	64.7
81	15th & H	West	61.8	54.7	59.9	64.5
82	15th & J	North	63.1	55.9	61.1	65.7
83	15th & J	West	65.8	58.6	63.8	68.4
84	15th & L	North	63.8	56.7	61.9	66.4
85	15th & L	West	65.1	58.0	63.2	67.8
86	15th & P	North	63.1	56.0	61.2	65.8
87	15th & P	West	65.1	57.9	63.1	67.7
88	15th & Q	North	62.9	55.8	61.0	65.5
89	15th & Q	West	62.9	55.7	60.9	65.5
90	15th & Q	South	62.9	55.8	61.0	65.5
91	15th & W	North	62.5	55.4	60.6	65.1
92	15th & W	West	63.9	56.7	61.9	66.5
93	15th & X	North	63.0	55.8	61.0	65.6
94	15th & X	West	65.0	57.8	63.0	67.6
95	15th & X	South	61.2	54.1	59.3	63.8
96	16th & H	North	65.3	58.2	63.4	67.9
97	16th & H	West	60.4	53.3	58.5	63.0
98	16th & H	East	59.3	52.2	57.4	62.0
99	16th & I	North	64.6	57.5	62.7	67.2
100	16th & I	West	64.2	57.0	62.2	66.8

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
101	16th & I	East	63.4	56.3	61.5	66.0
102	16th & J	North	66.3	59.2	64.4	68.9
103	16th & J	West	65.5	58.4	63.6	68.1
104	16th & J	East	65.1	58.0	63.2	67.7
105	16th & L	North	65.7	58.6	63.8	68.4
106	16th & L	West	64.5	57.4	62.6	67.2
107	16th & L	East	63.6	56.5	61.6	66.2
108	16th & P	North	66.4	59.3	64.5	69.1
109	16th & P	West	64.9	57.8	63.0	67.5
110	16th & P	East	64.8	57.7	62.9	67.4
111	16th & Q	North	66.5	59.4	64.6	69.1
112	16th & Q	West	63.4	56.3	61.5	66.0
113	16th & Q	South	65.8	58.7	63.9	68.5
114	16th & Q	East	61.9	54.8	60.0	64.6
115	16th & W	North	67.0	59.9	65.1	69.7
116	16th & W	West	63.9	56.8	61.9	66.5
117	16th & W	East	66.5	59.4	64.6	69.2
118	16th & X	North	67.0	59.9	65.1	69.7
119	16th & X	West	65.7	58.6	63.8	68.4
120	16th & X	South	65.5	58.4	63.6	68.1
121	16th & X	East	63.6	56.4	61.6	66.2
122	29th & J	North	64.9	57.7	62.9	67.5
123	29th & J	West	63.6	56.5	61.7	66.3
124	29th & J	South	64.1	57.0	62.2	66.8
125	30th & J	North	62.8	55.7	60.9	65.5

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
126	30th & J	West	64.7	57.6	62.8	67.3
127	30th & J	South	62.6	55.5	60.7	65.2
128	30th & J	East	64.5	57.4	62.6	67.2
129	11th & I	North	57.5	50.4	55.6	60.2
130	11th & I	West	64.1	57.0	62.2	66.7
131	11th & J	North	57.9	50.8	56.0	60.5
132	11th & J	West	66.7	59.6	64.8	69.3

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Appendix C-3: Sheet 1 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
1	3rd & J	West	33	104	328	1038	3283
2	3rd & J	North	2	5	16	52	165
3	3rd & L	North	7	21	68	215	679
4	3rd & Capitol Mall	North	8	25	80	253	802
5	3rd & Capitol Mall	West	9	28	88	277	877
6	3rd & N	North	6	18	58	182	575
7	3rd & N	West	4	13	41	130	411
8	3rd & P	North	3	10	33	105	331
9	3rd & P	West	7	21	66	207	656
10	3rd & Q	North	3	8	26	83	261
11	3rd & Q	South	4	13	40	127	403
12	3rd & Q	West	23	73	230	727	2301
13	5th & I	North	7	21	67	211	668
14	5th & I	West	8	24	77	244	773
15	5th & J	North	7	24	74	235	743
16	5th & J	West	26	83	262	829	2621
17	5th & L	West	6	19	60	191	604
18	5th & Capitol Mall	North	6	20	63	200	634
19	5th & Capitol Mall	East	8	25	78	248	785
20	5th & Capitol Mall	West	12	37	116	368	1164
21	5th & N	North	6	19	59	187	592
22	5th & N	East	6	18	58	185	585
23	5th & N	West	5	15	48	152	482
24	5th & P	North	8	25	80	252	796
25	5th & P	West	5	17	55	174	549

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
26	5th & P	East	6	19	60	190	602
27	5th & Q	North	7	23	73	232	735
28	5th & Q	West	22	70	221	700	2212
29	5th & Q	South	3	9	28	90	284
30	5th & Q	East	18	56	176	557	1762
31	7th & I	West	8	25	78	246	778
32	7th & I	North	5	15	46	145	460
33	7th & J	West	20	62	196	619	1958
34	7th & J	North	4	13	41	130	412
35	7th & L	North	5	16	51	161	508
36	7th & L	West	7	22	70	222	703
37	7th & L	South	6	18	56	179	565
38	8th & I	North	4	12	39	124	391
39	8th & I	West	8	26	83	263	831
40	8th & J	North	5	16	50	157	495
41	8th & J	West	18	58	184	581	1838
42	8th & L	North	5	17	53	168	531
43	8th & L	West	8	24	76	241	761
44	8th & L	South	4	12	40	125	395
45	9th & I	North	4	13	42	132	418
46	9th & I	West	9	27	87	274	867
47	9th & J	North	5	15	46	146	462
48	9th & J	West	16	50	159	503	1590
49	9th & L	North	5	14	45	142	450
50	9th & L	West	11	35	110	348	1101

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
51	9th & L	South	5	17	54	169	536
52	9th & P	North	7	22	68	217	685
53	9th & P	West	6	20	63	198	626
54	9th & Q	North	7	22	69	218	690
55	9th & Q	West	14	44	140	444	1403
56	9th & Q	South	9	29	93	293	925
57	10th & I	North	5	16	51	162	513
58	10th & I	West	9	28	89	281	890
59	10th & J	North	6	19	62	195	615
60	10th & J	West	13	42	133	420	1328
61	10th & L	North	8	24	77	243	768
62	10th & L	West	12	38	121	383	1210
63	10th & L	South	8	25	79	248	786
64	10th & P	North	12	38	119	375	1187
65	10th & P	West	6	19	60	189	597
66	10th & P	East	6	20	62	197	624
67	10th & Q	North	11	34	106	336	1063
68	10th & Q	West	12	37	117	369	1168
69	10th & Q	South	8	27	84	265	839
70	10th & Q	East	9	30	94	299	944
71	12th & H	North	13	43	135	426	1347
72	12th & H	West	4	12	37	116	367
73	12th & H	East	6	18	56	178	563
74	12th & I	North	10	33	104	329	1041
75	12th & I	West	9	27	86	273	863

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Appendix C-3: Sheet 4 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
76	12th & J	North	7	22	69	218	688
77	12th & J	West	13	40	126	399	1261
78	12th & L	North	6	19	59	187	591
79	12th & L	West	12	38	120	379	1198
80	15th & H	North	5	15	47	147	465
81	15th & H	West	4	14	44	140	443
82	15th & J	North	6	19	59	186	587
83	15th & J	West	11	35	110	347	1096
84	15th & L	North	7	22	69	220	694
85	15th & L	West	9	30	94	298	942
86	15th & P	North	6	19	59	188	595
87	15th & P	West	9	29	93	295	933
88	15th & Q	North	6	18	56	178	564
89	15th & Q	West	6	18	56	177	561
90	15th & Q	South	6	18	57	179	566
91	15th & W	North	5	16	51	163	514
92	15th & W	West	7	22	71	223	706
93	15th & X	North	6	18	58	182	575
94	15th & X	West	9	29	91	288	911
95	15th & X	South	4	12	38	121	381
96	16th & H	North	10	31	98	311	984
97	16th & H	West	3	10	32	101	319
98	16th & H	East	2	8	25	79	249
99	16th & I	North	8	26	84	264	835
100	16th & I	West	8	24	76	239	755

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
101	16th & I	East	6	20	64	201	635
102	16th & J	North	12	39	123	389	1232
103	16th & J	West	10	32	103	325	1027
104	16th & J	East	9	30	94	297	939
105	16th & L	North	11	34	109	343	1086
106	16th & L	West	8	26	82	259	820
107	16th & L	East	7	21	66	209	661
108	16th & P	North	13	40	128	405	1280
109	16th & P	West	9	28	90	283	896
110	16th & P	East	9	28	88	277	877
111	16th & Q	North	13	41	130	410	1298
112	16th & Q	West	6	20	64	201	637
113	16th & Q	South	11	35	111	353	1115
114	16th & Q	East	5	14	45	143	454
115	16th & W	North	15	46	146	463	1464
116	16th & W	West	7	22	71	224	708
117	16th & W	East	13	41	130	412	1302
118	16th & X	North	15	46	146	461	1459
119	16th & X	West	11	34	109	345	1090
120	16th & X	South	10	33	103	326	1030
121	16th & X	East	7	21	66	209	660
122	29th & J	North	9	28	89	281	888
123	29th & J	West	7	21	67	212	670
124	29th & J	South	7	24	75	237	749
125	30th & J	North	6	18	56	176	555

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Baseline + Project Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
126	30th & J	West	9	27	86	271	856
127	30th & J	South	5	17	53	166	526
128	30th & J	East	8	26	83	261	827
129	11th & I	North	2	5	16	52	164
130	11th & I	West	7	24	75	236	746
131	11th & J	North	2	6	18	57	179
132	11th & J	West	14	43	136	429	1356

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	3rd & J	West	45,460	83		17	2	2	35	50	
2	3rd & J	North	3,980	83		17	2	2	35	50	
3	3rd & L	North	12,320	83		17	2	2	35	50	
4	3rd & Capitol Mall	North	13,950	83		17	2	2	35	50	
5	3rd & Capitol Mall	West	13,260	83		17	2	2	35	50	
6	3rd & N	North	9,880	83		17	2	2	35	50	
7	3rd & N	West	6,560	83		17	2	2	35	50	
8	3rd & P	North	6,010	83		17	2	2	35	50	
9	3rd & P	West	10,640	83		17	2	2	35	50	
10	3rd & Q	North	5,610	83		17	2	2	35	50	
11	3rd & Q	South	11,810	83		17	2	2	35	50	
12	3rd & Q	West	34,990	83		17	2	2	35	50	
13	5th & I	North	12,320	83		17	2	2	35	50	
14	5th & I	West	13,400	83		17	2	2	35	50	
15	5th & J	North	13,650	83		17	2	2	35	50	
16	5th & J	West	34,950	83		17	2	2	35	50	
17	5th & L	West	8,290	83		17	2	2	35	50	
18	5th & Capitol Mall	North	11,610	83		17	2	2	35	50	
19	5th & Capitol Mall	East	9,970	83		17	2	2	35	50	
20	5th & Capitol Mall	West	17,190	83		17	2	2	35	50	
21	5th & N	North	8,580	83		17	2	2	35	50	
22	5th & N	East	10,870	83		17	2	2	35	50	
23	5th & N	West	9,570	83		17	2	2	35	50	
24	5th & P	North	10,090	83		17	2	2	35	50	
25	5th & P	West	9,490	83		17	2	2	35	50	

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Appendix D-1: Sheet 2 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
26	5th & P	East	9,030	83		17	2	2	35	50	
27	5th & Q	North	14,300	83		17	2	2	35	50	
28	5th & Q	West	28,040	83		17	2	2	35	50	
29	5th & Q	South	8,970	83		17	2	2	35	50	
30	5th & Q	East	22,710	83		17	2	2	35	50	
31	7th & I	West	14,010	83		17	2	2	35	50	
32	7th & I	North	8,440	83		17	2	2	35	50	
33	7th & J	West	24,660	83		17	2	2	35	50	
34	7th & J	North	7,140	83		17	2	2	35	50	
35	7th & L	North	8,290	83		17	2	2	35	50	
36	7th & L	West	12,410	83		17	2	2	35	50	
37	7th & L	South	7,130	83		17	2	2	35	50	
38	8th & I	North	7,020	83		17	2	2	35	50	
39	8th & I	West	12,990	83		17	2	2	35	50	
40	8th & J	North	8,280	83		17	2	2	35	50	
41	8th & J	West	23,120	83		17	2	2	35	50	
42	8th & L	North	7,600	83		17	2	2	35	50	
43	8th & L	West	10,720	83		17	2	2	35	50	
44	8th & L	South	6,470	83		17	2	2	35	50	
45	9th & I	North	7,570	83		17	2	2	35	50	
46	9th & I	West	14,390	83		17	2	2	35	50	
47	9th & J	North	5,920	83		17	2	2	35	50	
48	9th & J	West	19,960	83		17	2	2	35	50	
49	9th & L	North	5,620	83		17	2	2	35	50	
50	9th & L	West	13,950	83		17	2	2	35	50	

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Appendix D-1: Sheet 3 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
51	9th & L	South	6,730	83		17	2	2	35	50	
52	9th & P	North	9,190	83		17	2	2	35	50	
53	9th & P	West	9,520	83		17	2	2	35	50	
54	9th & Q	North	8,790	83		17	2	2	35	50	
55	9th & Q	West	20,070	83		17	2	2	35	50	
56	9th & Q	South	11,640	83		17	2	2	35	50	
57	10th & I	North	8,260	83		17	2	2	35	50	
58	10th & I	West	12,740	83		17	2	2	35	50	
59	10th & J	North	11,830	83		17	2	2	35	50	
60	10th & J	West	17,680	83		17	2	2	35	50	
61	10th & L	North	14,100	83		17	2	2	35	50	
62	10th & L	West	15,340	83		17	2	2	35	50	
63	10th & L	South	14,120	83		17	2	2	35	50	
64	10th & P	North	17,910	83		17	2	2	35	50	
65	10th & P	West	9,050	83		17	2	2	35	50	
66	10th & P	East	9,830	83		17	2	2	35	50	
67	10th & Q	North	15,040	83		17	2	2	35	50	
68	10th & Q	West	17,230	83		17	2	2	35	50	
69	10th & Q	South	12,810	83		17	2	2	35	50	
70	10th & Q	East	15,000	83		17	2	2	35	50	
71	12th & H	North	17,030	83		17	2	2	35	50	
72	12th & H	West	10,330	83		17	2	2	35	50	
73	12th & H	East	12,020	83		17	2	2	35	50	
74	12th & I	North	13,230	83		17	2	2	35	50	
75	12th & I	West	14,980	83		17	2	2	35	50	

Appendix D-1: Sheet 4 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
76	12th & J	North	9,240	83		17	2	2	35	50	
77	12th & J	West	15,730	83		17	2	2	35	50	
78	12th & L	North	7,590	83		17	2	2	35	50	
79	12th & L	West	15,130	83		17	2	2	35	50	
80	15th & H	North	8,050	83		17	2	2	35	50	
81	15th & H	West	8,560	83		17	2	2	35	50	
82	15th & J	North	10,270	83		17	2	2	35	50	
83	15th & J	West	13,650	83		17	2	2	35	50	
84	15th & L	North	9,200	83		17	2	2	35	50	
85	15th & L	West	12,420	83		17	2	2	35	50	
86	15th & P	North	7,880	83		17	2	2	35	50	
87	15th & P	West	13,130	83		17	2	2	35	50	
88	15th & Q	North	7,120	83		17	2	2	35	50	
89	15th & Q	West	9,200	83		17	2	2	35	50	
90	15th & Q	South	7,070	83		17	2	2	35	50	
91	15th & W	North	6,410	83		17	2	2	35	50	
92	15th & W	West	11,650	83		17	2	2	35	50	
93	15th & X	North	7,190	83		17	2	2	35	50	
94	15th & X	West	7,190	83		17	2	2	35	50	
95	15th & X	South	4,870	83		17	2	2	35	50	
96	16th & H	North	14,010	83		17	2	2	35	50	
97	16th & H	West	6,100	83		17	2	2	35	50	
98	16th & H	East	3,680	83		17	2	2	35	50	
99	16th & I	North	11,140	83		17	2	2	35	50	
100	16th & I	West	15,380	83		17	2	2	35	50	

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Appendix D-1: Sheet 5 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
101	16th & I	East	13,580	83		17	2	2	35	50	
102	16th & J	North	18,130	83		17	2	2	35	50	
103	16th & J	West	16,240	83		17	2	2	35	50	
104	16th & J	East	15,420	83		17	2	2	35	50	
105	16th & L	North	15,540	83		17	2	2	35	50	
106	16th & L	West	10,350	83		17	2	2	35	50	
107	16th & L	East	8,440	83		17	2	2	35	50	
108	16th & P	North	18,440	83		17	2	2	35	50	
109	16th & P	West	12,050	83		17	2	2	35	50	
110	16th & P	East	11,280	83		17	2	2	35	50	
111	16th & Q	North	19,190	83		17	2	2	35	50	
112	16th & Q	West	10,860	83		17	2	2	35	50	
113	16th & Q	South	15,790	83		17	2	2	35	50	
114	16th & Q	East	7,460	83		17	2	2	35	50	
115	16th & W	North	21,920	83		17	2	2	35	50	
116	16th & W	West	11,600	83		17	2	2	35	50	
117	16th & W	East	9,080	83		17	2	2	35	50	
118	16th & X	North	24,470	83		17	2	2	35	50	
119	16th & X	West	15,930	83		17	2	2	35	50	
120	16th & X	South	17,700	83		17	2	2	35	50	
121	16th & X	East	9,160	83		17	2	2	35	50	
122	29th & J	North	11,250	83		17	2	2	35	50	
123	29th & J	West	10,990	83		17	2	2	35	50	
124	29th & J	South	10,950	83		17	2	2	35	50	
125	30th & J	North	7,040	83		17	2	2	35	50	

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Appendix D-1: Sheet 6 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
126	30th & J	West	11,460	83		17	2	2	35	50	
127	30th & J	South	9,450	83		17	2	2	35	50	
128	30th & J	East	13,870	83		17	2	2	35	50	
129	11th & I	North	NA	83		17	2	2	35	50	
130	11th & I	West	NA	83		17	2	2	35	50	
131	11th & J	North	NA	83		17	2	2	35	50	
132	11th & J	West	NA	83		17	2	2	35	50	

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
1	3rd & J	West	70.9	63.8	69.0	73.6
2	3rd & J	North	60.3	53.2	58.4	63.0
3	3rd & L	North	65.2	58.1	63.3	67.9
4	3rd & Capitol Mall	North	65.8	58.7	63.9	68.4
5	3rd & Capitol Mall	West	65.6	58.4	63.6	68.2
6	3rd & N	North	64.3	57.2	62.4	66.9
7	3rd & N	West	62.5	55.4	60.6	65.1
8	3rd & P	North	62.1	55.0	60.2	64.8
9	3rd & P	West	64.6	57.5	62.7	67.3
10	3rd & Q	North	61.8	54.7	59.9	64.5
11	3rd & Q	South	65.1	57.9	63.1	67.7
12	3rd & Q	West	69.8	62.7	67.9	72.4
13	5th & I	North	65.2	58.1	63.3	67.9
14	5th & I	West	65.6	58.5	63.7	68.3
15	5th & J	North	65.7	58.6	63.8	68.3
16	5th & J	West	69.8	62.7	67.9	72.4
17	5th & L	West	63.5	56.4	61.6	66.2
18	5th & Capitol Mall	North	65.0	57.9	63.1	67.6
19	5th & Capitol Mall	East	64.3	57.2	62.4	67.0
20	5th & Capitol Mall	West	66.7	59.6	64.8	69.3
21	5th & N	North	63.7	56.6	61.8	66.3
22	5th & N	East	64.7	57.6	62.8	67.3
23	5th & N	West	64.2	57.0	62.2	66.8
24	5th & P	North	64.4	57.3	62.5	67.0
25	5th & P	West	64.1	57.0	62.2	66.8

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Appendix D-2: Sheet 2 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
26	5th & P	East	63.9	56.8	62.0	66.5
27	5th & Q	North	65.9	58.8	64.0	68.5
28	5th & Q	West	68.8	61.7	66.9	71.5
29	5th & Q	South	63.9	56.7	61.9	66.5
30	5th & Q	East	67.9	60.8	66.0	70.5
31	7th & I	West	65.8	58.7	63.9	68.4
32	7th & I	North	63.6	56.5	61.7	66.2
33	7th & J	West	68.3	61.1	66.3	70.9
34	7th & J	North	62.9	55.8	61.0	65.5
35	7th & L	North	63.5	56.4	61.6	66.2
36	7th & L	West	65.3	58.2	63.4	67.9
37	7th & L	South	62.9	55.8	60.9	65.5
38	8th & I	North	62.8	55.7	60.9	65.4
39	8th & I	West	65.5	58.4	63.6	68.1
40	8th & J	North	63.5	56.4	61.6	66.2
41	8th & J	West	68.0	60.9	66.1	70.6
42	8th & L	North	63.2	56.0	61.2	65.8
43	8th & L	West	64.6	57.5	62.7	67.3
44	8th & L	South	62.5	55.3	60.5	65.1
45	9th & I	North	63.1	56.0	61.2	65.8
46	9th & I	West	65.9	58.8	64.0	68.6
47	9th & J	North	62.1	54.9	60.1	64.7
48	9th & J	West	67.3	60.2	65.4	70.0
49	9th & L	North	61.8	54.7	59.9	64.5
50	9th & L	West	65.8	58.7	63.9	68.4

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Appendix D-2: Sheet 3 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
51	9th & L	South	62.6	55.5	60.7	65.3
52	9th & P	North	64.0	56.9	62.0	66.6
53	9th & P	West	64.1	57.0	62.2	66.8
54	9th & Q	North	63.8	56.7	61.9	66.4
55	9th & Q	West	67.4	60.2	65.4	70.0
56	9th & Q	South	65.0	57.9	63.1	67.6
57	10th & I	North	63.5	56.4	61.6	66.2
58	10th & I	West	65.4	58.3	63.5	68.0
59	10th & J	North	65.1	58.0	63.1	67.7
60	10th & J	West	66.8	59.7	64.9	69.5
61	10th & L	North	65.8	58.7	63.9	68.5
62	10th & L	West	66.2	59.1	64.3	68.8
63	10th & L	South	65.8	58.7	63.9	68.5
64	10th & P	North	66.9	59.8	64.9	69.5
65	10th & P	West	63.9	56.8	62.0	66.5
66	10th & P	East	64.3	57.1	62.3	66.9
67	10th & Q	North	66.1	59.0	64.2	68.8
68	10th & Q	West	66.7	59.6	64.8	69.3
69	10th & Q	South	65.4	58.3	63.5	68.1
70	10th & Q	East	66.1	59.0	64.2	68.7
71	12th & H	North	66.7	59.5	64.7	69.3
72	12th & H	West	64.5	57.4	62.6	67.1
73	12th & H	East	65.1	58.0	63.2	67.8
74	12th & I	North	65.6	58.4	63.6	68.2
75	12th & I	West	66.1	59.0	64.2	68.7

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
76	12th & J	North	64.0	56.9	62.1	66.6
77	12th & J	West	66.3	59.2	64.4	68.9
78	12th & L	North	63.1	56.0	61.2	65.8
79	12th & L	West	66.1	59.0	64.2	68.8
80	15th & H	North	63.4	56.3	61.5	66.0
81	15th & H	West	63.7	56.5	61.7	66.3
82	15th & J	North	64.5	57.3	62.5	67.1
83	15th & J	West	65.7	58.6	63.8	68.3
84	15th & L	North	64.0	56.9	62.1	66.6
85	15th & L	West	65.3	58.2	63.4	67.9
86	15th & P	North	63.3	56.2	61.4	65.9
87	15th & P	West	65.5	58.4	63.6	68.2
88	15th & Q	North	62.9	55.7	60.9	65.5
89	15th & Q	West	64.0	56.9	62.1	66.6
90	15th & Q	South	62.8	55.7	60.9	65.5
91	15th & W	North	62.4	55.3	60.5	65.0
92	15th & W	West	65.0	57.9	63.1	67.6
93	15th & X	North	62.9	55.8	61.0	65.5
94	15th & X	West	62.9	55.8	61.0	65.5
95	15th & X	South	61.2	54.1	59.3	63.9
96	16th & H	North	65.8	58.7	63.9	68.4
97	16th & H	West	62.2	55.1	60.3	64.8
98	16th & H	East	60.0	52.9	58.1	62.6
99	16th & I	North	64.8	57.7	62.9	67.4
100	16th & I	West	66.2	59.1	64.3	68.9

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Appendix D-2: Sheet 5 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
101	16th & I	East	65.7	58.5	63.7	68.3
102	16th & J	North	66.9	59.8	65.0	69.6
103	16th & J	West	66.4	59.3	64.5	69.1
104	16th & J	East	66.2	59.1	64.3	68.9
105	16th & L	North	66.3	59.1	64.3	68.9
106	16th & L	West	64.5	57.4	62.6	67.1
107	16th & L	East	63.6	56.5	61.7	66.2
108	16th & P	North	67.0	59.9	65.1	69.6
109	16th & P	West	65.2	58.0	63.2	67.8
110	16th & P	East	64.9	57.7	62.9	67.5
111	16th & Q	North	67.2	60.1	65.2	69.8
112	16th & Q	West	64.7	57.6	62.8	67.3
113	16th & Q	South	66.3	59.2	64.4	69.0
114	16th & Q	East	63.1	55.9	61.1	65.7
115	16th & W	North	67.8	60.6	65.8	70.4
116	16th & W	West	65.0	57.9	63.1	67.6
117	16th & W	East	63.9	56.8	62.0	66.6
118	16th & X	North	68.2	61.1	66.3	70.9
119	16th & X	West	66.4	59.2	64.4	69.0
120	16th & X	South	66.8	59.7	64.9	69.5
121	16th & X	East	64.0	56.8	62.0	66.6
122	29th & J	North	64.9	57.7	62.9	67.5
123	29th & J	West	64.8	57.6	62.8	67.4
124	29th & J	South	64.7	57.6	62.8	67.4
125	30th & J	North	62.8	55.7	60.9	65.5

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Appendix D-2: Sheet 6 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
126	30th & J	West	64.9	57.8	63.0	67.6
127	30th & J	South	64.1	57.0	62.2	66.7
128	30th & J	East	65.8	58.6	63.8	68.4
129	11th & I	North	#VALUE!	#VALUE!	#VALUE!	#VALUE!
130	11th & I	West	#VALUE!	#VALUE!	#VALUE!	#VALUE!
131	11th & J	North	#VALUE!	#VALUE!	#VALUE!	#VALUE!
132	11th & J	West	#VALUE!	#VALUE!	#VALUE!	#VALUE!

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Appendix D-3: Sheet 1 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
1	3rd & J	West	36	113	359	1134	3587
2	3rd & J	North	3	10	31	99	314
3	3rd & L	North	10	31	97	307	972
4	3rd & Capitol Mall	North	11	35	110	348	1101
5	3rd & Capitol Mall	West	10	33	105	331	1046
6	3rd & N	North	8	25	78	246	779
7	3rd & N	West	5	16	52	164	518
8	3rd & P	North	5	15	47	150	474
9	3rd & P	West	8	27	84	265	839
10	3rd & Q	North	4	14	44	140	443
11	3rd & Q	South	9	29	93	295	932
12	3rd & Q	West	28	87	276	873	2761
13	5th & I	North	10	31	97	307	972
14	5th & I	West	11	33	106	334	1057
15	5th & J	North	11	34	108	341	1077
16	5th & J	West	28	87	276	872	2757
17	5th & L	West	7	21	65	207	654
18	5th & Capitol Mall	North	9	29	92	290	916
19	5th & Capitol Mall	East	8	25	79	249	787
20	5th & Capitol Mall	West	14	43	136	429	1356
21	5th & N	North	7	21	68	214	677
22	5th & N	East	9	27	86	271	858
23	5th & N	West	8	24	76	239	755
24	5th & P	North	8	25	80	252	796
25	5th & P	West	7	24	75	237	749

Appendix D-3: Sheet 2 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
26	5th & P	East	7	23	71	225	712
27	5th & Q	North	11	36	113	357	1128
28	5th & Q	West	22	70	221	700	2212
29	5th & Q	South	7	22	71	224	708
30	5th & Q	East	18	57	179	567	1792
31	7th & I	West	11	35	111	350	1105
32	7th & I	North	7	21	67	211	666
33	7th & J	West	19	62	195	615	1946
34	7th & J	North	6	18	56	178	563
35	7th & L	North	7	21	65	207	654
36	7th & L	West	10	31	98	310	979
37	7th & L	South	6	18	56	178	563
38	8th & I	North	6	18	55	175	554
39	8th & I	West	10	32	102	324	1025
40	8th & J	North	7	21	65	207	653
41	8th & J	West	18	58	182	577	1824
42	8th & L	North	6	19	60	190	600
43	8th & L	West	8	27	85	267	846
44	8th & L	South	5	16	51	161	510
45	9th & I	North	6	19	60	189	597
46	9th & I	West	11	36	114	359	1135
47	9th & J	North	5	15	47	148	467
48	9th & J	West	16	50	157	498	1575
49	9th & L	North	4	14	44	140	443
50	9th & L	West	11	35	110	348	1101

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Appendix D-3: Sheet 3 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
51	9th & L	South	5	17	53	168	531
52	9th & P	North	7	23	73	229	725
53	9th & P	West	8	24	75	238	751
54	9th & Q	North	7	22	69	219	693
55	9th & Q	West	16	50	158	501	1583
56	9th & Q	South	9	29	92	290	918
57	10th & I	North	7	21	65	206	652
58	10th & I	West	10	32	101	318	1005
59	10th & J	North	9	30	93	295	933
60	10th & J	West	14	44	139	441	1395
61	10th & L	North	11	35	111	352	1112
62	10th & L	West	12	38	121	383	1210
63	10th & L	South	11	35	111	352	1114
64	10th & P	North	14	45	141	447	1413
65	10th & P	West	7	23	71	226	714
66	10th & P	East	8	25	78	245	776
67	10th & Q	North	12	38	119	375	1187
68	10th & Q	West	14	43	136	430	1359
69	10th & Q	South	10	32	101	320	1011
70	10th & Q	East	12	37	118	374	1183
71	12th & H	North	13	42	134	425	1344
72	12th & H	West	8	26	81	258	815
73	12th & H	East	9	30	95	300	948
74	12th & I	North	10	33	104	330	1044
75	12th & I	West	12	37	118	374	1182

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Appendix D-3: Sheet 4 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
76	12th & J	North	7	23	73	231	729
77	12th & J	West	12	39	124	392	1241
78	12th & L	North	6	19	60	189	599
79	12th & L	West	12	38	119	377	1194
80	15th & H	North	6	20	64	201	635
81	15th & H	West	7	21	68	214	675
82	15th & J	North	8	26	81	256	810
83	15th & J	West	11	34	108	341	1077
84	15th & L	North	7	23	73	230	726
85	15th & L	West	10	31	98	310	980
86	15th & P	North	6	20	62	197	622
87	15th & P	West	10	33	104	328	1036
88	15th & Q	North	6	18	56	178	562
89	15th & Q	West	7	23	73	230	726
90	15th & Q	South	6	18	56	176	558
91	15th & W	North	5	16	51	160	506
92	15th & W	West	9	29	92	291	919
93	15th & X	North	6	18	57	179	567
94	15th & X	West	6	18	57	179	567
95	15th & X	South	4	12	38	121	384
96	16th & H	North	11	35	111	350	1105
97	16th & H	West	5	15	48	152	481
98	16th & H	East	3	9	29	92	290
99	16th & I	North	9	28	88	278	879
100	16th & I	West	12	38	121	384	1213

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Appendix D-3: Sheet 5 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
101	16th & I	East	11	34	107	339	1071
102	16th & J	North	14	45	143	452	1430
103	16th & J	West	13	41	128	405	1281
104	16th & J	East	12	38	122	385	1217
105	16th & L	North	12	39	123	388	1226
106	16th & L	West	8	26	82	258	817
107	16th & L	East	7	21	67	211	666
108	16th & P	North	15	46	145	460	1455
109	16th & P	West	10	30	95	301	951
110	16th & P	East	9	28	89	281	890
111	16th & Q	North	15	48	151	479	1514
112	16th & Q	West	9	27	86	271	857
113	16th & Q	South	12	39	125	394	1246
114	16th & Q	East	6	19	59	186	589
115	16th & W	North	17	55	173	547	1729
116	16th & W	West	9	29	92	289	915
117	16th & W	East	7	23	72	227	716
118	16th & X	North	19	61	193	610	1931
119	16th & X	West	13	40	126	397	1257
120	16th & X	South	14	44	140	442	1396
121	16th & X	East	7	23	72	229	723
122	29th & J	North	9	28	89	281	888
123	29th & J	West	9	27	87	274	867
124	29th & J	South	9	27	86	273	864
125	30th & J	North	6	18	56	176	555

Appendix D-3: Sheet 6 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
126	30th & J	West	9	29	90	286	904
127	30th & J	South	7	24	75	236	746
128	30th & J	East	11	35	109	346	1094
129	11th & I	North	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
130	11th & I	West	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
131	11th & J	North	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
132	11th & J	West	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

Appendix E-1: Sheet 1 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	3rd & J	West	48,370	83		17	2	2	35	50	
2	3rd & J	North	4,050	83		17	2	2	35	50	
3	3rd & L	North	13,310	83		17	2	2	35	50	
4	3rd & Capitol Mall	North	14,970	83		17	2	2	35	50	
5	3rd & Capitol Mall	West	14,480	83		17	2	2	35	50	
6	3rd & N	North	11,460	83		17	2	2	35	50	
7	3rd & N	West	7,140	83		17	2	2	35	50	
8	3rd & P	North	6,660	83		17	2	2	35	50	
9	3rd & P	West	11,540	83		17	2	2	35	50	
10	3rd & Q	North	5,610	83		17	2	2	35	50	
11	3rd & Q	South	11,810	83		17	2	2	35	50	
12	3rd & Q	West	37,390	83		17	2	2	35	50	
13	5th & I	North	12,400	83		17	2	2	35	50	
14	5th & I	West	14,920	83		17	2	2	35	50	
15	5th & J	North	13,810	83		17	2	2	35	50	
16	5th & J	West	36,930	83		17	2	2	35	50	
17	5th & L	West	11,140	83		17	2	2	35	50	
18	5th & Capitol Mall	North	12,590	83		17	2	2	35	50	
19	5th & Capitol Mall	East	11,220	83		17	2	2	35	50	
20	5th & Capitol Mall	West	19,000	83		17	2	2	35	50	
21	5th & N	North	10,130	83		17	2	2	35	50	
22	5th & N	East	15,940	83		17	2	2	35	50	
23	5th & N	West	12,910	83		17	2	2	35	50	
24	5th & P	North	13,370	83		17	2	2	35	50	
25	5th & P	West	9,740	83		17	2	2	35	50	

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Appendix E-1: Sheet 2 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
26	5th & P	East	10,520	83		17	2	2	35	50	
27	5th & Q	North	16,340	83		17	2	2	35	50	
28	5th & Q	West	30,440	83		17	2	2	35	50	
29	5th & Q	South	8,970	83		17	2	2	35	50	
30	5th & Q	East	23,070	83		17	2	2	35	50	
31	7th & I	West	15,450	83		17	2	2	35	50	
32	7th & I	North	10,050	83		17	2	2	35	50	
33	7th & J	West	27,540	83		17	2	2	35	50	
34	7th & J	North	9,650	83		17	2	2	35	50	
35	7th & L	North	10,040	83		17	2	2	35	50	
36	7th & L	West	15,310	83		17	2	2	35	50	
37	7th & L	South	8,010	83		17	2	2	35	50	
38	8th & I	North	7,470	83		17	2	2	35	50	
39	8th & I	West	15,330	83		17	2	2	35	50	
40	8th & J	North	9,540	83		17	2	2	35	50	
41	8th & J	West	26,810	83		17	2	2	35	50	
42	8th & L	North	10,770	83		17	2	2	35	50	
43	8th & L	West	15,260	83		17	2	2	35	50	
44	8th & L	South	7,950	83		17	2	2	35	50	
45	9th & I	North	7,620	83		17	2	2	35	50	
46	9th & I	West	15,830	83		17	2	2	35	50	
47	9th & J	North	6,600	83		17	2	2	35	50	
48	9th & J	West	23,580	83		17	2	2	35	50	
49	9th & L	North	8,320	83		17	2	2	35	50	
50	9th & L	West	21,940	83		17	2	2	35	50	

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Appendix E-1: Sheet 3 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
51	9th & L	South	7,250	83		17	2	2	35	50	
52	9th & P	North	9,950	83		17	2	2	35	50	
53	9th & P	West	10,570	83		17	2	2	35	50	
54	9th & Q	North	9,530	83		17	2	2	35	50	
55	9th & Q	West	20,090	83		17	2	2	35	50	
56	9th & Q	South	12,290	83		17	2	2	35	50	
57	10th & I	North	8,360	83		17	2	2	35	50	
58	10th & I	West	14,820	83		17	2	2	35	50	
59	10th & J	North	11,690	83		17	2	2	35	50	
60	10th & J	West	19,000	83		17	2	2	35	50	
61	10th & L	North	14,090	83		17	2	2	35	50	
62	10th & L	West	21,140	83		17	2	2	35	50	
63	10th & L	South	15,790	83		17	2	2	35	50	
64	10th & P	North	19,310	83		17	2	2	35	50	
65	10th & P	West	10,070	83		17	2	2	35	50	
66	10th & P	East	10,040	83		17	2	2	35	50	
67	10th & Q	North	17,250	83		17	2	2	35	50	
68	10th & Q	West	17,330	83		17	2	2	35	50	
69	10th & Q	South	15,020	83		17	2	2	35	50	
70	10th & Q	East	15,100	83		17	2	2	35	50	
71	12th & H	North	18,260	83		17	2	2	35	50	
72	12th & H	West	10,540	83		17	2	2	35	50	
73	12th & H	East	12,140	83		17	2	2	35	50	
74	12th & I	North	14,330	83		17	2	2	35	50	
75	12th & I	West	15,590	83		17	2	2	35	50	

Appendix E-1: Sheet 4 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
76	12th & J	North	10,430	83		17	2	2	35	50	
77	12th & J	West	17,780	83		17	2	2	35	50	
78	12th & L	North	8,970	83		17	2	2	35	50	
79	12th & L	West	19,260	83		17	2	2	35	50	
80	15th & H	North	8,050	83		17	2	2	35	50	
81	15th & H	West	8,760	83		17	2	2	35	50	
82	15th & J	North	10,270	83		17	2	2	35	50	
83	15th & J	West	15,330	83		17	2	2	35	50	
84	15th & L	North	9,790	83		17	2	2	35	50	
85	15th & L	West	15,170	83		17	2	2	35	50	
86	15th & P	North	8,690	83		17	2	2	35	50	
87	15th & P	West	13,350	83		17	2	2	35	50	
88	15th & Q	North	7,830	83		17	2	2	35	50	
89	15th & Q	West	10,300	83		17	2	2	35	50	
90	15th & Q	South	7,830	83		17	2	2	35	50	
91	15th & W	North	7,050	83		17	2	2	35	50	
92	15th & W	West	11,650	83		17	2	2	35	50	
93	15th & X	North	7,830	83		17	2	2	35	50	
94	15th & X	West	7,190	83		17	2	2	35	50	
95	15th & X	South	4,870	83		17	2	2	35	50	
96	16th & H	North	14,670	83		17	2	2	35	50	
97	16th & H	West	6,300	83		17	2	2	35	50	
98	16th & H	East	3,680	83		17	2	2	35	50	
99	16th & I	North	11,600	83		17	2	2	35	50	
100	16th & I	West	15,710	83		17	2	2	35	50	

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Appendix E-1: Sheet 5 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
101	16th & I	East	13,580	83		17	2	2	35	50	
102	16th & J	North	18,920	83		17	2	2	35	50	
103	16th & J	West	17,330	83		17	2	2	35	50	
104	16th & J	East	15,960	83		17	2	2	35	50	
105	16th & L	North	15,880	83		17	2	2	35	50	
106	16th & L	West	13,100	83		17	2	2	35	50	
107	16th & L	East	9,950	83		17	2	2	35	50	
108	16th & P	North	20,010	83		17	2	2	35	50	
109	16th & P	West	12,260	83		17	2	2	35	50	
110	16th & P	East	11,600	83		17	2	2	35	50	
111	16th & Q	North	20,650	83		17	2	2	35	50	
112	16th & Q	West	11,010	83		17	2	2	35	50	
113	16th & Q	South	17,250	83		17	2	2	35	50	
114	16th & Q	East	7,610	83		17	2	2	35	50	
115	16th & W	North	23,380	83		17	2	2	35	50	
116	16th & W	West	11,600	83		17	2	2	35	50	
117	16th & W	East	9,080	83		17	2	2	35	50	
118	16th & X	North	24,470	83		17	2	2	35	50	
119	16th & X	West	16,570	83		17	2	2	35	50	
120	16th & X	South	17,700	83		17	2	2	35	50	
121	16th & X	East	9,800	83		17	2	2	35	50	
122	29th & J	North	11,250	83		17	2	2	35	50	
123	29th & J	West	11,100	83		17	2	2	35	50	
124	29th & J	South	10,950	83		17	2	2	35	50	
125	30th & J	North	7,040	83		17	2	2	35	50	

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
126	30th & J	West	11,570	83		17	2	2	35	50	
127	30th & J	South	9,450	83		17	2	2	35	50	
128	30th & J	East	13,980	83		17	2	2	35	50	
129	11th & I	North	NA	83		17	2	2	35	50	
130	11th & I	West	NA	83		17	2	2	35	50	
131	11th & J	North	NA	83		17	2	2	35	50	
132	11th & J	West	NA	83		17	2	2	35	50	

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Appendix E-2: Sheet 1 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
1	3rd & J	West	71.2	64.1	69.3	73.8
2	3rd & J	North	60.4	53.3	58.5	63.1
3	3rd & L	North	65.6	58.5	63.7	68.2
4	3rd & Capitol Mall	North	66.1	59.0	64.2	68.7
5	3rd & Capitol Mall	West	66.0	58.8	64.0	68.6
6	3rd & N	North	64.9	57.8	63.0	67.6
7	3rd & N	West	62.9	55.8	61.0	65.5
8	3rd & P	North	62.6	55.5	60.7	65.2
9	3rd & P	West	65.0	57.8	63.0	67.6
10	3rd & Q	North	61.8	54.7	59.9	64.5
11	3rd & Q	South	65.1	57.9	63.1	67.7
12	3rd & Q	West	70.1	62.9	68.1	72.7
13	5th & I	North	65.3	58.2	63.4	67.9
14	5th & I	West	66.1	59.0	64.2	68.7
15	5th & J	North	65.7	58.6	63.8	68.4
16	5th & J	West	70.0	62.9	68.1	72.7
17	5th & L	West	64.8	57.7	62.9	67.4
18	5th & Capitol Mall	North	65.3	58.2	63.4	68.0
19	5th & Capitol Mall	East	64.8	57.7	62.9	67.5
20	5th & Capitol Mall	West	67.1	60.0	65.2	69.8
21	5th & N	North	64.4	57.3	62.5	67.0
22	5th & N	East	66.4	59.2	64.4	69.0
23	5th & N	West	65.5	58.3	63.5	68.1
24	5th & P	North	65.6	58.5	63.7	68.2
25	5th & P	West	64.2	57.1	62.3	66.9

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Appendix E-2: Sheet 2 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
26	5th & P	East	64.6	57.4	62.6	67.2
27	5th & Q	North	66.5	59.4	64.5	69.1
28	5th & Q	West	69.2	62.1	67.3	71.8
29	5th & Q	South	63.9	56.7	61.9	66.5
30	5th & Q	East	68.0	60.9	66.0	70.6
31	7th & I	West	66.2	59.1	64.3	68.9
32	7th & I	North	64.4	57.2	62.4	67.0
33	7th & J	West	68.7	61.6	66.8	71.4
34	7th & J	North	64.2	57.1	62.3	66.8
35	7th & L	North	64.4	57.2	62.4	67.0
36	7th & L	West	66.2	59.1	64.3	68.8
37	7th & L	South	63.4	56.3	61.5	66.0
38	8th & I	North	63.1	56.0	61.1	65.7
39	8th & I	West	66.2	59.1	64.3	68.8
40	8th & J	North	64.1	57.0	62.2	66.8
41	8th & J	West	68.6	61.5	66.7	71.3
42	8th & L	North	64.7	57.5	62.7	67.3
43	8th & L	West	66.2	59.1	64.3	68.8
44	8th & L	South	63.3	56.2	61.4	66.0
45	9th & I	North	63.2	56.0	61.2	65.8
46	9th & I	West	66.3	59.2	64.4	69.0
47	9th & J	North	62.5	55.4	60.6	65.2
48	9th & J	West	68.1	60.9	66.1	70.7
49	9th & L	North	63.5	56.4	61.6	66.2
50	9th & L	West	67.8	60.6	65.8	70.4

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Appendix E-2: Sheet 3 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
51	9th & L	South	62.9	55.8	61.0	65.6
52	9th & P	North	64.3	57.2	62.4	67.0
53	9th & P	West	64.6	57.5	62.7	67.2
54	9th & Q	North	64.1	57.0	62.2	66.8
55	9th & Q	West	67.4	60.3	65.4	70.0
56	9th & Q	South	65.2	58.1	63.3	67.9
57	10th & I	North	63.6	56.4	61.6	66.2
58	10th & I	West	66.1	58.9	64.1	68.7
59	10th & J	North	65.0	57.9	63.1	67.7
60	10th & J	West	67.1	60.0	65.2	69.8
61	10th & L	North	65.8	58.7	63.9	68.5
62	10th & L	West	67.6	60.5	65.7	70.2
63	10th & L	South	66.3	59.2	64.4	69.0
64	10th & P	North	67.2	60.1	65.3	69.8
65	10th & P	West	64.4	57.3	62.4	67.0
66	10th & P	East	64.4	57.2	62.4	67.0
67	10th & Q	North	66.7	59.6	64.8	69.3
68	10th & Q	West	66.7	59.6	64.8	69.4
69	10th & Q	South	66.1	59.0	64.2	68.7
70	10th & Q	East	66.1	59.0	64.2	68.8
71	12th & H	North	67.0	59.8	65.0	69.6
72	12th & H	West	64.6	57.4	62.6	67.2
73	12th & H	East	65.2	58.1	63.3	67.8
74	12th & I	North	65.9	58.8	64.0	68.5
75	12th & I	West	66.3	59.1	64.3	68.9

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
76	12th & J	North	64.5	57.4	62.6	67.2
77	12th & J	West	66.8	59.7	64.9	69.5
78	12th & L	North	63.9	56.7	61.9	66.5
79	12th & L	West	67.2	60.1	65.3	69.8
80	15th & H	North	63.4	56.3	61.5	66.0
81	15th & H	West	63.8	56.6	61.8	66.4
82	15th & J	North	64.5	57.3	62.5	67.1
83	15th & J	West	66.2	59.1	64.3	68.8
84	15th & L	North	64.3	57.1	62.3	66.9
85	15th & L	West	66.2	59.0	64.2	68.8
86	15th & P	North	63.7	56.6	61.8	66.4
87	15th & P	West	65.6	58.5	63.7	68.2
88	15th & Q	North	63.3	56.2	61.4	65.9
89	15th & Q	West	64.5	57.3	62.5	67.1
90	15th & Q	South	63.3	56.2	61.4	65.9
91	15th & W	North	62.8	55.7	60.9	65.5
92	15th & W	West	65.0	57.9	63.1	67.6
93	15th & X	North	63.3	56.2	61.4	65.9
94	15th & X	West	62.9	55.8	61.0	65.5
95	15th & X	South	61.2	54.1	59.3	63.9
96	16th & H	North	66.0	58.9	64.1	68.6
97	16th & H	West	62.3	55.2	60.4	65.0
98	16th & H	East	60.0	52.9	58.1	62.6
99	16th & I	North	65.0	57.9	63.1	67.6
100	16th & I	West	66.3	59.2	64.4	68.9

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Appendix E-2: Sheet 5 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
101	16th & I	East	65.7	58.5	63.7	68.3
102	16th & J	North	67.1	60.0	65.2	69.7
103	16th & J	West	66.7	59.6	64.8	69.4
104	16th & J	East	66.4	59.3	64.4	69.0
105	16th & L	North	66.4	59.2	64.4	69.0
106	16th & L	West	65.5	58.4	63.6	68.2
107	16th & L	East	64.3	57.2	62.4	67.0
108	16th & P	North	67.4	60.2	65.4	70.0
109	16th & P	West	65.2	58.1	63.3	67.9
110	16th & P	East	65.0	57.9	63.1	67.6
111	16th & Q	North	67.5	60.4	65.6	70.1
112	16th & Q	West	64.8	57.6	62.8	67.4
113	16th & Q	South	66.7	59.6	64.8	69.3
114	16th & Q	East	63.2	56.0	61.2	65.8
115	16th & W	North	68.0	60.9	66.1	70.7
116	16th & W	West	65.0	57.9	63.1	67.6
117	16th & W	East	63.9	56.8	62.0	66.6
118	16th & X	North	68.2	61.1	66.3	70.9
119	16th & X	West	66.5	59.4	64.6	69.2
120	16th & X	South	66.8	59.7	64.9	69.5
121	16th & X	East	64.3	57.1	62.3	66.9
122	29th & J	North	64.9	57.7	62.9	67.5
123	29th & J	West	64.8	57.7	62.9	67.4
124	29th & J	South	64.7	57.6	62.8	67.4
125	30th & J	North	62.8	55.7	60.9	65.5

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	Autos	Medium Trucks	Heavy Trucks	Total
126	30th & J	West	65.0	57.9	63.0	67.6
127	30th & J	South	64.1	57.0	62.2	66.7
128	30th & J	East	65.8	58.7	63.9	68.4
129	11th & I	North	#VALUE!	#VALUE!	#VALUE!	#VALUE!
130	11th & I	West	#VALUE!	#VALUE!	#VALUE!	#VALUE!
131	11th & J	North	#VALUE!	#VALUE!	#VALUE!	#VALUE!
132	11th & J	West	#VALUE!	#VALUE!	#VALUE!	#VALUE!

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Appendix E-3: Sheet 1 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
1	3rd & J	West	38	121	382	1207	3816
2	3rd & J	North	3	10	32	101	320
3	3rd & L	North	11	33	105	332	1050
4	3rd & Capitol Mall	North	12	37	118	373	1181
5	3rd & Capitol Mall	West	11	36	114	361	1142
6	3rd & N	North	9	29	90	286	904
7	3rd & N	West	6	18	56	178	563
8	3rd & P	North	5	17	53	166	525
9	3rd & P	West	9	29	91	288	910
10	3rd & Q	North	4	14	44	140	443
11	3rd & Q	South	9	29	93	295	932
12	3rd & Q	West	29	93	295	933	2950
13	5th & I	North	10	31	98	309	978
14	5th & I	West	12	37	118	372	1177
15	5th & J	North	11	34	109	345	1090
16	5th & J	West	29	92	291	921	2914
17	5th & L	West	9	28	88	278	879
18	5th & Capitol Mall	North	10	31	99	314	993
19	5th & Capitol Mall	East	9	28	89	280	885
20	5th & Capitol Mall	West	15	47	150	474	1499
21	5th & N	North	8	25	80	253	799
22	5th & N	East	13	40	126	398	1258
23	5th & N	West	10	32	102	322	1019
24	5th & P	North	11	33	105	334	1055
25	5th & P	West	8	24	77	243	768

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Appendix E-3: Sheet 2 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Noise Contour Output

Project #: 2006-090

Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions

Ldn/CNEL: Ldn

Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
26	5th & P	East	8	26	83	262	830
27	5th & Q	North	13	41	129	408	1289
28	5th & Q	West	24	76	240	759	2402
29	5th & Q	South	7	22	71	224	708
30	5th & Q	East	18	58	182	576	1820
31	7th & I	West	12	39	122	385	1219
32	7th & I	North	8	25	79	251	793
33	7th & J	West	22	69	217	687	2173
34	7th & J	North	8	24	76	241	761
35	7th & L	North	8	25	79	250	792
36	7th & L	West	12	38	121	382	1208
37	7th & L	South	6	20	63	200	632
38	8th & I	North	6	19	59	186	589
39	8th & I	West	12	38	121	382	1209
40	8th & J	North	8	24	75	238	753
41	8th & J	West	21	67	212	669	2115
42	8th & L	North	8	27	85	269	850
43	8th & L	West	12	38	120	381	1204
44	8th & L	South	6	20	63	198	627
45	9th & I	North	6	19	60	190	601
46	9th & I	West	12	39	125	395	1249
47	9th & J	North	5	16	52	165	521
48	9th & J	West	19	59	186	588	1860
49	9th & L	North	7	21	66	208	656
50	9th & L	West	17	55	173	547	1731

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Appendix E-3: Sheet 3 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	-------- Distances to Traffic Noise Contours -------- 75	70	65	60	55
51	9th & L	South	6	18	57	181	572
52	9th & P	North	8	25	78	248	785
53	9th & P	West	8	26	83	264	834
54	9th & Q	North	8	24	75	238	752
55	9th & Q	West	16	50	158	501	1585
56	9th & Q	South	10	31	97	307	970
57	10th & I	North	7	21	66	209	660
58	10th & I	West	12	37	117	370	1169
59	10th & J	North	9	29	92	292	922
60	10th & J	West	15	47	150	474	1499
61	10th & L	North	11	35	111	352	1112
62	10th & L	West	17	53	167	527	1668
63	10th & L	South	12	39	125	394	1246
64	10th & P	North	15	48	152	482	1523
65	10th & P	West	8	25	79	251	794
66	10th & P	East	8	25	79	250	792
67	10th & Q	North	14	43	136	430	1361
68	10th & Q	West	14	43	137	432	1367
69	10th & Q	South	12	37	118	375	1185
70	10th & Q	East	12	38	119	377	1191
71	12th & H	North	14	46	144	456	1441
72	12th & H	West	8	26	83	263	832
73	12th & H	East	10	30	96	303	958
74	12th & I	North	11	36	113	358	1131
75	12th & I	West	12	39	123	389	1230

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

Segment	Intersection	Direction	-------- Distances to Traffic Noise Contours -------- 75	70	65	60	55
76	12th & J	North	8	26	82	260	823
77	12th & J	West	14	44	140	444	1403
78	12th & L	North	7	22	71	224	708
79	12th & L	West	15	48	152	481	1519
80	15th & H	North	6	20	64	201	635
81	15th & H	West	7	22	69	219	691
82	15th & J	North	8	26	81	256	810
83	15th & J	West	12	38	121	382	1209
84	15th & L	North	8	24	77	244	772
85	15th & L	West	12	38	120	378	1197
86	15th & P	North	7	22	69	217	686
87	15th & P	West	11	33	105	333	1053
88	15th & Q	North	6	20	62	195	618
89	15th & Q	West	8	26	81	257	813
90	15th & Q	South	6	20	62	195	618
91	15th & W	North	6	18	56	176	556
92	15th & W	West	9	29	92	291	919
93	15th & X	North	6	20	62	195	618
94	15th & X	West	6	18	57	179	567
95	15th & X	South	4	12	38	121	384
96	16th & H	North	12	37	116	366	1157
97	16th & H	West	5	16	50	157	497
98	16th & H	East	3	9	29	92	290
99	16th & I	North	9	29	92	289	915
100	16th & I	West	12	39	124	392	1239

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Appendix E-3: Sheet 5 of 6

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
101	16th & I	East	11	34	107	339	1071
102	16th & J	North	15	47	149	472	1493
103	16th & J	West	14	43	137	432	1367
104	16th & J	East	13	40	126	398	1259
105	16th & L	North	13	40	125	396	1253
106	16th & L	West	10	33	103	327	1034
107	16th & L	East	8	25	78	248	785
108	16th & P	North	16	50	158	499	1579
109	16th & P	West	10	31	97	306	967
110	16th & P	East	9	29	92	289	915
111	16th & Q	North	16	52	163	515	1629
112	16th & Q	West	9	27	87	275	869
113	16th & Q	South	14	43	136	430	1361
114	16th & Q	East	6	19	60	190	600
115	16th & W	North	18	58	184	583	1845
116	16th & W	West	9	29	92	289	915
117	16th & W	East	7	23	72	227	716
118	16th & X	North	19	61	193	610	1931
119	16th & X	West	13	41	131	413	1307
120	16th & X	South	14	44	140	442	1396
121	16th & X	East	8	24	77	244	773
122	29th & J	North	9	28	89	281	888
123	29th & J	West	9	28	88	277	876
124	29th & J	South	9	27	86	273	864
125	30th & J	North	6	18	56	176	555

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FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2006-090
Description: The Metropolitan EIR - Cumulative (2030) + Projects Conditions
Ldn/CNEL: Ldn
Hard/Soft: Hard

			-------- Distances to Traffic Noise Contours --------				
Segment	Intersection	Direction	75	70	65	60	55
126	30th & J	West	9	29	91	289	913
127	30th & J	South	7	24	75	236	746
128	30th & J	East	11	35	110	349	1103
129	11th & I	North	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
130	11th & I	West	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
131	11th & J	North	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
132	11th & J	West	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

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Appendix F-1

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Noise Prediction Worksheet

Project Information:

Job Number: 2006-090
Project Name: Metropolitan EIR
Roadway Name: J Street

Traffic Data:

Year:	2030
Average Daily Traffic Volume:	20,210
Percent Daytime Traffic:	83
Percent Nighttime Traffic:	17
Percent Medium Trucks (2 axle):	6
Percent Heavy Trucks (3+ axle):	2
Assumed Vehicle Speed (mph):	40
Intervening Ground Type (hard/soft):	**Hard**

Traffic Noise Levels:

				----------------- L_{dn}, dB	------------------		
Location:	**Description**	**Distance**	**Offset (dB)**	**Autos**	**Medium Trucks**	**Heavy Trucks**	**Total**
1	Ground Floor	40	0	70	67	67	73
2	5th Floor Loft	60	3	71	68	68	74
3	6th Floor Loft	64	3	71	68	68	74
4	7th Floor Residential	90	3	69	66	66	72
5	15th Floor Residential	151	3	67	64	64	70
6	38th Floor Residential	345	3	63	61	61	67
7	Pool Deck	350	-7	53	51	51	56

Traffic Noise Contours (No Calibration Offset):

L_{dn} Contour, dB	Distance from Centerline, (ft)
75	49
70	156
65	494
60	1562

Notes:

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Appendix F-2

FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Noise Prediction Worksheet

Project Information:

Job Number: 2006-090
Project Name: Metropolitan EIR
Roadway Name: 10th Street

Traffic Data:

Year:	2025
Average Daily Traffic Volume:	7,800
Percent Daytime Traffic:	83
Percent Nighttime Traffic:	17
Percent Medium Trucks (2 axle):	1
Percent Heavy Trucks (3+ axle):	1
Assumed Vehicle Speed (mph):	40
Intervening Ground Type (hard/soft):	**Hard**

Traffic Noise Levels:

				-----------------L_{dn}, dB------------------			
Location:	**Description**	**Distance**	**Offset (dB)**	**Autos**	**Medium Trucks**	**Heavy Trucks**	**Total**
1	Ground Floor	40	0	66	55	60	67
2	3rd Floor Loft	46	3	68	57	62	70
3	4th Floor Loft	50	3	68	57	62	69
4	5th Floor Loft	57	3	67	56	61	69
5	6th Floor Loft	64	3	67	56	61	68
6	7th Floor Residential	90	3	65	54	59	67
7	38th Floor Residential	345	3	60	49	53	61

Traffic Noise Contours (No Calibration Offset):

L_{dn} Contour, dB	Distance from Centerline, (ft)
75	13
70	42
65	133
60	419

Notes:

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APPENDIX G

TRANSPORTATION AND CIRCULATION TECHNICAL APPENDIX

Capacity Analysis of Freeway Mainline Segments
2000 Highway Capacity Manual

Capacity based on 2100 vphpl for freeway lanes, 1600 vphpl for auxiliary lanes

Mainline Segment	Dir	Frwy Lanes	Aux Lanes	Exising Conditions Without Project AM	Exising Conditions Without Project PM	Baseline Conditions Without Project AM	Baseline Conditions Without Project PM	Baseline Conditions With Project AM	Baseline Conditions With Project PM
Freeway Traffic Volume									
I-5, South of US 50 on-ramp	NB	3	0	3,417	2,872	3,539	2,959	3,542	2,969
I-5, North of US 50 on-ramp	NB	4	0	7,119	5,235	7,249	5,346	7,254	5,362
I-5, South of L Street on-ramp	NB	3	0	5,279	3,841	5,330	4,960	5,330	4,960
I-5, South of I Street on-ramp	NB	4	0	5,471	4,598	5,522	5,717	5,522	5,717
I-5, South of Richards Blvd off-ramp	NB	4	1	5,806	6,011	5,881	7,196	5,899	7,211
US-50, West of I-5 on-ramp	EB	4	0	3,176	1,434	3,197	1,446	3,197	1,446
US-50, West of 15th Street off-ramp	EB	5	1	8,183	6,334	8,278	6,441	8,278	6,441
US-50, West of 10th Street on-ramp	EB	5	0	7,534	5,658	7,629	5,765	7,629	5,765
US-50, West of 16th Street on-ramp	EB	5	1	8,319	6,403	8,465	6,795	8,465	6,795
Volume to Capacity (V/C)									
I-5, South of US 50 on-ramp	NB	3	0	0.54	0.46	0.56	0.47	0.56	0.47
I-5, North of US 50 on-ramp	NB	4	0	0.85	0.62	0.86	0.64	0.86	0.64
I-5, South of L Street on-ramp	NB	3	0	0.84	0.61	0.85	0.79	0.85	0.79
I-5, South of I Street on-ramp	NB	4	0	0.65	0.55	0.66	0.68	0.66	0.68
I-5, South of Richards Blvd off-ramp	NB	4	1	0.58	0.60	0.59	0.72	0.59	0.72
US-50, West of I-5 on-ramp	EB	4	0	0.38	0.17	0.38	0.17	0.38	0.17
US-50, West of 15th Street off-ramp	EB	5	1	0.68	0.52	0.68	0.53	0.68	0.53
US-50, West of 10th Street on-ramp	EB	5	0	0.72	0.54	0.73	0.55	0.73	0.55
US-50, West of 16th Street on-ramp	EB	5	1	0.69	0.53	0.70	0.56	0.70	0.56
Level of Service:									
I-5, South of US 50 on-ramp	NB			C	B	C	B	C	B
I-5, North of US 50 on-ramp	NB			D	C	D	C	D	C
I-5, South of L Street on-ramp	NB			D	C	D	D	D	D
I-5, South of I Street on-ramp	NB			C	C	C	C	C	C
I-5, South of Richards Blvd off-ramp	NB			C	C	C	C	C	C
US-50, West of I-5 on-ramp	EB			B	A	B	A	B	A
US-50, West of 15th Street off-ramp	EB			C	B	C	C	C	C
US-50, West of 10th Street on-ramp	EB			C	C	C	C	C	C
US-50, West of 16th Street on-ramp	EB			C	B	C	C	C	C

Freeway Capacity Source: 2000 Highway Capacity Manual

		V/C	LOS
Ideal Freeway Capacity =	2400 (p. 23-4)		
Free-Flow Speed =	70 mph	0.32	A
Peak Hour Factor =	0.92	0.53	B
Percent Trucks =	5.0%	0.74	C
Actual Capacity / Ideal Capacity =	88%	0.90	D
Adjusted Freeway Capacity =	2100	1.00	E

Capacity Analysis of Freeway Mainline Segments
2000 Highway Capacity Manual
Capacity based on 2100 vphpl for freeway lanes, 1600 vphpl for auxiliary lanes

Mainline Segment	Dir	Frwy Lanes	Aux Lanes	Exising Conditions Without Project AM	Exising Conditions Without Project PM	Baseline Conditions Without Project AM	Baseline Conditions Without Project PM	Baseline Conditions With Project AM	Baseline Conditions With Project PM
Freeway Traffic Volume									
I-5, North of Richards Blvd on-ramp	SB	4	0	7,628	5,797	8,124	6,086	8,130	6,105
I-5, North of J Street on-ramp	SB	4	0	8,104	6,568	8,600	6,857	8,606	6,876
I-5, North of I Street on-ramp	SB	4	0	6,437	6,295	6,607	6,281	6,607	6,281
I-5, North of US 50 off-ramp	SB	3	2	5,978	6,149	5,846	6,036	5,862	6,049
US-50, East of Hwy 51/US 99 on-ram	WB	4	1	3,637	3,250	4,065	3,447	4,068	3,457
US-50, East of 10th Street off-ramp	WB	5	0	6,483	6,058	6,854	6,281	6,854	6,281
US-50, East of 15th Street on-ramp	WB	5	0	5,555	5,709	5,645	5,857	5,645	5,857
US-50, East of I-5 off-ramp	WB	6	0	6,029	6,375	6,124	6,530	6,124	6,530
Volume to Capacity (V/C)									
I-5, North of Richards Blvd on-ramp	SB	4	0	0.91	0.69	0.97	0.72	0.97	0.73
I-5, North of J Street on-ramp	SB	4	0	0.96	0.78	1.02	0.82	1.02	0.82
I-5, North of I Street on-ramp	SB	4	0	0.77	0.75	0.79	0.75	0.79	0.75
I-5, North of US 50 off-ramp	SB	3	2	0.63	0.65	0.62	0.64	0.62	0.64
US-50, East of Hwy 51/US 99 on-ram	WB	4	1	0.36	0.33	0.41	0.34	0.41	0.35
US-50, East of 10th Street off-ramp	WB	5	0	0.62	0.58	0.65	0.60	0.65	0.60
US-50, East of 15th Street on-ramp	WB	5	0	0.53	0.54	0.54	0.56	0.54	0.56
US-50, East of I-5 off-ramp	WB	6	0	0.48	0.51	0.49	0.52	0.49	0.52
Level of Service:									
I-5, North of Richards Blvd on-ramp	SB			E	C	E	C	E	C
I-5, North of J Street on-ramp	SB			E	D	F	D	F	D
I-5, North of I Street on-ramp	SB			D	D	D	D	D	D
I-5, North of US 50 off-ramp	SB			C	C	C	C	C	C
US-50, East of Hwy 51/US 99 on-ram	WB			B	B	B	B	B	B
US-50, East of 10th Street off-ramp	WB			C	C	C	C	C	C
US-50, East of 15th Street on-ramp	WB			B	C	C	C	C	C
US-50, East of I-5 off-ramp	WB			B	B	B	B	B	B

Freeway Capacity Source: 2000 Highway Capacity Manual

		V/C	LOS
Ideal Freeway Capacity =	2400 (p. 23-4)		
Free-Flow Speed =	70 mph	0.32	A
Peak Hour Factor =	0.92	0.53	B
Percent Trucks =	5.0%	0.74	C
Actual Capacity / Ideal Capacity =	88%	0.90	D
Adjusted Freeway Capacity =	2100	1.00	E

EB US-50 - Weaving from 16th St to Hwy 51 / SR 99

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Type	B
Existing Upstrm Frwy Lanes / Aux. Lanes	5
Existing Dnstrm Frwy Lanes / Aux. Lanes	4
Sacramento Factor. [Note: Capacity is fixed hence adjust volume]	1

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
PHF (Peak Hour Factor) =	1	1	1	1	1	1
f_{HV} (Adjustment factor for heavy vehicles) =	1	1	1	1	1	1
f_p (Adjustment factor for driver population) =	1	1	1	1	1	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01	0.01	0.01	0.01	0.01	0.01
P_R (Proportioin of RVs in the traffic stream) =	0	0	0	0	0	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5	1.5	1.5	1.5	1.5	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5	1.5	1.5	1.5	1.5	1.5
L - Length of weaving segment (ft)	1000	1000	1000	1000	1000	1000
N, Total number of lanes in the weaving segment	6	6	6	6	6	6
N_w, Number of lanes to be used by weaving vehicles if unconstrained operation is to be achived. note: Type-B, Ex 24-7	3.05491	4.245573	3.139685	4.400099	3.150334	4.414818
$N_{w(max)}$, Maximum number of lanes that can be used by weaving vehicles for a given configuration. note: A:1.4, B:3.5, C:3.0	3.5	3.5	3.5	3.5	3.5	3.5
N_{nw}, Number of lanes used by nonweaving vehicles. note: Nw < Nw(max) implies unconstrained, and Nw >= Nw(max) implies constrained	5	5	5	5	5	5
v, Total flow rate in the weaving segment (pc/h)	8975	6743	9153	7206	9164	7220
v_{o1}, Larger of the two outer, or nonweaving, flow rates in the weaving segment (pc/h)	5645	3135	5669	3236	5664	3230
v_{o2}, Smaller of the two outer, or nonweaving, flow rates in the weaving segment (pc/h)	0	0	0	0	0	0
v_{w1}, Larger of two weaving flow rates in the weaving segment (pc/h)	2674	2983	2796	3265	2800.62	3271.72
v_{w2}, Smaller of two weaving flow rates in the weaving segment (pc/h)	656	625	688	705	699	719
v_w, Total weaving flow rate in the weaving segment (pc/h) ($v_w = v_{w1} + v_{w2}$)	3330	3608	3484	3970	3500	3991
v_{nw}, Total nonweaving flow rate in the weaving segment (pc/h) ($v_{nw} = v_{o1} + v_{o2}$)	5645	3135	5669	3236	5664	3230
VR, Volume ratio; the ratio of weaving flow rate to total flow rate in the weaving segment (VR = v_w/v)	0.371031	0.535085	0.38064	0.550937	0.381901	0.552698
R, Weaving ratio; the ratio of the smaller weaving flow rate to total weaving flow rate (R = vw2/vw)	0.196997	0.173264	0.197474	0.177565	0.199782	0.180156
S_w, Speed of weaving vehicles in the weaving segment (mi/h)	44.80542	44.14186	44.40747	43.19427	44.36826	43.14052
S_{nw}, Speed of nonweaving vehicles in the weaving segment (mi/h)	48.77669	43.4957	47.96909	41.73644	47.88054	41.61516
S, Speed of all vehicles in the weaving segment (mi/h) [Eq 24-5, HCM2000]	47.2237	43.83908	46.54805	42.52721	46.47549	42.44463
D, Density of all vehicles in the weaving segment (pc/mi/ln) [Eq 24-6, HCM2000]	31.67548	25.63606	32.77259	28.23977	32.86392	28.35198
W_w, Weaving intensity factor for prediction of weaving speed	0.845302	0.88732	0.870273	0.950751	0.87277	0.954477
W_{nw}, Weaving intensity factor for prediction of nonweaving speed	0.628342	0.930116	0.668229	1.057118	0.672722	1.066491
S_{min}, Minimum speed expected in a weaving segment (mi/h)	15	15	15	15	15	15
S_{max}, Maximum speed expected in a weaving segment (mi/h)	70	70	70	70	70	70
a (weaving) [Exhibit 24-6, Unconstrainted Case]	0.08	0.08	0.08	0.08	0.08	0.08
b (weaving)	2.2	2.2	2.2	2.2	2.2	2.2
c (weaving)	0.7	0.7	0.7	0.7	0.7	0.7
d (weaving)	0.5	0.5	0.5	0.5	0.5	0.5
a (non-weaving)	0.002	0.002	0.002	0.002	0.002	0.002
b (non-weaving)	6	6	6	6	6	6
c (non-weaving)	1	1	1	1	1	1
d (non-weaving)	0.5	0.5	0.5	0.5	0.5	0.5
LOS	**D**	**C**	**D**	**D**	**D**	**D**

WB US-50 - Weaving from Hwy 51 / SR 99 to 16th St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Type	B
Existing Upstrm Frwy Lanes / Aux. Lanes	4
Existing Dnstrm Frwy Lanes / Aux. Lanes	5
Sacramento Factor. [Note: Capacity is fixed hence adjust volume]	1

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
PHF (Peak Hour Factor) =	1	1	1	1	1	1
f_{HV} (Adjustment factor for heavy vehicles) =	1	1	1	1	1	1
f_p (Adjustment factor for driver population) =	1	1	1	1	1	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01	0.01	0.01	0.01	0.01	0.01
P_R (Proportioin of RVs in the traffic stream) =	0	0	0	0	0	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5	1.5	1.5	1.5	1.5	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5	1.5	1.5	1.5	1.5	1.5
L - Length of weaving segment (ft)	1000	1000	1000	1000	1000	1000
N, Total number of lanes in the weaving segment	6	6	6	6	6	6
N_w, Number of lanes to be used by weaving vehicles if unconstrained operation is to be achived. note: Type-B, Ex 24-7	3.344402	3.613636	3.267712	3.608068	3.274178	3.627439
$N_{w(max)}$, Maximum number of lanes that can be used by weaving vehicles for a given configuration. note: A:1.4, B:3.5, C:3.0	3.5	3.5	3.5	3.5	3.5	3.5
N_{nw}, Number of lanes used by nonweaving vehicles. note: Nw < Nw(max) implies unconstrained, and Nw >= Nw(max) implies constrained	5	5	5	5	5	5
v, Total flow rate in the weaving segment (pc/h)	4880	4883	5343	5147	5346	5157
v_{o1}, Larger of the two outer, or nonweaving, flow rates in the weaving segment (pc/h)	2757	2583	3093	2739	3090	2732
v_{o2}, Smaller of the two outer, or nonweaving, flow rates in the weaving segment (pc/h)	0	0	0	0	0	0
v_{w1}, Larger of two weaving flow rates in the weaving segment (pc/h)	1243	1633	1278	1700	1278	1700
v_{w2}, Smaller of two weaving flow rates in the weaving segment (pc/h)	880	667	972	708	977.9	725.2
v_w, Total weaving flow rate in the weaving segment (pc/h) ($v_w = v_{w1} + v_{w2}$)	2123	2300	2250	2408	2255.9	2425.2
v_{nw}, Total nonweaving flow rate in the weaving segment (pc/h) ($v_{nw} = v_{o1} + v_{o2}$)	2757	2583	3093	2739	3090.43	2731.54
VR, Volume ratio; the ratio of weaving flow rate to total flow rate in the weaving segment (VR = v_w/v)	0.435041	0.471022	0.421112	0.467845	0.421953	0.470297
R, Weaving ratio; the ratio of the smaller weaving flow rate to total weaving flow rate (R = vw2/vw)	0.414508	0.29	0.432	0.29402	0.433486	0.299027
S_w, Speed of weaving vehicles in the weaving segment (mi/h)	49.16001	48.4447	48.61381	48.02249	48.59108	47.95654
S_{nw}, Speed of nonweaving vehicles in the weaving segment (mi/h)	52.95076	51.1478	52.57063	50.65308	52.5209	50.50352
S, Speed of all vehicles in the weaving segment (mi/h) [Eq 24-5, HCM2000]	51.23212	49.83796	50.82846	49.38739	50.78774	49.27281
D, Density of all vehicles in the weaving segment (pc/mi/ln) [Eq 24-6, HCM2000]	15.87546	16.32959	17.51971	17.36948	17.54469	17.44282
W_w, Weaving intensity factor for prediction of weaving speed	0.61007	0.644506	0.636232	0.665532	0.637339	0.668864
W_{nw}, Weaving intensity factor for prediction of nonweaving speed	0.449246	0.521531	0.46391	0.542644	0.46585	0.549142
S_{min}, Minimum speed expected in a weaving segment (mi/h)	15	15	15	15	15	15
S_{max}, Maximum speed expected in a weaving segment (mi/h)	70	70	70	70	70	70
a (weaving) [Exhibit 24-6, Unconstrainted Case]	0.08	0.08	0.08	0.08	0.08	0.08
b (weaving)	2.2	2.2	2.2	2.2	2.2	2.2
c (weaving)	0.7	0.7	0.7	0.7	0.7	0.7
d (weaving)	0.5	0.5	0.5	0.5	0.5	0.5
a (non-weaving)	0.002	0.002	0.002	0.002	0.002	0.002
b (non-weaving)	6	6	6	6	6	6
c (non-weaving)	1	1	1	1	1	1
d (non-weaving)	0.5	0.5	0.5	0.5	0.5	0.5
LOS	**B**	**B**	**B**	**B**	**B**	**B**

NB I-5 - Weaving from P St to J St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Type	B
Existing Upstrm Frwy Lanes / Aux. Lanes	4
Existing Dnstrm Frwy Lanes / Aux. Lanes	4
Sacramento Factor. [Note: Capacity is fixed hence adjust volume]	1

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
PHF (Peak Hour Factor) =	1	1	1	1	1	1
f_{HV} (Adjustment factor for heavy vehicles) =	1	1	1	1	1	1
f_p (Adjustment factor for driver population) =	1	1	1	1	1	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01	0.01	0.01	0.01	0.01	0.01
P_R (Proportioin of RVs in the traffic stream) =	0	0	0	0	0	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5	1.5	1.5	1.5	1.5	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5	1.5	1.5	1.5	1.5	1.5
L - Length of weaving segment (ft)	1000	1000	1000	1000	1000	1000
N, Total number of lanes in the weaving segment	6	6	6	6	6	6
N_w, Number of lanes to be used by weaving vehicles if unconstrained operation is to be achived. note: Type-B, Ex 24-7	2.473536	1.069067	2.60249	1.298211	2.606312	1.307238
$N_{w(max)}$, Maximum number of lanes that can be used by weaving vehicles for a given configuration. note: A:1.4, B:3.5, C:3.0	3.5	3.5	3.5	3.5	3.5	3.5
N_{nw}, Number of lanes used by nonweaving vehicles. note: Nw < Nw(max) implies unconstrained, and Nw >= Nw(max) implies constrained	5	5	5	5	5	5
v, Total flow rate in the weaving segment (pc/h)	7306	5920	7487	6345	7492.41	6361.48
v_{o1}, Larger of the two outer, or nonweaving, flow rates in the weaving segment (pc/h)	5092	3960	5092	3961	5092	3961
v_{o2}, Smaller of the two outer, or nonweaving, flow rates in the weaving segment (pc/h)	0	0	0	0	0	0
v_{w1}, Larger of two weaving flow rates in the weaving segment (pc/h)	2027	1275	2157	1385	2162.41	1401.48
v_{w2}, Smaller of two weaving flow rates in the weaving segment (pc/h)	187	685	238	999	238	999
v_w, Total weaving flow rate in the weaving segment (pc/h) ($v_w = v_{w1} + v_{w2}$)	2214	1960	2395	2384	2400.41	2400.48
v_{nw}, Total nonweaving flow rate in the weaving segment (pc/h) ($v_{nw} = v_{o1} + v_{o2}$)	5092	3960	5092	3961	5092	3961
VR, Volume ratio; the ratio of weaving flow rate to total flow rate in the weaving segment (VR = v_w/v)	0.303039	0.331081	0.319888	0.375729	0.320379	0.377346
R, Weaving ratio; the ratio of the smaller weaving flow rate to total weaving flow rate (R = vw2/vw)	0.084463	0.34949	0.099374	0.419044	0.09915	0.416167
S_w, Speed of weaving vehicles in the weaving segment (mi/h)	48.244	41.06832	47.6443	39.41475	47.62673	39.35502
S_{nw}, Speed of nonweaving vehicles in the weaving segment (mi/h)	54.94289	61.86678	53.80723	59.83524	53.77345	59.75509
S, Speed of all vehicles in the weaving segment (mi/h) [Eq 24-5, HCM2000]	52.72434	52.98305	51.66923	50.08548	51.6383	49.97912
D, Density of all vehicles in the weaving segment (pc/mi/ln) [Eq 24-6, HCM2000]	23.09496	18.62231	24.15041	21.1139	24.18234	21.21379
W_w, Weaving intensity factor for prediction of weaving speed	0.654434	1.10984	0.684827	1.252737	0.685735	1.258262
W_{nw}, Weaving intensity factor for prediction of nonweaving speed	0.376966	0.173539	0.417262	0.226714	0.418496	0.22891
S_{min}, Minimum speed expected in a weaving segment (mi/h)	15	15	15	15	15	15
S_{max}, Maximum speed expected in a weaving segment (mi/h)	70	70	70	70	70	70
a (weaving) [Exhibit 24-6, AM:Unconstrainted, PM:Constrainted]	0.08	0.15	0.08	0.15	0.08	0.15
b (weaving)	2.2	2.2	2.2	2.2	2.2	2.2
c (weaving)	0.7	0.7	0.7	0.7	0.7	0.7
d (weaving)	0.5	0.5	0.5	0.5	0.5	0.5
a (non-weaving)	0.002	0.001	0.002	0.001	0.002	0.001
b (non-weaving)	6	6	6	6	6	6
c (non-weaving)	1	1	1	1	1	1
d (non-weaving)	0.5	0.5	0.5	0.5	0.5	0.5
LOS	**C**	**B**	**C**	**C**	**C**	**C**

SB I-5 - Weaving from I St to Q St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Type	B
Existing Upstrm Frwy Lanes / Aux. Lanes	4
Existing Dnstrm Frwy Lanes / Aux. Lanes	5
Sacramento Factor. [Note: Capacity is fixed hence adjust volume]	1

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
PHF (Peak Hour Factor) =	1	1	1	1	1	1
f_{HV} (Adjustment factor for heavy vehicles) =	1	1	1	1	1	1
f_p (Adjustment factor for driver population) =	1	1	1	1	1	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01	0.01	0.01	0.01	0.01	0.01
P_R (Proportioin of RVs in the traffic stream) =	0	0	0	0	0	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5	1.5	1.5	1.5	1.5	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5	1.5	1.5	1.5	1.5	1.5
L - Length of weaving segment (ft)	1000	1000	1000	1000	1000	1000
N, Total number of lanes in the weaving segment	6	6	6	6	6	6
N_w, Number of lanes to be used by weaving vehicles if unconstrained operation is to be achived. note: Type-B, Ex 24-7	1.512992	2.489416	1.755705	2.640769	1.766819	2.649917
$N_{w(max)}$, Maximum number of lanes that can be used by weaving vehicles for a given configuration. note: A:1.4, B:3.5, C:3.0	3.5	3.5	3.5	3.5	3.5	3.5
N_{nw}, Number of lanes used by nonweaving vehicles. note: Nw < Nw(max) implies unconstrained, and Nw >= Nw(max) implies constrained	5	5	5	5	5	5
v, Total flow rate in the weaving segment (pc/h)	6725	7342	6904	7356	6919.96	7368.81
v_{o1}, Larger of the two outer, or nonweaving, flow rates in the weaving segment (pc/h)	5690	5102	5549	4961	5549	4961
v_{o2}, Smaller of the two outer, or nonweaving, flow rates in the weaving segment (pc/h)	0	0	0	0	0	0
v_{w1}, Larger of two weaving flow rates in the weaving segment (pc/h)	747	1193	1058	1320	1058	1320
v_{w2}, Smaller of two weaving flow rates in the weaving segment (pc/h)	288	1047	297	1075	312.96	1087.81
v_w, Total weaving flow rate in the weaving segment (pc/h) ($v_w = v_{w1} + v_{w2}$)	1035	2240	1355	2395	1370.96	2407.81
v_{nw}, Total nonweaving flow rate in the weaving segment (pc/h) ($v_{nw} = v_{o1} + v_{o2}$)	5690	5102	5549	4961	5549	4961
VR, Volume ratio; the ratio of weaving flow rate to total flow rate in the weaving segment ($VR = v_w/v$)	0.153903	0.305094	0.196263	0.325585	0.198117	0.326757
R, Weaving ratio; the ratio of the smaller weaving flow rate to total weaving flow rate (R = vw2/vw)	0.278261	0.467411	0.219188	0.448852	0.228278	0.451784
S_w, Speed of weaving vehicles in the weaving segment (mi/h)	52.34759	48.15309	51.15655	47.68252	51.09428	47.64056
S_{nw}, Speed of nonweaving vehicles in the weaving segment (mi/h)	62.11585	54.78522	60.33186	53.71351	60.23908	53.63264
S, Speed of all vehicles in the weaving segment (mi/h) [Eq 24-5, HCM2000]	60.38175	52.57595	58.28032	51.58904	58.17622	51.51543
D, Density of all vehicles in the weaving segment (pc/mi/ln) [Eq 24-6, HCM2000]	18.56245	23.27427	19.74366	23.76474	19.82471	23.84014
W_w, Weaving intensity factor for prediction of weaving speed	0.472652	0.658971	0.521163	0.682857	0.523787	0.68502
W_{nw}, Weaving intensity factor for prediction of nonweaving speed	0.167335	0.382423	0.213275	0.420693	0.215763	0.423667
S_{min}, Minimum speed expected in a weaving segment (mi/h)	15	15	15	15	15	15
S_{max}, Maximum speed expected in a weaving segment (mi/h)	70	70	70	70	70	70
a (weaving) [Exhibit 24-6, Unconstrainted]	0.08	0.08	0.08	0.08	0.08	0.08
b (weaving)	2.2	2.2	2.2	2.2	2.2	2.2
c (weaving)	0.7	0.7	0.7	0.7	0.7	0.7
d (weaving)	0.5	0.5	0.5	0.5	0.5	0.5
a (non-weaving)	0.002	0.002	0.002	0.002	0.002	0.002
b (non-weaving)	6	6	6	6	6	6
c (non-weaving)	1	1	1	1	1	1
d (non-weaving)	0.5	0.5	0.5	0.5	0.5	0.5
LOS	**B**	**C**	**B**	**C**	**B**	**C**

NB I-5 - US 50 On-Ramp

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 6 lane freeway, 2 Lane On-Ramp (Pfm=0.555 for 2-lane ramp)

Existing Upstrm Frwy Lanes / Aux. Lanes	3
Existing Dnstrm Frwy Lanes / Aux. Lanes	4

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	3,417	2,872	3,539	2,959	3,542	2,969
Ramp Volume:	3,269	1,997	3,277	2,021	3,277	2,021
L_{Aeff} (Effective length of the acceleration lane, ft)	1,000	1,000	1,000	1,000	1,000	1,000
Sacto Adjusted Freeway Volume (Upstream):	3,728	3,133	3,861	3,228	3,864	3,239
Sacto Adjusted Ramp Volume:	3,566	2,179	3,575	2,205	3,575	2,205
V_{FO} Capacity (downstream segment capacity)	9,600	9,600	9,600	9,600	9,600	9,600
Downstream Freeway V/C:	0.76	0.55	0.77	0.57	0.77	0.57
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	2,069	1,739	2,143	1,792	2,145	1,798
V_{R12} (Maximum total flow entering the ramp, merge influence area, two-lane volume):	5,635	3,918	5,718	3,997	5,720	4,003
V_{R12} Capacity:	4,600	4,600	4,600	4,600	4,600	4,600
V_{R12} V/C:	1.23	0.85	1.24	0.87	1.24	0.87
D_R (Density of merge influence area (pc/mi/ln))	41.52	28.76	42.16	29.37	42.18	29.41
v_F (Maximum total flow approaching a major diverge area on the freeway) =	3,728	3,133	3,861	3,228	3,864	3,239
v_R (Maximum flow on a ramp) =	3,566	2,179	3,575	2,205	3,575	2,205
V_{FO} (Maximum total departing from a merge or diverge area on the freeway)	7,294	5,312	7,436	5,433	7,439	5,444
Level of Service:	F	D	F	D	F	D

Proportion in lanes 1,2 (P_{FM}):	0.555	HCM pg 25-9
PHF (Peak Hour Factor) =	1	
f_{HV} (Adjustment factor for heavy vehicles) =	1	
f_p (Adjustment factor for driver population) =	1	
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01	
P_R (Proportioin of RVs in the traffic stream) =	0	
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5	
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5	

I-5 NB On-Ramp from P Street

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Single Lane On-Ramp, Enters Own Lane

Existing Upstrm Frwy Lanes / Aux. Lanes 4
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Ramp Volume:	187	685	238	999	238	999
Ramp Design Speed (mph):	40	40	40	40	40	40
Adjusted Ramp Volume:	204	747	260	1,090	260	1,090
Service Flow Rate @ LOS "A"	0	0	0	0	0	0
Service Flow Rate @ LOS "B"	0	0	0	0	0	0
Service Flow Rate @ LOS "C"	1,400	1,400	1,400	1,400	1,400	1,400
Service Flow Rate @ LOS "D"	1,700	1,700	1,700	1,700	1,700	1,700
Service Flow Rate @ LOS "E"	2,000	2,000	2,000	2,000	2,000	2,000
Level of Service:	C	C	C	C	C	C

I-5 NB off-ramp to J St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Major Diverge, 2 Lane Off-Ramp, P_{FD}=0.260

Existing Upstrm Frwy Lanes / Aux. Lanes 5
Existing Dnstrm Frwy Lanes / Aux. Lanes 4

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	7,306	5,920	7,487	6,345	7,492	6,361
Ramp Volume:	2,027	1,275	2,157	1,385	2,162	1,401
Ramp Design Speed (mph):	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	7,970	6,458	8,168	6,922	8,174	6,940
Sacto Adjusted Ramp Volume:	2,211	1,391	2,353	1,511	2,359	1,529
Sacto Adjusted Freeway Volume (Downstream):	5,759	5,067	5,815	5,411	5,815	5,411
v_F (Maximum total flow approaching a major diverge area on the freeway) =	8,010	6,490	8,209	6,957	8,215	6,975
V_{R12} (Off-ramp demand flow rate (pc/h)) =	2,222	1,398	2,365	1,519	2,371	1,537
Upstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000
Upstream Freeway V/C:	0.67	0.54	0.68	0.58	0.68	0.58
Downstream Freeway Capacity:	9,600	9,600	9,600	9,600	9,600	9,600
Downstream Freeway V/C:	0.60	0.53	0.61	0.56	0.61	0.56
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	0.58	0.37	0.62	0.40	0.62	0.40
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	3,727	2,722	3,884	2,932	3,890	2,951
Density (pc/mi/ln):	17.46	14.15	17.90	15.17	17.91	15.20
V5	1,602	974	1,642	1,043	1,643	1,046
VF4eff	6,408	5,517	6,567	5,913	6,572	5,928
Level of Service:	B	B	B	B	B	B

Proportion in lanes 1,2 (P_{FD}):	0.260
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

I-5 NB on-ramp from L Street

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Single Lane On-Ramp, Enters Own Lane

Existing Upstrm Frwy Lanes / Aux. Lanes 3
Existing Dnstrm Frwy Lanes / Aux. Lanes 4

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Ramp Volume:	192	757	192	757	192	757
Ramp Design Speed (mph):	40	40	40	40	40	40
Adjusted Ramp Volume:	209	826	209	826	209	826
Service Flow Rate @ LOS "A"	0	0	0	0	0	0
Service Flow Rate @ LOS "B"	0	0	0	0	0	0
Service Flow Rate @ LOS "C"	1,400	1,400	1,400	1,400	1,400	1,400
Service Flow Rate @ LOS "D"	1,700	1,700	1,700	1,700	1,700	1,700
Service Flow Rate @ LOS "E"	2,000	2,000	2,000	2,000	2,000	2,000
Level of Service:	C	C	C	C	C	C

I-5 NB On-Ramp from I St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 8 lane freeway, 2 Lane On-Ramp (Pfm=0.209 for 2-lane ramp)

Existing Upstrm Frwy Lanes / Aux. Lanes	4
Existing Dnstrm Frwy Lanes / Aux. Lanes	5

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	5,471	4,598	5,522	5,717	5,522	5,717
Ramp Volume:	335	1,413	359	1,479	377	1,494
L_{Aeff} (Effective length of the acceleration lane, ft)	1,000	1,000	1,000	1,000	1,000	1,000
Sacto Adjusted Freeway Volume (Upstream):	5,968	5,016	6,024	6,237	6,024	6,237
Sacto Adjusted Ramp Volume:	365	1,541	392	1,613	411	1,630
V_{FO} Capacity (downstream segment capacity)	12,000	12,000	12,000	12,000	12,000	12,000
Downstream Freeway V/C:	0.53	0.55	0.53	0.65	0.54	0.66
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	1,247	1,048	1,259	1,304	1,259	1,304
V_{R12} (Maximum total flow entering the ramp, merge influence area, two-lane volume):	1,612	2,589	1,651	2,917	1,670	2,934
V_{R12} Capacity:	4,600	4,600	4,600	4,600	4,600	4,600
V_{R12} V/C:	0.35	0.56	0.36	0.63	0.36	0.64
D_R (Density of merge influence area (pc/mi/ln))	11.61	18.69	11.90	21.22	12.04	21.34
v_F (Maximum total flow approaching a major diverge area on the freeway) =	5,968	5,016	6,024	6,237	6,024	6,237
v_R (Maximum flow on a ramp) =	365	1,541	392	1,613	411	1,630
V_{FO} (Maximum total departing from a merge or diverge area on the freeway)	6,333	6,557	6,416	7,850	6,435	7,867
Level of Service:	B	B	B	C	B	C

Proportion in lanes 1,2 (P_{FM}):	0.209
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

I-5 NB Off-ramp to Richards Blvd

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 10 lane freeway, Single Lane Off-Ramp

Existing Upstrm Frwy Lanes / Aux. Lanes 5
Existing Dnstrm Frwy Lanes / Aux. Lanes 4

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	5,806	6,011	5,881	7,196	5,899	7,211
Ramp Volume:	659	349	659	349	659	349
L_D	1,000	1,000	1,000	1,000	1,000	1,000
Ramp Design Speed (mph):	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	6,334	6,557	6,416	7,850	6,435	7,867
Sacto Adjusted Ramp Volume:	719	381	719	381	719	381
Sacto Adjusted Freeway Volume (Downstream):	5,615	6,176	5,697	7,469	5,716	7,486
v_F (Maximum total flow approaching a major diverge area on the freeway) =	6,366	6,590	6,448	7,889	6,467	7,906
V_{R12} (Off-ramp demand flow rate (pc/h)) =	723	383	723	383	723	383
Upstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000
Upstream Freeway V/C:	0.53	0.55	0.54	0.66	0.54	0.66
Downstream Freeway Capacity:	9,600	9,600	9,600	9,600	9,600	9,600
Downstream Freeway V/C:	0.58	0.64	0.59	0.78	0.60	0.78
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	0.19	0.10	0.19	0.10	0.19	0.10
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	2,767	3,089	2,797	3,656	2,804	3,663
Density (pc/mi/ln):	19.05	21.82	19.31	26.69	19.37	26.75
V5	955	988	967	1,578	970	1,581
VF4eff	5,411	5,601	5,481	6,311	5,497	6,325
Level of Service:	B	C	B	C	B	C

Proportion in lanes 1,2 (P_{FD}):	0.436
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

I-5 NB On-Ramp from Richards Blvd

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Single Lane On-Ramp, Enters Own Lane

Existing Upstrm Frwy Lanes / Aux. Lanes 4
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Ramp Volume:	499	1,458	499	1,458	499	1,458
Ramp Design Speed (mph):	40	40	40	40	40	40
Adjusted Ramp Volume:	544	1,591	544	1,591	544	1,591
Service Flow Rate @ LOS "A"	0	0	0	0	0	0
Service Flow Rate @ LOS "B"	0	0	0	0	0	0
Service Flow Rate @ LOS "C"	1,400	1,400	1,400	1,400	1,400	1,400
Service Flow Rate @ LOS "D"	1,700	1,700	1,700	1,700	1,700	1,700
Service Flow Rate @ LOS "E"	2,000	2,000	2,000	2,000	2,000	2,000
Level of Service:	C	D	C	D	C	D

I-5 SB On-Ramp from Richards Blvd

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Single Lane On-Ramp, Enters Own Lane

Existing Upstrm Frwy Lanes / Aux. Lanes 4
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing Without Project		Baseline Without Project		Baseline Without Project	
	AM	PM	AM	PM	AM	PM
Ramp Volume:	476	771	476	771	476	771
Ramp Design Speed (mph):	40	40	40	40	40	40
Adjusted Ramp Volume:	519	841	519	841	519	841
Service Flow Rate @ LOS "A"	0	0	0	0	0	0
Service Flow Rate @ LOS "B"	0	0	0	0	0	0
Service Flow Rate @ LOS "C"	1,400	1,400	1,400	1,400	1,400	1,400
Service Flow Rate @ LOS "D"	1,700	1,700	1,700	1,700	1,700	1,700
Service Flow Rate @ LOS "E"	2,000	2,000	2,000	2,000	2,000	2,000
Level of Service:	C	C	C	C	C	C

I-5 SB off-ramp to J St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Major Diverge, 2 Lane Off-Ramp, P_{FD}=0.260

Existing Upstrm Frwy Lanes / Aux. Lanes 5
Existing Dnstrm Frwy Lanes / Aux. Lanes 4

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	8,104	6,568	8,600	6,857	8,606	6,876
Ramp Volume:	1,667	273	1,993	576	1,999	595
Ramp Design Speed (mph):	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	8,841	7,165	9,382	7,480	9,389	7,501
Sacto Adjusted Ramp Volume:	1,819	298	2,174	628	2,181	649
Sacto Adjusted Freeway Volume (Downstream):	7,022	6,867	7,208	6,852	7,208	6,852
v_F (Maximum total flow approaching a major diverge area on the freeway) =	8,885	7,201	9,429	7,517	9,436	7,539
V_{R12} (Off-ramp demand flow rate (pc/h)) =	1,828	299	2,185	631	2,192	652
Upstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000
Upstream Freeway V/C:	0.74	0.60	0.79	0.63	0.79	0.63
Downstream Freeway Capacity:	9,600	9,600	9,600	9,600	9,600	9,600
Downstream Freeway V/C:	0.73	0.72	0.75	0.71	0.75	0.71
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	0.48	0.08	0.57	0.17	0.58	0.17
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	3,663	2,094	4,068	2,422	4,075	2,443
Density (pc/mi/ln):	19.37	15.70	20.56	16.39	20.57	16.43
V5	1,777	1,440	1,886	1,503	1,887	1,508
VF4eff	7,108	5,761	7,543	6,014	7,549	6,031
Level of Service:	B	B	C	B	C	B

Proportion in lanes 1,2 (P_{FD}):	0.260
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

I-5 SB On-Ramp from I Street

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Single Lane On-Ramp, Enters Own Lane

Existing Upstrm Frwy Lanes / Aux. Lanes 4
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Ramp Volume:	288	1,047	297	1,075	313	1,088
Ramp Design Speed (mph):	40	40	40	40	40	40
Adjusted Ramp Volume:	314	1,142	324	1,173	341	1,187
Service Flow Rate @ LOS "A"	0	0	0	0	0	0
Service Flow Rate @ LOS "B"	0	0	0	0	0	0
Service Flow Rate @ LOS "C"	1,400	1,400	1,400	1,400	1,400	1,400
Service Flow Rate @ LOS "D"	1,700	1,700	1,700	1,700	1,700	1,700
Service Flow Rate @ LOS "E"	2,000	2,000	2,000	2,000	2,000	2,000
Level of Service:	C	C	C	C	C	C

I-5 SB Off-ramp to Q Street

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 10 lane freeway, Single Lane Off-Ramp

Existing Upstrm Frwy Lanes / Aux. Lanes	5
Existing Dnstrm Frwy Lanes / Aux. Lanes	5

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	6,725	7,342	6,904	7,356	6,920	7,369
Ramp Volume:	747	1,193	1,058	1,320	1,058	1,320
L_D	1,000	1,000	1,000	1,000	1,000	1,000
Ramp Design Speed (mph):	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	7,336	8,009	7,532	8,025	7,549	8,039
Sacto Adjusted Ramp Volume:	815	1,301	1,154	1,440	1,154	1,440
Sacto Adjusted Freeway Volume (Downstream):	6,521	6,708	6,378	6,585	6,395	6,599
v_F (Maximum total flow approaching a major diverge area on the freeway) =	7,373	8,049	7,570	8,065	7,587	8,079
V_{R12} (Off-ramp demand flow rate (pc/h)) =	819	1,308	1,160	1,447	1,160	1,447
Upstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000
Upstream Freeway V/C:	0.61	0.67	0.63	0.67	0.63	0.67
Downstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000
Downstream Freeway V/C:	0.54	0.56	0.53	0.55	0.53	0.55
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	0.22	0.34	0.31	0.38	0.31	0.38
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	3,676	4,247	3,954	4,333	3,962	4,339
Density (pc/mi/ln):	26.87	31.77	29.26	32.51	29.32	32.57
V5	1,475	1,610	1,514	1,613	1,517	1,616
VF4eff	5,898	6,439	6,056	6,452	6,069	6,463
Level of Service:	C	D	D	D	D	D

Proportion in lanes 1,2 (P_{FD}):	0.436
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

I-5 SB off-ramp to US 50

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Major Diverge, 2 Lane Off-Ramp

Existing Upstrm Frwy Lanes / Aux. Lanes	5
Existing Dnstrm Frwy Lanes / Aux. Lanes	3

	Existing Without Project		Baseline Without Project		Baseline Without Project	
	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	5,978	6,149	5,846	6,036	5,862	6,049
Ramp Volume:	3,809	4,301	3,809	4,301	3,815	4,306
Ramp Design Speed (mph):	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	6,521	6,708	6,377	6,585	6,395	6,599
Sacto Adjusted Ramp Volume:	4,155	4,692	4,155	4,692	4,162	4,697
Sacto Adjusted Freeway Volume (Downstream):	2,366	2,016	2,222	1,893	2,233	1,902
v_F (Maximum total flow approaching a major diverge area on the freeway) =	6,554	6,742	6,409	6,618	6,427	6,632
V_{R12} (Off-ramp demand flow rate (pc/h)) =	4,176	4,715	4,176	4,715	4,183	4,720
Upstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000
Upstream Freeway V/C:	0.55	0.56	0.53	0.55	0.54	0.55
Downstream Freeway Capacity:	7,200	7,200	7,200	7,200	7,200	7,200
Downstream Freeway V/C:	0.33	0.28	0.31	0.26	0.31	0.26
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	1.10	1.24	1.10	1.24	1.10	1.24
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	4,794	5,242	4,756	5,210	4,766	5,217
Density (pc/mi/ln):	14.29	14.70	13.97	14.43	14.01	14.46
V5	983	1,011	961	993	964	995
VF4eff	5,571	5,730	5,448	5,625	5,463	5,637
Level of Service:	F	F	F	F	F	F

Proportion in lanes 1,2 (P_{FD}):	0.260
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

US 50 EB On-Ramp from I-5

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 12 lane freeway, 3 Lane On-Ramp

Existing Upstrm Frwy Lanes / Aux. Lanes 3
Existing Dnstrm Frwy Lanes / Aux. Lanes 6

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	3,176	1,434	3,197	1,446	3,197	1,446
Ramp Volume:	5,007	4,900	5,081	4,995	5,081	4,995
L_{Aeff} (Effective length of the acceleration lane, ft)	1,000	1,000	1,000	1,000	1,000	1,000
Sacto Adjusted Freeway Volume (Upstream):	3,465	1,564	3,488	1,577	3,488	1,577
Sacto Adjusted Ramp Volume:	5,462	5,345	5,543	5,449	5,543	5,449
V_{FO} Capacity (downstream segment capacity)	14,400	14,400	14,400	14,400	14,400	14,400
Downstream Freeway V/C:	0.62	0.48	0.63	0.49	0.63	0.49
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	724	327	729	330	729	330
V_{R12} (Maximum total flow entering the ramp, merge influence area, two-lane volume):	6,186	5,672	6,272	5,779	6,272	5,779
V_{R12} Capacity:	4,600	4,600	4,600	4,600	4,600	4,600
V_{R12} V/C:	1.34	1.23	1.36	1.26	1.36	1.26
D_R (Density of merge influence area (pc/mi/ln))	44.94	40.99	45.58	41.77	45.58	41.77
v_F (Maximum total flow approaching a major diverge area on the freeway) =	3,465	1,564	3,488	1,577	3,488	1,577
v_R (Maximum flow on a ramp) =	5,462	5,345	5,543	5,449	5,543	5,449
V_{FO} (Maximum total departing from a merge or diverge area on the freeway)	8,927	6,909	9,031	7,026	9,031	7,026
Level of Service:	F	F	F	F	F	F

Proportion in lanes 1,2 (P_{FM}):	0.209
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

US 50 EB Off-ramp to 15th St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Major Diverge, 1 Lane Off-Ramp, P_{FD}=0.260

Existing Upstrm Frwy Lanes / Aux. Lanes 6
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	8,183	6,334	8,278	6,441	8,278	6,441
Ramp Volume:	649	676	649	676	649	676
L_D	1,000	1,000	1,000	1,000	1,000	1,000
Ramp Design Speed (mph):	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	8,927	6,910	9,031	7,027	9,031	7,027
Sacto Adjusted Ramp Volume:	708	737	708	737	708	737
Sacto Adjusted Freeway Volume (Downstream):	8,219	6,173	8,323	6,290	8,323	6,290
v_F (Maximum total flow approaching a major diverge area on the freeway) =	8,972	6,945	9,076	7,062	9,076	7,062
V_{R12} (Off-ramp demand flow rate (pc/h)) =	712	741	712	741	712	741
Upstream Freeway Capacity:	14,400	14,400	14,400	14,400	14,400	14,400
Upstream Freeway V/C:	0.62	0.48	0.63	0.49	0.63	0.49
Downstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000
Downstream Freeway V/C:	0.68	0.51	0.69	0.52	0.69	0.52
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	0.19	0.19	0.19	0.19	0.19	0.19
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	4,313	3,446	4,359	3,497	4,359	3,497
Density (pc/mi/ln):	32.34	24.88	32.74	25.32	32.74	25.32
V5-6	1,495	868	1,513	1,177	1,513	1,177
VF4eff	7,476	6,076	7,563	5,885	7,563	5,885
Level of Service:	D	C	D	C	D	C

Proportion in lanes 1,2 (P_{FD}):	0.436
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

US 50 EB On-Ramp from 10th St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 10 lane freeway, 1 Lane On-Ramp (Exhibit 25-5, Eq4)

Existing Upstrm Frwy Lanes / Aux. Lanes	5
Existing Dnstrm Frwy Lanes / Aux. Lanes	5

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	7,534	5,658	7,629	5,765	7,629	5,765
Ramp Volume:	785	745	836	1,030	836	1,030
L_{Aeff} (Effective length of the acceleration lane, ft)	1,000	1,000	1,000	1,000	1,000	1,000
Sacto Adjusted Freeway Volume (Upstream):	8,219	6,172	8,323	6,289	8,323	6,289
Sacto Adjusted Ramp Volume:	856	813	912	1,124	912	1,124
V_{FO} Capacity (downstream segment capacity)	12,000	12,000	12,000	12,000	12,000	12,000
Downstream Freeway V/C:	0.49	0.39	0.50	0.40	0.50	0.40
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	1,718	1,290	1,740	1,314	1,740	1,314
V_{R12} (Maximum total flow entering the ramp, merge influence area, two-lane volume):	2,574	2,103	2,652	2,438	2,652	2,438
V_{R12} Capacity:	4,600	4,600	4,600	4,600	4,600	4,600
V_{R12} V/C:	0.56	0.46	0.58	0.53	0.58	0.53
D_R (Density of merge influence area (pc/mi/ln))	18.89	15.23	19.47	17.70	19.47	17.70
v_F (Maximum total flow approaching a major diverge area on the freeway) =	8,219	6,172	8,323	6,289	8,323	6,289
v_R (Maximum flow on a ramp) =	856	813	912	1,124	912	1,124
V_{FO} (Maximum total departing from a merge or diverge area on the freeway)	6,733	6,985	6,863	7,413	6,863	7,413
V5	2,342	1,481	2,372	1,509	2,372	1,509
VF4eff	5,877	4,691	5,951	4,780	5,951	4,780
Level of Service:	B	B	B	B	B	B

Proportion in lanes 1,2 (P_{FM}):	0.209
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

US 50 WB off-ramp to 10th St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 10 lane freeway, Single Lane Off-Ramp

Existing Upstrm Frwy Lanes / Aux. Lanes 5
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	6,483	6,058	6,854	6,281	6,854	6,281
Ramp Volume:	928	349	1,209	424	1,209	424
L_D	1,000	1,000	1,000	1,000	1,000	1,000
Ramp Design Speed (mph):	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	7,072	6,609	7,477	6,852	7,477	6,852
Sacto Adjusted Ramp Volume:	1,012	381	1,319	463	1,319	463
Sacto Adjusted Freeway Volume (Downstream):	6,060	6,228	6,158	6,389	6,158	6,389
v_F (Maximum total flow approaching a major diverge area on the freeway) =	7,107	6,642	7,514	6,886	7,514	6,886
V_{R12} (Off-ramp demand flow rate (pc/h)) =	1,017	383	1,326	465	1,326	465
Upstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000
Upstream Freeway V/C:	0.59	0.55	0.63	0.57	0.63	0.57
Downstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000
Downstream Freeway V/C:	0.51	0.52	0.51	0.53	0.51	0.53
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	0.27	0.10	0.35	0.12	0.35	0.12
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	3,672	3,112	4,024	3,265	4,024	3,265
Density (pc/mi/ln):	26.83	22.01	29.86	23.33	29.86	23.33
V5	1,421	996	1,503	1,033	1,503	1,033
VF4eff	5,686	5,646	6,012	5,853	6,012	5,853
Level of Service:	C	C	D	C	D	C

Proportion in lanes 1,2 (P_{FD}):	0.436
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

US50 WB On-Ramp from 15th St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 10 lane freeway, 1 Lane On-Ramp

Existing Upstrm Frwy Lanes / Aux. Lanes	5
Existing Dnstrm Frwy Lanes / Aux. Lanes	6

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	5,555	5,709	5,645	5,857	5,645	5,857
Ramp Volume:	474	666	479	673	479	673
L_{Aeff} (Effective length of the acceleration lane, ft)	1,000	1,000	1,000	1,000	1,000	1,000
Sacto Adjusted Freeway Volume (Upstream):	6,060	6,228	6,158	6,389	6,158	6,389
Sacto Adjusted Ramp Volume:	517	727	523	734	523	734
V_{FO} Capacity (downstream segment capacity)	14,400	14,400	14,400	14,400	14,400	14,400
Downstream Freeway V/C:	0.46	0.48	0.46	0.49	0.46	0.49
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	3,181	3,269	3,232	3,353	3,232	3,353
V_{R12} (Maximum total flow entering the ramp, merge influence area, two-lane volume):	3,698	3,996	3,755	4,087	3,755	4,087
V_{R12} Capacity:	4,600	4,600	4,600	4,600	4,600	4,600
V_{R12} V/C:	0.80	0.87	0.82	0.89	0.82	0.89
D_R (Density of merge influence area (pc/mi/ln))	27.81	30.04	28.25	30.75	28.25	30.75
v_F (Maximum total flow approaching a major diverge area on the freeway) =	6,060	6,228	6,158	6,389	6,158	6,389
v_R (Maximum flow on a ramp) =	517	727	523	734	523	734
V_{FO} (Maximum total departing from a merge or diverge area on the freeway)	6,577	6,955	6,681	7,123	6,681	7,123
V5	1,454	1,495	1,478	1,533	1,478	1,533
VF4eff	4,606	4,733	4,680	4,856	4,680	4,856
Level of Service:	C	D	D	D	D	D

Proportion in lanes 1,2 (P_{FM}):	0.525
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5
FFS on-ramp (miles/hr)	30

US 50 WB Off-ramp to I-5

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Major Diverge, 2 Lane Off-Ramp, P_{FD}=0.260

Existing Upstrm Frwy Lanes / Aux. Lanes 6
Existing Dnstrm Frwy Lanes / Aux. Lanes 4

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	6,029	6,375	6,124	6,530	6,124	6,530
Ramp Volume:	3,853	3,276	3,934	3,404	3,934	3,404
Ramp Design Speed (mph):	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	6,577	6,955	6,681	7,124	6,681	7,124
Sacto Adjusted Ramp Volume:	4,203	3,574	4,292	3,713	4,292	3,713
Sacto Adjusted Freeway Volume (Downstream):	2,374	3,381	2,389	3,411	2,389	3,411
v_F (Maximum total flow approaching a major diverge area on the freeway) =	6,610	6,990	6,714	7,160	6,714	7,160
V_{R12} (Off-ramp demand flow rate (pc/h)) =	4,224	3,592	4,313	3,732	4,313	3,732
Upstream Freeway Capacity:	14,400	14,400	14,400	14,400	14,400	14,400
Upstream Freeway V/C:	0.40	0.42	0.41	0.41	0.41	0.41
Downstream Freeway Capacity:	9,600	9,600	9,600	9,600	9,600	9,600
Downstream Freeway V/C:	0.25	0.35	0.25	0.36	0.25	0.36
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	1.11	0.95	1.14	0.98	1.14	0.98
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	5,264	5,073	5,360	5,226	5,360	5,226
Density (pc/mi/ln):	12.01	12.70	12.20	13.01	12.20	13.01
V5-6	826	874	839	1,193	839	1,193
VF4eff	5,784	6,116	5,875	5,966	5,875	5,966
Level of Service:	F	B	F	B	F	B

Proportion in lanes 1,2 (P_{FD}):	0.436
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

US-50 EB On-Ramp from 16th St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Single Lane On-Ramp, Enters Own Lane

Existing Upstrm Frwy Lanes / Aux. Lanes 5
Existing Dnstrm Frwy Lanes / Aux. Lanes 6

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Ramp Volume:	656	682	688	769	699	784
Ramp Design Speed (mph):	40	40	40	40	40	40
Adjusted Ramp Volume:	716	744	751	839	763	856
Service Flow Rate @ LOS "A"	0	0	0	0	0	0
Service Flow Rate @ LOS "B"	0	0	0	0	0	0
Service Flow Rate @ LOS "C"	1,400	1,400	1,400	1,400	1,400	1,400
Service Flow Rate @ LOS "D"	1,700	1,700	1,700	1,700	1,700	1,700
Service Flow Rate @ LOS "E"	2,000	2,000	2,000	2,000	2,000	2,000
Level of Service:	C	C	C	C	C	C

US 50 EB Off-ramp to Hwy 51

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Major Diverge, 2 Lane Off-Ramp, P_{FD}=0.260

Existing Upstrm Frwy Lanes / Aux. Lanes 6
Existing Dnstrm Frwy Lanes / Aux. Lanes 4

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	8,975	7,085	9,153	7,564	9,164	7,579
Ramp Volume:	2,674	2,983	2,796	3,265	2,801	3,272
Ramp Design Speed (mph):	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	9,791	7,729	9,985	8,252	9,997	8,268
Sacto Adjusted Ramp Volume:	2,917	3,254	3,050	3,562	3,055	3,569
Sacto Adjusted Freeway Volume (Downstream):	6,874	4,475	6,935	4,690	6,942	4,699
v_F (Maximum total flow approaching a major diverge area on the freeway) =	9,840	7,768	10,035	8,293	10,047	8,309
V_{R12} (Off-ramp demand flow rate (pc/h)) =	2,932	3,270	3,065	3,580	3,070	3,587
Upstream Freeway Capacity:	14,400	14,400	14,400	14,400	14,400	14,400
Upstream Freeway V/C:	0.68	0.54	0.70	0.58	0.70	0.58
Downstream Freeway Capacity:	9,600	9,600	9,600	9,600	9,600	9,600
Downstream Freeway V/C:	0.72	0.47	0.72	0.49	0.72	0.49
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	0.77	0.86	0.81	0.94	0.81	0.94
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	5,944	5,231	6,104	5,635	6,112	5,646
Density (pc/mi/ln):	17.88	14.11	18.23	15.07	18.25	15.10
V5-6	1,640	1,295	1,672	1,382	1,674	1,385
VF4eff	8,200	6,473	8,362	6,911	8,372	6,924
Level of Service:	B	B	B	B	B	B

Proportion in lanes 1,2 (P_{FD}):	0.436
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

US-50 WB On-Ramp from Hwy51

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 8 lane freeway, 2 Lane On-Ramp (Pfm=0.209 for 2-lane ramp)

Existing Upstrm Frwy Lanes / Aux. Lanes 4
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	3,637	3,250	4,065	3,447	4,068	3,457
Ramp Volume:	1,243	1,633	1,278	1,700	1,278	1,700
L_{Aeff} (Effective length of the acceleration lane, ft)	1,000	1,000	1,000	1,000	1,000	1,000
Sacto Adjusted Freeway Volume (Upstream):	3,968	3,545	4,435	3,760	4,438	3,771
Sacto Adjusted Ramp Volume:	1,356	1,781	1,394	1,855	1,394	1,855
V_{FO} Capacity (downstream segment capacity)	12,000	12,000	12,000	12,000	12,000	12,000
Downstream Freeway V/C:	0.44	0.44	0.49	0.47	0.49	0.47
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	829	741	927	786	928	788
V_{R12} (Maximum total flow entering the ramp, merge influence area, two-lane volume):	2,185	2,522	2,321	2,641	2,322	2,643
V_{R12} Capacity:	4,600	4,600	4,600	4,600	4,600	4,600
V_{R12} V/C:	0.48	0.55	0.50	0.57	0.50	0.57
D_R (Density of merge influence area (pc/mi/ln))	15.62	18.06	16.67	18.95	16.68	18.97
v_F (Maximum total flow approaching a major diverge area on the freeway) =	3,968	3,545	4,435	3,760	4,438	3,771
v_R (Maximum flow on a ramp) =	1,356	1,781	1,394	1,855	1,394	1,855
V_{FO} (Maximum total departing from a merge or diverge area on the freeway)	5,324	5,326	5,829	5,615	5,832	5,626
Level of Service:	B	B	B	B	B	B

Proportion in lanes 1,2 (P_{FM}):	0.209
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

US 50 WB off-ramp to 16th St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 10 lane freeway, Single Lane Off-Ramp

Existing Upstrm Frwy Lanes / Aux. Lanes 6
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing Without Project		Baseline Without Project		Baseline With Project	
	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	7,363	6,725	7,826	6,989	7,832	7,006
Ramp Volume:	880	667	972	708	978	725
L_D	1,000	1,000	1,000	1,000	1,000	1,000
Ramp Design Speed (mph):	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	8,032	7,336	8,537	7,624	8,544	7,643
Sacto Adjusted Ramp Volume:	960	728	1,060	772	1,067	791
Sacto Adjusted Freeway Volume (Downstream):	7,072	6,608	7,477	6,852	7,477	6,852
v_F (Maximum total flow approaching a major diverge area on the freeway) =	8,072	7,373	8,580	7,662	8,587	7,681
V_{R12} (Off-ramp demand flow rate (pc/h)) =	965	732	1,065	776	1,072	795
Upstream Freeway Capacity:	14,400	14,400	14,400	14,400	14,400	14,400
Upstream Freeway V/C:	0.56	0.51	0.60	0.53	0.60	0.53
Downstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000
Downstream Freeway V/C:	0.59	0.55	0.62	0.57	0.62	0.57
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	0.25	0.19	0.28	0.20	0.28	0.21
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	4,064	3,627	4,342	3,778	4,349	3,797
Density (pc/mi/ln):	30.20	26.45	32.59	27.75	32.65	27.91
V5-6	1,345	1,229	1,430	1,277	1,431	1,280
VF4eff	6,727	6,144	7,150	6,385	7,156	6,401
Level of Service:	D	C	D	C	D	C

Proportion in lanes 1,2 (P_{FD}):	0.436
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

APPENDIX H
SACRAMENTO DOWNTOWN TRAFFIC STUDY

Sacramento Downtown Traffic Study

Prepared for:
City of Sacramento

Submitted by:

Dowling Associates, Inc.
Transportation Engineering • Planning • Research • Education

180 Grand Avenue, Suite 250
Oakland, CA 94612
Phone: (510) 839-1742; Fax: (510) 839-0871
www.dowlinginc.com
Contact: Mark Bowman

June 22, 2006

June 22, 2006

Ms. Samar Hajeer
City of Sacramento
Development Engineering & Finance Division
1231 I Street, Suite 200
Sacramento, CA 95814

Subject: Sacramento Downtown Traffic Study [P5003.6]

Dear Samar:

We are pleased to submit the revised draft report for the Sacramento Downtown Traffic Study. The report was revised to account for new land uses of the 800 K Street project.

This study is intended to provide a stand-alone assessment of the cumulative impacts of a large number of projects currently proposed for Downtown. The study is also intended to provide an assessment of baseline and cumulative conditions that will be used as a common basis for the assessment of project impacts for each of the proposed projects.

Please let me know if you have any questions or comments.

Sincerely,

Dowling Associates, Inc.

[Sent via email]

Mark Bowman

Principal

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Introduction

The Sacramento Downtown Traffic Study was prepared to assist the City staff in the assessment of transportation impacts for projects planned in Downtown Sacramento. The study evaluated existing conditions, baseline conditions expected to occur after development of Downtown projects already approved, and the cumulative impacts of all nine proposed projects in combination with other growth expected to occur in the region. The study evaluated two cumulative horizon years: a near-term 2013 horizon and a long-term 2030 horizon.

The elements of the Downtown Traffic Study are expected to provide a common basis for project-specific studies that will be conducted for each of the nine projects in compliance with the California Environmental Quality Act (CEQA).

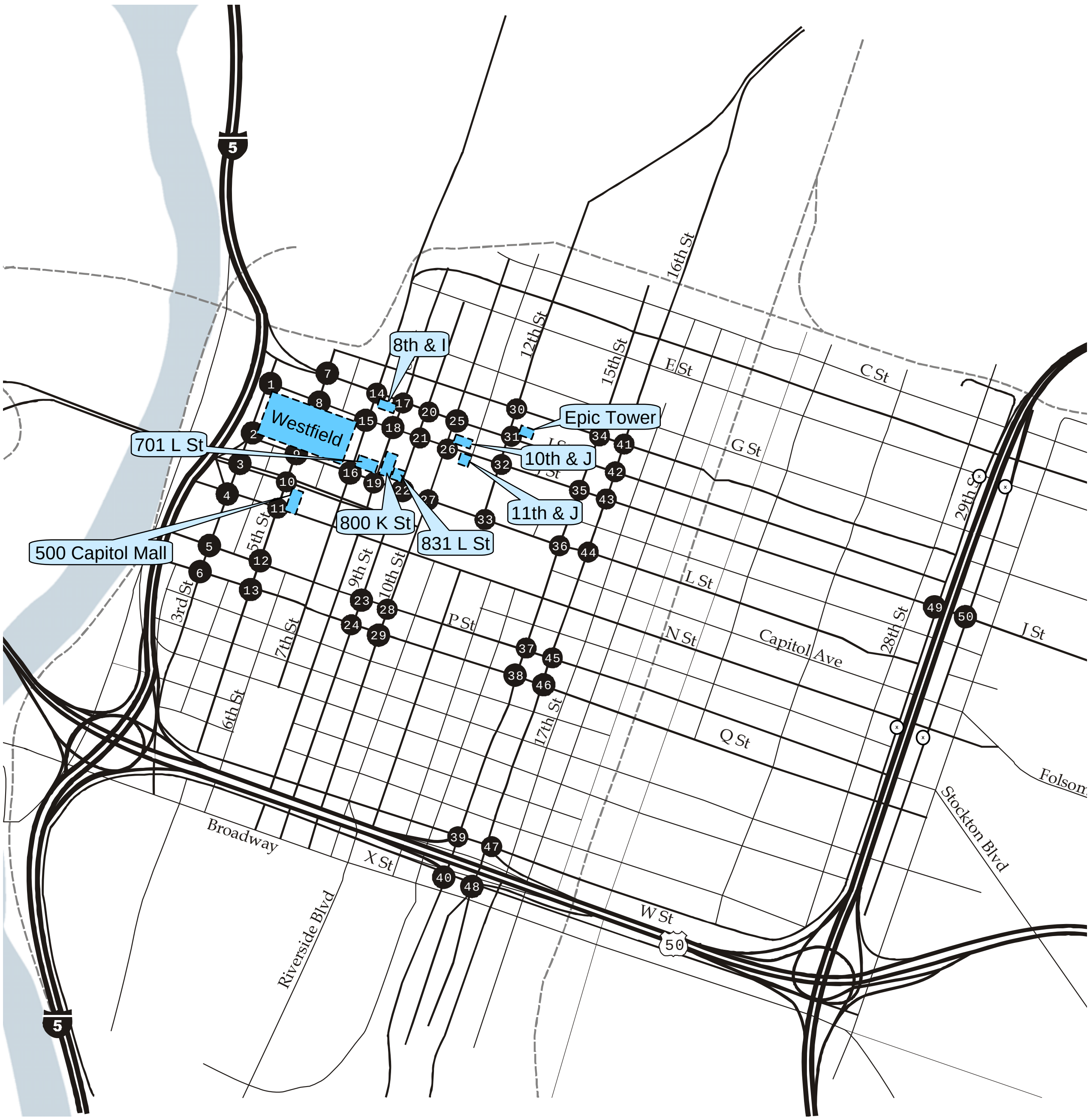
Project Description

The Downtown Traffic Study analyzed the cumulative impacts of nine proposed developments. Each of the proposed developments is briefly described below. An area map showing the location of the proposed Downtown development projects is provided in Figure 1.

800 K Street

Located along the east side of 8th Street between K and L Streets, the proposed 800 K Street project would include 300,000 square feet of office space, 17,730 square feet of retail area, 300 condominium units, and 722 parking spaces. Both the residential tower and the office tower would be positioned above ground floor retail. Access to both towers would be provided from 8th and 9th Streets and the alley that connects them.

Existing land uses on the site include 17,600 square feet of functional retail space and 26 occupied apartment units, all of which would be replaced by the proposed project.



KEY

40 = Study intersection

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

Figure 1
LOCATIONS OF PROPOSED PROJECTS

831 L Street (9th & L)

The 831 L Street project (sometimes referred to as the 9th & L Street project) is proposed at the corner of 9th and L Streets, just east of the 800 K Street project. The project would include 140,000 square feet of office space, 10,000 square feet of ground level retail area, and 510 parking spaces. Access to the site would be provided by a two-way driveway at L Street and an exit-only driveway at 9th Street. The existing office space on the project site is currently vacant.

Westfield Shoppingtown Downtown Plaza Expansion

The proposed Westfield Downtown Plaza expansion would reconfigure the existing buildings bounded by J Street, L Street, 3rd Street, and 7th Street to accommodate the addition of a new 150,000 square-foot discount anchor store and multi-screen movie theater and reconfiguration of retail space and food court areas. The new uses would replace 61,000 square feet of existing office space, 30,000 square feet of retail space, and the existing movie theater. No changes are proposed to the existing 4,000-space parking facility nor would existing access to the

500 Capitol Mall

The proposed 500 Capitol Mall project is located on the east side of 5th Street between Capitol Mall and N Street and would provide 503,000 square feet of office space, 15,200 square feet of retail area, a 20,200 square-foot restaurant, and 716 parking spaces. Vehicular access would be provided on 5th for retail and restaurant parking and on N Street for office parking. The existing bank building on the project site is currently vacant.

The Metropolitan (10th & J)

The Metropolitan project (sometimes referred to as the 10th & J Street project) lies along the north side of J Street between 10th and 11th Streets. The Metropolitan project would include 340 residential units, 13,000 square feet of retail space, and 545 parking spaces. Vehicular access is through an alleyway that provides access to 10th and 11th Streets at the north edge of the site. The existing 43,000 square feet of office space on the site would be replaced by the proposed project.

Cathedral Square (11th & J)

Located at the southwest corner of J and 11th Street, the Cathedral Square project (sometimes referred to as the 11th & J Street project) would include 242 condominium units, 7,290 square feet of ground level retail space, and 350 parking spaces. Vehicular access to 10th and 11th Streets would be provided via an existing one-way alley on the south side of the site. The alley would be converted to two-way operations between the project driveway and 11th Street.

Existing land uses on the site include 12,810 square feet of functional retail space and 11,530 square feet of storage space that would be replaced by the proposed project.

Epic Tower

The proposed Epic Tower project would be located at the northeast corner of 12th and I Streets. The project would contain 39,000 square feet of office space, 26,850 square feet of retail area, 354 condominium units, and 413 parking spaces. Vehicular access would be provided directly to I Street and to 12th and 13th Streets through an north of the site. The existing 118-space parking lot on the site would be replaced by the proposed project.

701 L Street

The 701 L Street project, located on the north side of L Street between 7th and 8th Streets, would provide 240,000 square feet of office space, 10,500 square feet of retail area, 80 apartment units, and 570 parking spaces. Vehicular access for the residential parking area would be provided to 7th and 8th Streets via an alley north of the site. Access for the office parking area would be provided directly to L Street. The existing Greyhound bus station would be replaced by the proposed project.[1]

The Library Lofts (8th & I)

On the south side of I Street between 7th and 8th Streets, The Library Lofts project (sometimes referred to as the 8th & I Street project) would provide 295 residential units, 30,000 square feet of office space, 5,000 square feet of retail area, and 450 parking spaces. Vehicular access to/from its parking facility would be provided directly to 8th Street. The vacant former Bank of American building would be replaced by the proposed project.

Environmental Setting

The existing roadway, transit, bicycle and pedestrian components of the transportation system within the study area are described below.

[1] The eventual location of the bus station is not known but is assumed to remain downtown at a nearby location. No adjustment in traffic was made for displacement of the bus station.

Existing Roadway Network

Regional vehicular access to Downtown Sacramento is provided primarily by the freeway system that serves the central areas of Sacramento. Interstate 5 (I-5) is a north-south facility located just west of Downtown. Access from Downtown to I-5 is provided via I, L and P Streets, and access from I-5 to Downtown is provided via J and Q Streets. To the south, I-5 provides access to southern portions of the City and County, as well as other Central Valley communities. To the north, I-5 provides access to I-80, northern portions of the City and County, Sacramento International Airport, and other Central Valley communities.

The east-west U.S. Route 50 (U.S. 50) lies approximately 1.5 miles south of Downtown. Access to U.S. 50 from Downtown is provided via 9th and 15th Streets to the 11th and 16th Street on-ramps. Access from U.S. 50 to Downtown is provided from the 16th and 10th Street off-ramps. To the east, U.S. 50 serves eastern portions of the City and County and extends into El Dorado County. To the west, U.S. 50 extends via the Pioneer Bridge to West Sacramento and Yolo County.

Business Loop Interstate 80 (Business 80), also known as State Route 51 between US 50 and Auburn Avenue, lies approximately 2 miles east of Downtown. Although access between Downtown and Business 80 is available at several locations along the east edge of Central City, more direct access to Business 80 is provided via State Route 160 (SR 160) and the 12th and 16th Street crossings of the American River. SR 160 provides access to North Sacramento, northeastern portions of the City and County, South Natomas via Northgate Boulevard, and I-80 extending into Placer County.

Downtown Sacramento is served by a grid street system. North-south streets have numbered street names and east-west streets have lettered street names. Near Downtown, many streets operate as one-way facilities. In general, the one-way streets carry three travel lanes, with parking permitted along both curbs. Two-way streets generally have one lane in each direction with parking on both sides of the street. To accommodate critical traffic volumes and turning movements in selected locations, parking has been prohibited to provide additional lanes. Most major intersections in Downtown are signal-controlled.

Important east-west streets for Downtown access include H, J, N, Q, and X Streets, which are one-way eastbound, and I, L, P, and W Streets, which are one-way westbound. Capitol Mall is a two-way east-west facility that extends from the Tower Bridge to the State Capitol at 10th Street. Capitol Mall has two to three lanes in each direction between the Tower Bridge and 9th Street, separated by a grass median. Between 9th and 10th Streets, the roadway includes a mid-block traffic circle.

Important north-south streets for Downtown access include 3rd, 7th, 9th, 12th, and 15th Streets, which are one-way southbound (except for a portion of 3rd street between L and J Street) and 5th, 8th, 10th, and 16th Streets, which are one-way northbound (except for a portion of 5th Street between J and L Streets.

Existing Transit System

The Sacramento Regional Transit District (RT) provides extensive bus and light rail services in the Downtown area, as shown in Figure 2, and throughout the city. A number of other transit services connect Downtown Sacramento with neighboring communities. Such services are provided by El Dorado Transit, Folsom Stage Lines, Roseville Transit, San Joaquin Regional Transit District, Vallejo Transit, Yolobus, Yuba-Sutter Transit. Amtrak provides train service from its Downtown depot at 4th and I Street and Greyhound Lines, and limousine and taxi services provide additional transit services to the downtown.

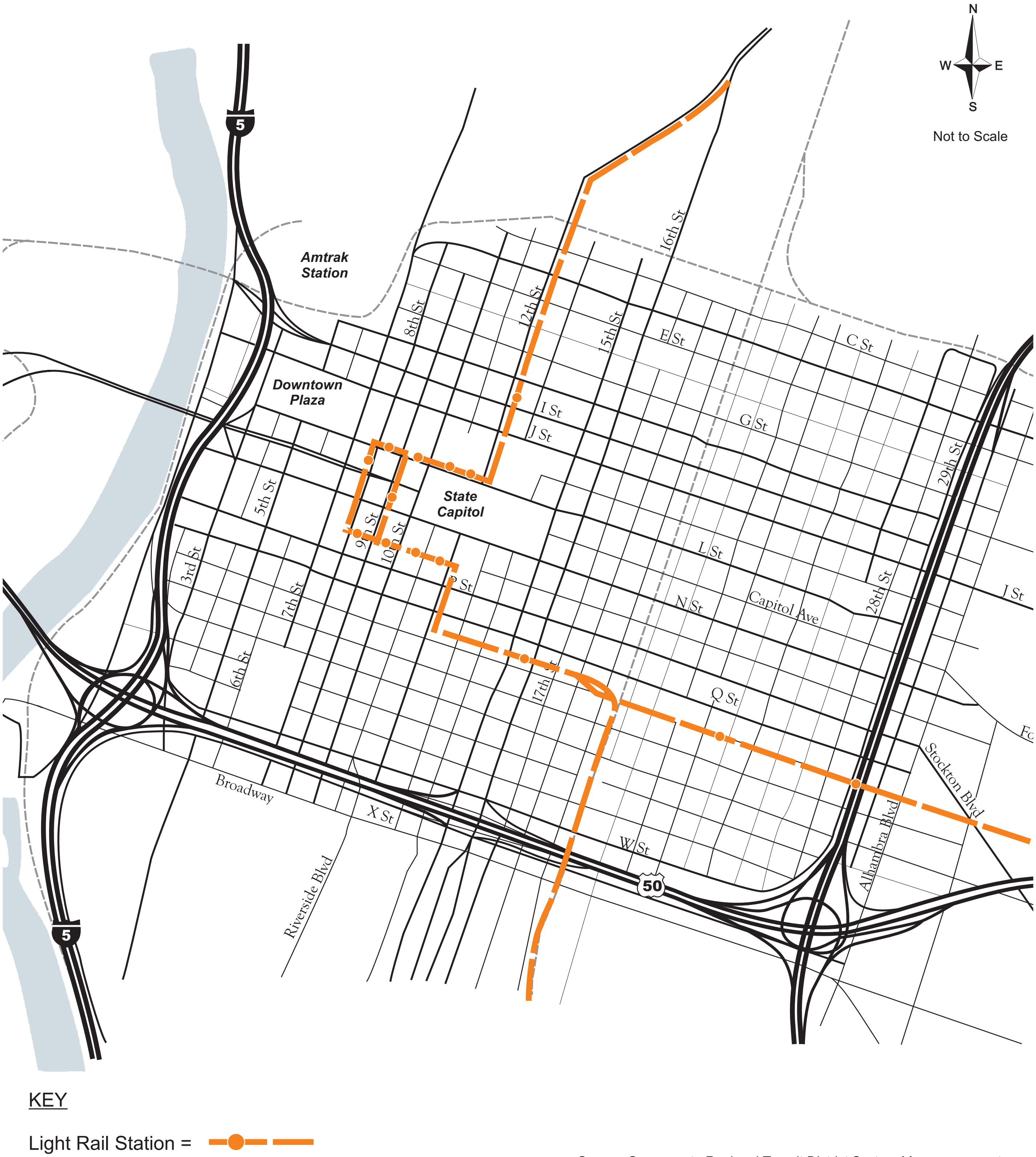
Regional Transit (RT)

Regional Transit is the major transit provider within Sacramento County, providing light rail service and fixed-route bus service on more than 70 routes. Light rail service and many of the bus routes are oriented to the downtown area. Downtown access is provided to and from all areas served by RT. Current light rail service extends from the downtown area to the Watt / I-80 station to the northeast and to the Mather Field / Mills Station to the east. Thirty stations are located along the line. Transit schedules are synchronized to provide "timed transfers" between bus routes and light rail at several stations. Many suburban stations include park-and-ride facilities. Light rail operates at 15 minute headways daily and on weekends, and at a 30-minute headway during the evening.

In addition to light rail service, many bus routes serve the downtown area within walking distance of the project site. Regular bus service is provided at a convenient walking distance to all proposed project sites.

Other Transit Services

Other transit operators provide service to Downtown, consisting primarily of peak-period services designed to accommodate the commuter. El Dorado Transit operates commuter service from Placerville, Shingle Springs, Cameron Park, El Dorado Hills to Downtown Sacramento. Folsom Stage Lines operates commuter transit service from Folsom to Downtown Sacramento. Roseville Transit provides commuter service from Roseville to Downtown Sacramento. Yolobus operates bus routes connecting to Downtown Sacramento from Davis, Woodland, Winters, and West Sacramento. Yolobus also operates transit service between Downtown Sacramento and the Sacramento International Airport. Yuba-Sutter Transit provides commuter transit service from Yuba and Sutter counties to Downtown Sacramento with connections to Regional Transit bus and light rail service. The San Joaquin



Source: Sacramento Regional Transit District System Map - www.sacrt.com

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

Figure 2
Existing Light Rail Service

Regional Transit District has service to Sacramento from park-and-ride locations in Stockton and Lodi.

Amtrak operates daily scheduled passenger train service from the Sacramento station at 4th and I Streets to Richmond-BART-Oakland-San Francisco-San Jose, the San Joaquin Valley, Los Angeles, and Portland-Seattle. Reno-Denver-Chicago service is also available. Connections can be made to locations throughout the United States and Canada.

Existing and Planned Pedestrian and Bicycle Facilities

Within the Downtown grid street system, sidewalks on both sides of virtually all streets accommodate pedestrians. Pedestrian crossings of major streets are accommodated by pedestrian signals and marked crosswalks at Downtown signalized intersections.

A Sacramento City / County Bicycle Task Force developed a 2010 Bikeway Master Plan for the region. The Master Plan is a policy document that was prepared to coordinate and develop a bikeway system that will benefit and serve the recreational and transportation needs of the public. Officially designated bicycle facilities are classified as follows:

Class I — Off-street bike trails or paths which are physically separated from streets or roads used by motorized vehicles.

Class II — On-street bike lanes with signs, striped lane markings, and pavement legends.

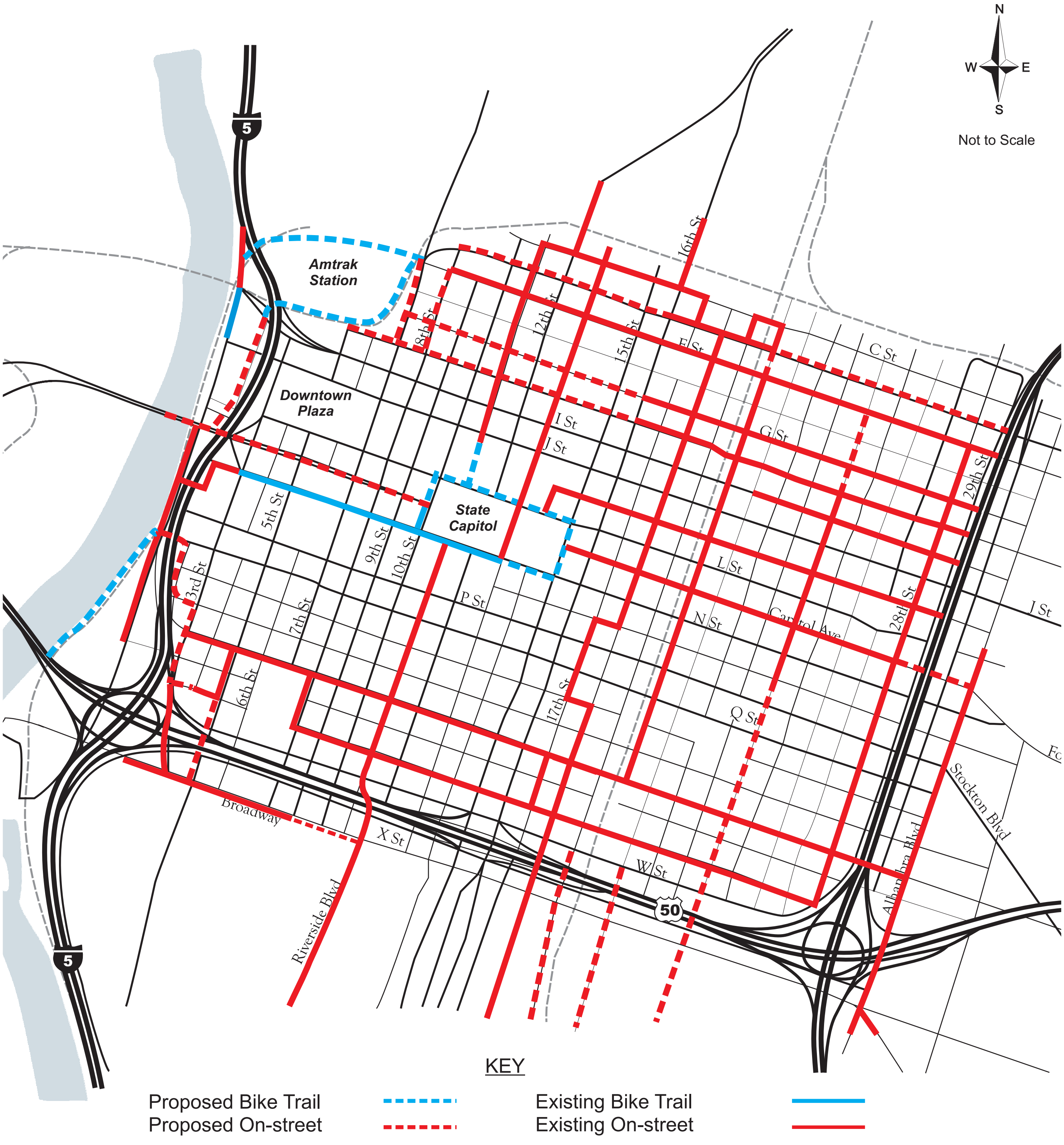
Class III — On-street bike routes marked by signs and shared with motor vehicles and pedestrians. Optional four-inch edge lines painted on the pavement.

According to the Bikeway Master Plan map contained in the City of Sacramento Parks and Recreation Master Plan 2005-2010, existing bikeways may be found along the following roadways in the project area:

- E Street between 8th and 35th Streets
- G Street between 16th Street and Alhambra Boulevard
- H Street between 16th Street and Elvas Avenue
- K Street between 14th Street and Alhambra Boulevard
- Capitol Avenue between 15th Street and city limit
- N Street between 2nd and 13th Streets
- Front Street between Capitol Mall and Marina View Drive

- 11^{th} Street between C and J Streets; and between N and W Street, then continue on Riverside Boulevard to around 43^{rd} Avenue
- 13^{th} Street between C and N Streets
- 18^{th} Street between D Street and 2^{nd} Avenue (with short segment on 17^{th} Street)

Additional bikeways were proposed to further enhance the already extensive network. Proposed bikeways located in Downtown include on-street bike lanes along D, G, and H Streets and Capitol Mall. Bike trails are proposed around the perimeter of Capitol Park. Figure 3 shows the existing and planned bikeways under the Bikeway Master Plan.



Source: Sacramento Regional Transit District System Map - www.sacrt.com

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

Figure 3
Bicycle Facilities

Study Area

A set of intersections, freeway mainline segments, freeway merge/diverge areas, and freeway ramps were selected for study based upon the anticipated volume and distributional patterns of project traffic and known locations of operational difficulty. This selection was made in collaboration with the City of Sacramento Development Engineering & Finance Division and Caltrans staff members. The following locations, shown in Figure 4, were studied:

Intersections:

1. 3rd Street / J Street
2. 3rd Street / L Street
3. 3rd Street / Capitol Mall
4. 3rd Street / N Street
5. 3rd Street / P Street
6. 3rd Street / Q Street
7. 5th Street / I Street
8. 5th Street / J Street
9. 5th Street / L Street
10. 5th Street / Capitol Mall
11. 5th Street / N Street
12. 5th Street / P Street
13. 5th Street / Q Street
14. 7th Street / I Street
15. 7th Street / J Street
16. 7th Street / L Street
17. 8th Street / I Street
18. 8th Street / J Street
19. 8th Street / L Street
20. 9th Street / I Street
21. 9th Street / J Street
22. 9th Street / L Street
23. 9th Street / P Street
24. 9th Street / Q Street
25. 10th Street / I Street
26. 10th Street / J Street
27. 10th Street / L Street
28. 10th Street / P Street
29. 10th Street / Q Street
30. 12th Street / H Street
31. 12th Street / I Street
32. 12th Street / J Street
33. 12th Street / L Street
34. 15th Street / H Street
35. 15th Street / J Street
36. 15th Street / L Street
37. 15th Street / P Street
38. 15th Street / Q Street
39. 15th Street / W Street
40. 15th Street / X Street
41. 16th Street / H Street
42. 16th Street / I Street
43. 16th Street / J Street
44. 16th Street / L Street
45. 16th Street / P Street
46. 16th Street / Q Street
47. 16th Street / W Street
48. 16th Street / X Street
49. 29th Street / J Street
50. 30th Street / J Street

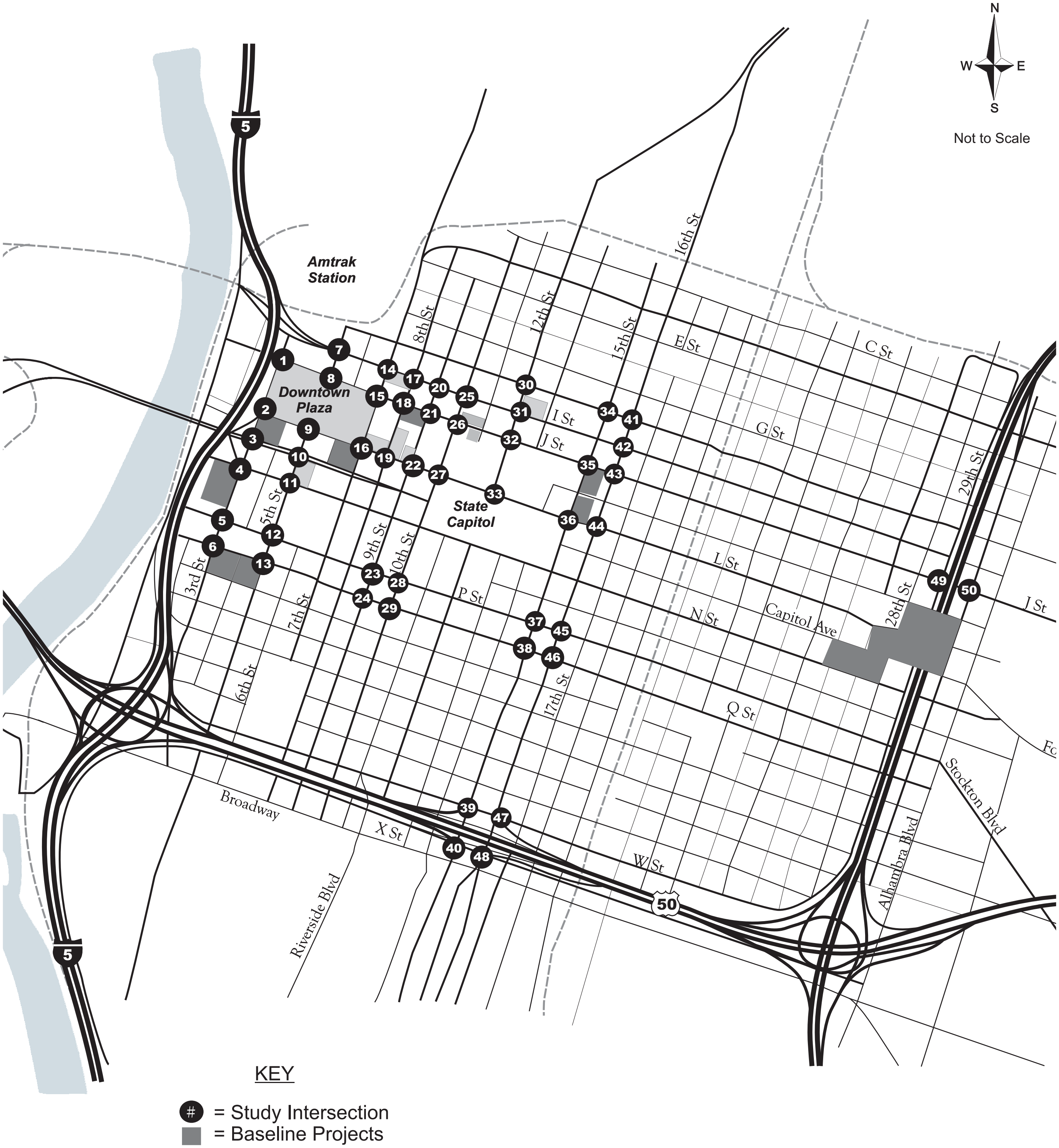


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Figure 4
Study Intersections and Freeway Locations

Freeway Mainline:

- I-5 Northbound
  - South of US 50 on-ramp
  - North of US 50 on-ramp
  - South of L Street on-ramp
  - South of I Street on-ramp
  - South of Richards Boulevard off-ramp
- I-5 Southbound
  - North of Richards Boulevard on-ramp
  - North of J Street off-ramp
  - North of I Street on-ramp
  - North of US 50 off-ramp
- US 50 Eastbound
  - West of I-5 on-ramp
  - West of 15th Street off-ramp
  - West of 10th Street on-ramp
  - West of 16th Street on-ramp
- US 50 Westbound
  - East of SR 99 on-ramp
  - East of 10th Street off-ramp
  - East of 15th Street on-ramp
  - East of I-5 off-ramp

Freeway Merge / Diverge / Weave:

- I-5 Northbound
  - US 50 on-ramp
  - P Street to J Street weave
  - L Street on-ramp
  - I Street on-ramp
  - Richards Boulevard off-ramp
- I-5 Southbound
  - Richards Boulevard on-ramp
  - J Street off-ramp
  - I Street to Q Street weave
  - US 50 off-ramp
- US 50 Eastbound
  - I-5 on-ramp
  - 15th Street off-ramp
  - 10th Street on-ramp
  - 16th Street to Business 80/SR99 weave
- US 50 Westbound
  - Business 80 to 16th Street weave
  - 10th Street off-ramp
  - 15th Street on-ramp
  - I-5 off-ramp

Freeway Ramp Queues:

- I-5 Northbound
  - Q Street off-ramp
  - J Street off-ramp
- I-5 Southbound J Street off-ramp
- US 50 Eastbound 15th Street off-ramp
- US 50 Westbound
  - 16th Street off-ramp
  - 10th Street off-ramp

Existing Traffic Operations

Traffic Volumes

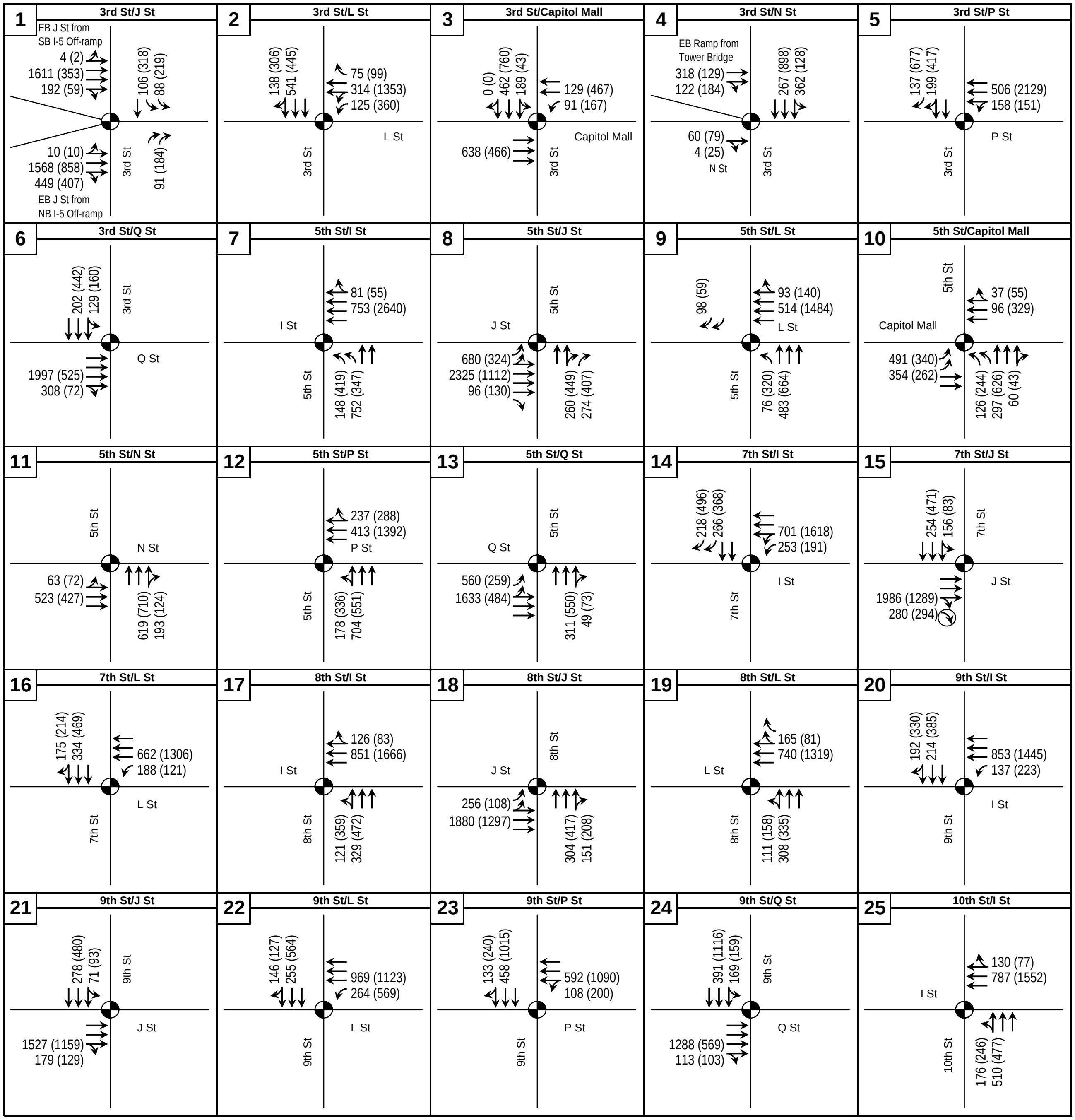
An inventory of traffic controls was developed for each of the study area intersections, ramps, and freeway mainline segments. Turning traffic volumes observed at the study intersections between September 2004 and February 2006. The existing traffic volumes, lane configurations, and traffic controls at study area intersections are shown in Figure 5.

Freeway mainline and ramp data were provided by the California Department of Transportation (Caltrans). Caltrans data were supplemented by intersection and ramp volume counts conducted during the same period as mentioned above. Freeway traffic volumes and lane configurations are provided in Appendix A.

Levels of Service

"Levels of service" describe the operating conditions experienced by motorists. Level of service is a qualitative measure of the effect of a number of factors, including speed and travel time, traffic interruptions, freedom to maneuver, driving comfort and convenience. Levels of service are designated "A" through "F" from best to worst, which cover the entire range of traffic operations that might occur. Level of Service (LOS) "A" through "E" generally represent traffic volumes at less than roadway capacity, while LOS "F" represents over capacity and/or forced flow conditions.

The City of Sacramento General Plan (October 1987) outlines the goals and policies that coordinate the transportation and circulation system with planned land uses. The General Plan (Goal D, Street and Road section) identifies LOS C as the goal for City's local and major street system except at freeway ramp intersections, where the goal is LOS D. In addition, the General Plan smart growth principles identify the need for a balanced transportation system, including walkability and improved bicycle infrastructure. The current LOS C goal is being reexamined as part of the upcoming General Plan update. The revised policy is expected to recognize alternative mode opportunities, support developments in infill areas and near transit stations.



KEY

31 (27) = AM (PM) peak hour traffic volume
= Signalized intersection
= Intersection approach lane
= Lane provided during AM peak, only
= Lane provided during PM peak, only

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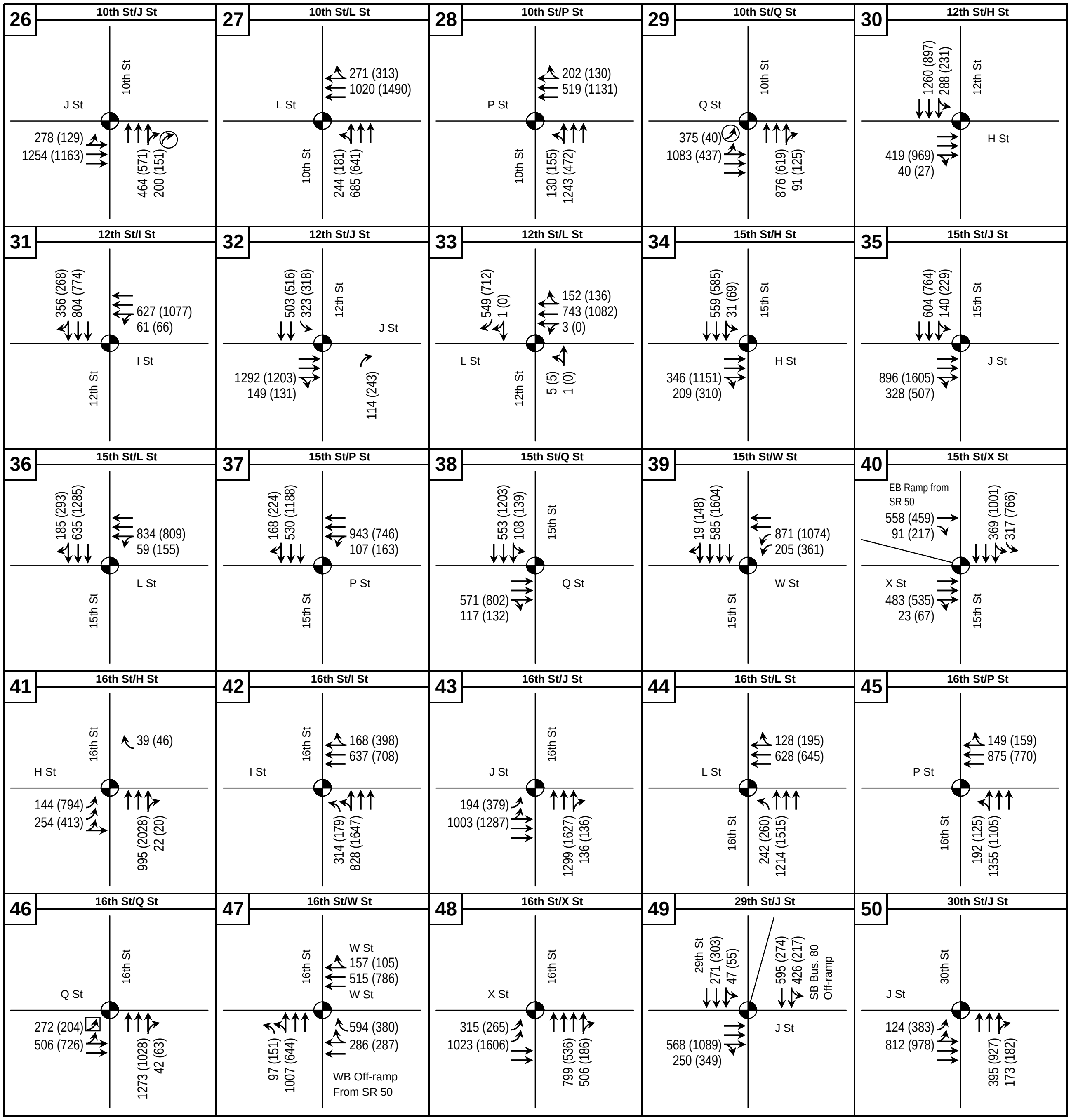
N W E S

Figure 5
EXISTING TRAFFIC VOLUMES, LANES, AND TRAFFIC CONTROLS



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

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N W E S

Figure 5
EXISTING TRAFFIC VOLUMES, LANES, AND TRAFFIC CONTROLS

Signalized Intersections Analysis

Signalized intersection analyses were conducted using the operational methodology outlined in the *Highway Capacity Manual* (Transportation Research Board, Washington, D.C., 2000, Chapters 10 and 16). This procedure calculates an average stopped delay per vehicle at a signalized intersection, and assigns a level of service designation based upon the delay. The method also provides a calculation of the volume-to-capacity (v/c) ratio of the critical movements at the intersection. Table 1 shows level of service criteria for signalized intersections.

Freeway Segment Analysis

The freeway mainline was analyzed utilizing a methodology outlined in the *Highway Capacity Manual* (Transportation Research Board, Washington, D.C., 2000, Chapters 13 and 23). Maximum service flow rates of 2,200 vehicles per lane per hour for typical freeway lanes and 1,600 vehicles per lane per hour for auxiliary lanes were used, based upon data collected by Caltrans in the Sacramento urban area. Table 2 shows the relationship of freeway volume-to-capacity ratios and density to level of service.

Freeway Ramp and Merge / Diverge Analysis

Freeway ramps and merge / diverge areas were analyzed using a methodology outlined in the *Highway Capacity Manual* (Transportation Research Board, Washington, D.C., 2000, Chapters 13 and 25). Freeway ramp operating conditions are dependent upon traffic volumes and the ramp characteristics. These characteristics include the length and type of acceleration / deceleration lanes; free-flow speed of the ramps; number of lanes; grade; and types of facilities that the ramps interconnect. Table 3 shows the relationship of level of service to freeway density.

Table 1
Level Of Service Criteria – Signalized Intersections

Level of Service (LOS)	Average Delay (seconds/vehicle)	Description
A	≤ 10	Very Low Delay: This level of service occurs when progression is extremely favorable and most vehicles arrive during a green phase. Most vehicles do not stop at all.
B	> 10 and < 20	Minimal Delays: This level of service generally occurs with good progression, short cycle lengths, or both. More vehicles stop than at LOS A, causing higher levels of average delay.
C	> 20 and < 35	Acceptable Delay: Delay increases due to only fair progression, longer cycle lengths, or both. Individual cycle failures (to service all waiting vehicles) may begin to appear at this level of service. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.
D	> 35 and < 55	Approaching Unstable Operation/Significant Delays: The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume / capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	> 55 and < 80	Unstable Operation/Substantial Delays: These high delay values generally indicate poor progression, long cycle lengths, and high volume / capacity ratios. Individual cycle failures are frequent occurrences.
F	> 80	Excessive Delays: This level, considered unacceptable to most drivers, often occurs with oversaturation (that is, when arrival traffic volumes exceed the capacity of the intersection). It may also occur at nearly saturated conditions with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.

Source: Transportation Research Board, *Highway Capacity Manual*, Washington, D.C., 2000, pages 10-16 and 16-2.

Table 2
Level of Service Criteria – Freeway Mainline

Level of Service	Maximum Volume-to-Capacity Ratio	Maximum Density (passenger vehicles per mile per lane)
A	0.32	11
B	0.53	18
C	0.74	26
D	0.90	35
E	1.00	45
F	Varies	Varies

Source: Transportation Research Board, Highway Capacity Manual, Washington, D.C., 2000, pages 23-3 and 23-4.

Table 3
Level Of Service Criteria – Freeway Ramp Merge / Diverge Areas

Level of Service	Maximum Density (passenger vehicles per mile per lane)
A	10
B	20
C	28
D	35
E	> 35
F	Demand exceeds capacity

Source: Transportation Research Board, *Highway Capacity Manual*, Washington, D.C., 2000, page 25-5.

As shown in Table 3, the basic criterion used to determine Freeway Ramp LOS is vehicle density in the merge or diverge area. Note that the 2000 Highway Capacity Manual[2] requires that several additional criteria be considered so that LOS F is automatically attained for a ramp if:

- At an on-ramp, volume exceeds capacity (V>C) in:
  1. The segment of a freeway downstream, or
  2. The merge-area defined by the on-ramp and the two adjacent freeway lanes,
- At an off-ramp, volume exceeds capacity (V>C) in:
  1. The segment of a freeway upstream OR downstream,
  2. The off-ramp itself, or
  3. The diverge-area defined by the two adjacent freeway lanes approaching the ramp

Table 4 shows maximum service flow rates for freeway ramps, based upon information presented in the *Highway Capacity Manual* (Transportation Research Board, Washington, D.C., 2000, Chapters 13 and 25; 1985, Chapter 5). This methodology is used in cases where the freeway ramp configuration governs the operating condition.

The freeway ramps were also analyzed in terms of the expected queues versus the storage capacity. The length of a vehicle is assumed to be 25 feet long.

[2] See *Highway Capacity Manual*, Transportation Research Board, Washington, D.C., 2000, pages 13-22 and 13-23.

Table 4
Level of Service Definitions – Freeway Ramps

Level of Service (LOS)	Service Flow Rates for Single Lane / Two Lane Ramps Ramp Design Speed (Mph)					Definition
	< 20	21-30	31-40	41-50	> 51	
A	(1)	(1)	(1)	(1)	800/ 1,550	Conditions of free flow; speed is controlled by driver's desires, speed limits, or physical conditions.
B	(1)	(1)	(1)	1,150/ 2,250	1,150/ 2,350	Conditions of stable flow; operating speeds beginning to be restricted; little or no restrictions on maneuverability from other vehicles.
C	(1)	(1)	1,400/ 2,600	1,600/ 3,100	1,700/ 3,350	Conditions of stable flow; speeds and maneuverability more closely restricted
D	(1)	1,550/ 2,900	1,700/ 3,200	1,950/ 3,850	2,050/ 4,150	Conditions approach unstable flow; tolerable speeds can be maintained, but temporary restrictions may cause extensive delays; little freedom to maneuver; comfort and convenience low.
E	1,800/ 3,200	1,900/ 3,500	2,000/ 3,800	2,100/ 4,100	2,200/ 4,400	Conditions approach capacity; unstable flow with stoppages of momentary duration; maneuverability severely limited.
F	Widely Variable					Forced flow conditions; stoppages for long periods; low operating speeds.

(1) Level of service not attainable due to restricted design speed.
Sources: Transportation Research Board, Highway Capacity Manual, Washington, D.C., 2000, page 25-5.
Transportation Research Board, Highway Capacity Manual, Washington, D.C., 1985, page 5-15.

Existing Levels of Service

The existing a.m. and p.m. peak hour operating conditions at the study area intersections are shown in Table 5. All study intersections currently operate at or above the City's level of service "C" goal except for the 3rd Street / J Street intersection, which operates at LOS D during the a.m. peak hour.

Table 5
Intersection Levels of Service – Existing Conditions

Intersection	AM Peak Hour		PM Peak Hour	
	LOS[1]	Delay[2]	LOS[1]	Delay[2]
1) 3rd St/J St	D	44.4	B	15.7
2) 3rd St/L St	B	13.2	B	15.4
3) 3rd St/Capitol Mall	B	19.0	B	18.1
4) 3rd St/N St	C	21.1	B	19.0
5) 3rd St/P St	A	8.9	B	14.1
6) 3rd St/Q St	A	9.7	B	10.3
7) 5th St/I St	B	11.0	B	14.6
8) 5th St/J St	C	20.5	B	11.4
9) 5th St/L St	B	13.8	C	21.7
10) 5th St/Capitol Mall	C	20.2	B	18.0
11) 5th St/N St	B	13.2	B	13.2
12) 5th St/P St	B	10.3	B	12.0
13) 5th St/Q St	A	9.5	A	9.9
14) 7th St/I St	A	9.8	B	18.2
15) 7th St/J St	B	16.5	B	12.4
16) 7th St/L St	B	11.2	B	14.5
17) 8th St/I St	B	10.3	B	17.5
18) 8th S/tJ St	B	16.1	B	12.1
19) 8th St/L St	B	11.5	B	15.2
20) 9th St/I St	B	12.7	C	20.7
21) 9th St/J St	B	18.1	B	12.4
22) 9th St/L St	A	9.6	B	11.5
23) 9th St/P St	A	9.0	B	10.8
24) 9th St/Q St	B	10.6	B	10.9
25) 10th St/I St	B	14.4	C	21.2
26) 10th St/J St	C	21.3	B	16.6
27) 10th St/L St	B	12.0	B	13.5
28) 10th St/P St	B	11.4	A	8.6
29) 10th St/Q St	B	10.9	A	8.5
30) 12th St/H St	B	16.5	B	13.3
31) 12th St/I St	A	6.3	A	7.3
32) 12th St/J St	B	16.1	B	14.3
33) 12th St/L St	B	12.6	B	14.0
34) 15th St/H St	A	9.7	B	11.9
35) 15th St/J St	B	11.1	B	19.9
36) 15th St/L St	B	10.9	B	11.2
37) 15th St/P St	B	11.2	B	11.0
38) 15th St/Q St	B	10.0	B	11.1
39) 15th St/W St	B	12.3	B	14.4
40) 15th St/X St	C	22.5	C	29.5

Table 5
Intersection Levels of Service – Existing Conditions

Intersection	AM Peak Hour		PM Peak Hour	
	LOS[1]	Delay[2]	LOS[1]	Delay[2]
41) 16th St/H St	B	11.3	B	17.3
42) 16th St/I St	B	10.3	B	11.5
43) 16th St/J St	B	11.6	B	13.2
44) 16th St/L St	B	10.8	B	11.8
45) 16th St/P St	B	11.3	B	10.8
46) 16th St/Q St	B	11.6	A	9.9
47) 16th St/W St	C	23.5	C	23.7
48) 16th St/X St	B	13.7	B	15.8
49) 29th St/J St	C	28.6	C	22.0
50) 30th St/J St	B	12.2	B	14.0

Source*:* Dowling Associates, Inc., 2006.
[1] LOS = Level of Service
[2] Weighted average control delay in seconds

Table 6 shows levels of service for freeway mainline study segments. The calculations are provided in Appendix A. Analysis showed that the freeway mainline study segments operate acceptably although it is apparent from experience that most of the freeway study segments operate at LOS F during peak periods. The analysis is based on the number of vehicles that travel through each freeway segment. During congested conditions, fewer vehicles are able to pass, resulting in low estimates of congestion. The analysis shows many segments are near capacity (Volumes/Capacity are close to 1.00), so the analysis of future conditions would identify segments that are likely to be impacted.

Table 6
Freeway Mainline Operations – Existing Conditions

Location	AM Peak Hour			PM Peak Hour		
	Volume	V/C[1]	LOS[2]	Volume	V/C[1]	LOS[2]
Northbound I-5						
South of US 50 on-ramp	3,417	0.54	C	2,872	0.46	**F**[3]
North of US 50 on-ramp	7,119	0.85	D	5,235	0.62	**F**[3]
South of L Street on-ramp	5,279	0.84	D	3,841	0.61	**F**[3]
South of I Street on-ramp	5,471	0.65	C	4,598	0.55	**F**[3]
South of Richards Blvd off-ramp	5,806	0.58	C	6,011	0.60	**F**[3]
Southbound I-5						
North of Richards Blvd on-ramp	7,628	0.91	E	5,797	0.69	C
North of J Street on-ramp	8,104	0.96	E	6,568	0.78	D
North of I Street on-ramp	6,437	0.77	D	6,295	0.75	**F**[3]
North of US 50 off-ramp	5,978	0.63	C	6,149	0.65	**F**[3]
Eastbound US 50						
West of I-5 on-ramp	3,176	0.38	B	1,434	0.17	A
West of 15th Street off-ramp	8,183	0.68	C	6,334	0.52	B
West of 10th Street on-ramp	7,534	0.72	C	5,658	0.54	C
West of 16th Street on-ramp	8,319	0.69	C	6,403	0.53	B
Westbound US 50						
East of Hwy 51/US 99 on-ramp	3,637	0.36	B	3,250	0.33	B
East of 10th Street off-ramp	6,483	0.62	C	6,058	0.58	C
East of 15th Street on-ramp	5,555	0.53	B	5,709	0.54	C
East of I-5 off ramp	6,029	0.48	B	6,375	0.51	B

Source: Dowling Associates, Inc., 2006.
[1] V/C = Volume / Capacity
[2] LOS = Level of Service
[3] Queuing extends from downstream bottlenecks.

Table 7 provides a summary of traffic operations at study area interchanges and backup calculations are provided in Appendix A. The analysis showed several interchanges operated at LOS F during both the a.m. and p.m. peak hours.

Table 7
Freeway Interchange Operations – Existing Conditions

Ramp	AM Peak Hour			PM Peak Hour		
	LOS[1]	Density[2] (Flow)	Volume	LOS[1]	Density[2] (Flow)	Volume
Northbound I-5						
US 50 on-ramp	**F**	41.52	3,269	D	28.76	1,997
P Street to J Street weave	C	23.09	7,306	C	18.62	5,920
L Street on-ramp	C	(209)	192	C	(826)	757
I Street on-ramp	B	11.61	335	B	18.69	1,413
Richards Boulevard off-ramp	B	19.05	659	C	21.82	349
Southbound I-5						
Richards Boulevard on-ramp	C	(519)	476	C	(841)	771
J Street off-ramp	B	19.37	1,667	B	15.70	273
I Street to Q Street weave	B	18.56	6,725	C	23.27	7,342
US 50 off-ramp	**F**	14.29	3,809	**F**	14.70	4,301
Eastbound U.S. 50						
I-5 on-ramp	**F**	44.94	5,007	**F**	40.99	4,900
15th Street off-ramp	D	32.34	649	C	24.88	676
10th Street on-ramp	B	18.89	785	B	15.23	745
16th Street to Business 80/SR99 weave	D	31.68	8975	C	25.64	6743
Westbound U.S. 50						
Business 80 to 16th Street weave	B	15.88	4,880	B	16.33	4883
10th Street off-ramp	C	26.83	928	C	22.01	349
15th Street on-ramp	C	27.81	474	D	30.04	666
I-5 off-ramp	**F**	(4224)	3,853	B	(3592)	3,276

Source: Dowling Associates, Inc., 2006.

[1] LOS = Level of Service

[2] Numbers with decimals indicate the density of passenger vehicles per mile per lane in the merge or diverge area. Whole numbers indicate the ramp flow rate in passenger car equivalents where a lane is added to the freeway at an on-ramp.

Table 8 compares the a.m. and p.m. peak hour vehicle queues and the storage capacity at freeway off-ramps. The northbound I-5 off ramp to J Street has inadequate storage capacity during the a.m. peak hour, during which time the queues extend onto the freeway.

Table 8
Freeway Ramp Queues - Existing Conditions

Location	Storage Capacity (feet)	AM Peak Hour		PM Peak Hour	
		Queue (feet)	Adequate Capacity	Queue (feet)	Adequate Capacity
I-5 NB Q Street off-ramp	3500	700	Yes	150	Yes
I-5 NB J Street off-ramp	1750	3450	**No**	825	Yes
I-5 SB J Street off-ramp	3600	3000	Yes	600	Yes
US 50 EB 15th Street off-ramp	1600	600	Yes	650	Yes
US 50 WB 16th Street off-ramp	1625	975	Yes	900	Yes

Source: Dowling Associates, Inc., 2006
Note: **Bold** values show substandard traffic operations.

Regulatory Provisions

Roadway operations are regulated by agencies with jurisdiction of a particular roadway. In the study area, the interstate freeways are under the jurisdiction of Caltrans. The non-freeway roadways are under the jurisdiction of the City of Sacramento.

Impacts and Mitigation Measures

The standards of significance, methods of analysis, and traffic impacts and mitigation measures are summarized below.

Standards of Significance

In accordance with CEQA, the effects of a project are evaluated to determine if they will result in a significant adverse impact on the environment. For the purposes of this analysis, an impact is considered significant if the proposed projects would have the effects described below.

The standards of significance in this analysis are based upon the current practice of the appropriate regulatory agencies. For most areas related to transportation and circulation, the standards of the City of Sacramento have been used. For traffic flow on the freeway system and associated interchanges, the standards of Caltrans have been used.

Intersections

In the City of Sacramento, a significant traffic impact occurs at a signalized or unsignalized intersection (except for freeway ramp/arterial intersections within North Natomas) when:

The traffic generated by the project degrades peak period level of service (LOS) from A, B, or C (without the project) to D, E, or F (with the project); or,

The level of service (without project) is D, E, or F and project generated traffic increases the average vehicle delay by 5 seconds or more.

These standards have been developed consistent with a goal set forth in the City of Sacramento, General Plan Update (1988). Specifically, Section 5-11 - Goal D, states to "Work towards achieving a Level of Service C on the City's local and major street system."

Freeway Ramps and Mainline

Caltrans considers the following to be significant impacts:

Off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway.

Project traffic increases that cause any ramp's merge / diverge level of service to be worse than the freeway's level of service.

Project traffic increases that cause the freeway level of service to deteriorate beyond level of service "E."

In addition, a significant ramp impact would occur if the expected queue is greater than the storage capacity.

Bikeways

For the purposes of this analysis, impacts to bikeways are considered significant if the proposed projects would:

Hinder or eliminate an existing designated bikeway, or interfered with implementation of a proposed bikeway; or

Result in unsafe conditions for bicyclists, including unsafe bicycle/pedestrian or bicycle/motor vehicle conflicts.

Pedestrian Circulation

For the purposes of this analysis, impacts to pedestrian circulation are considered significant if the proposed projects would:

Result in unsafe conditions or create a hindrance for pedestrians, including unsafe pedestrian/bicycle or pedestrian/motor vehicle access.

Transit System

For the purposes of this analysis, impacts to the transit system are considered significant if the proposed projects would:

Increase ridership, when added to the existing or future ridership, would exceed available or planned system capacity. Capacity is defined as the total number of passengers the system of buses and light rail vehicles can carry during the peak hours of operations.

Trip Generation

Trip generation of the proposed projects is based upon information compiled by the Institute of Transportation Engineers (*Trip Generation, Seventh Edition*, 2003 and *Trip Generation Handbook*, 2004). Table 9 shows the number of trips that would be generated by the proposed projects. In summary, all the proposed downtown projects combined have the potential to generate about 28,111 new external trips on an average day. Of the external trips, approximately 2,379 external trips would occur during the weekday morning peak hour and 3,154 external trips during the weekday evening peak hour.

The external trips were derived by adjusting the Institute of Transportation Engineers (ITE) trip generation estimates. ITE trip generation estimates are based on empirical data collected at *suburban* locations throughout the United States. Adjustments to the ITE trip generation estimates were made to account for higher transit ridership, higher levels of walking and bicycle use, and the interaction of land uses in the Downtown area. Adjustments for the higher use of transit and walk, bike, and other non-auto travel were based on information contained in the *Pre-Census Travel Behavior Report: Analysis of the 2000 SACOG Household Travel Survey* (DKS, 2001).

After the adjustments were made for transit, walk, bike, and other non-auto travel, an adjustment was made to account for internal trips between different types of land uses within each project site. The internal trip adjustments were performed using procedures recommended by the Institute of Transportation Engineers for multi-use developments (*Trip Generation Handbook*). Internal trips are trips that would occur between different land uses on the same site without accessing the external street system.

Finally, adjustments were made to account for trips likely to be made by non-motorized travel modes among the new projects proposed for Downtown. The ITE method for determining internal trips was used and considered all the proposed downtown projects as one project (because of the ease of walking between the new projects). Only the trips generated over and above the internal trips for each individual project were considered appropriate for this adjustment.

No pass-by trips were assumed for Downtown retail uses because it is not convenient to drive by, park and stop to shop as would be the case in suburban locations. Most of these types of trips would be served by non-motorized travel modes – walking or biking.

Details of the adjustments made to the ITE trip generation estimates are provided in Appendix B.

Trip Distribution

The distribution of trips associated with the project site was derived from the SACMET 2027 travel demand model, observations of travel patterns near the site, and knowledge of the proposed access locations associated with the Project. Two sets of trip distribution percentages were developed to better represent the different land uses included in the Project. One set of estimated percentages represent Office and Retail uses, and another for Residential use. From a selected zone assignment of traffic for each land use type, the distribution of inbound and outbound trips was estimated. Figure 6 and Figure 7 show the estimated trip distribution percentages for each proposed land use type. Assigned traffic volumes for each project are shown in Appendix C.

Table 9 Trip Generation for Proposed Projects

Land Use	Amount	Weekday	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
800 K Street								
Proposed Project								
Office (General Office Building)	300KSF	3,109	398	54	452	71	344	415
Retail (Shopping Center)	18KSF	2,206	34	21	55	96	104	200
High Rise Residential Condominium	300Units	1,355	22	94	116	73	44	117
Total Project Trips		6,670	454	169	623	240	492	732
Transit Adjustments		-429	-46	-9	-55	-12	-42	-54
Walk, Bike & Other Non-Auto Travel Adjustments		-473	-17	-11	-28	-19	-26	-45
Internal Trips Within This Project		-549	-6	-6	-13	-24	-24	-48
Trips To-From Other Proposed Projects		-440	-13	-13	-26	-20	-20	-41
New External Trips		4,778	371	129	501	165	380	544
Existing Site								
Retail (Shopping Center)	18KSF	2,195	34	21	55	96	103	199
Mid Rise Apartment	26Units	175	4	9	13	9	7	16
Total Project Trips		2,370	38	30	68	105	110	215
Transit Adjustments		-53	-1	0	-1	-2	-2	-4
Walk, Bike & Other Non-Auto Travel Adjustments		-272	-4	-3	-7	-12	-12	-24
Internal Trips		-109	-4	-4	-8	-6	-6	-12
Existing External Trips		1,936	29	23	52	85	90	175
Net New External Trips		2,842	342	106	449	80	290	369

Table 9 Trip Generation for Proposed Projects

Land Use	Amount	Weekday	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Westfield Shoppingtown Downtown Plaza								
Proposed Project								
Office (General Office Building)	221KSF	2,453	311	42	353	55	271	326
Retail (Shopping Center)	843KSF	27,140	343	219	562	1,227	1,329	2,556
Free Standing Discount Store	150KSF	8,403	86	40	126	380	380	759
Multiplex Movie Theater	3,800Seats	0	0	0	0	109	195	304
Total Project Trips		37,996	740	301	1,041	1,771	2,175	3,945
Transit Adjustments		-1,054	-43	-11	-54	-44	-72	-116
Walk, Bike & Other Non-Auto Travel Adjustments		-4,192	-59	-31	-90	-201	-228	-429
Internal Trips Within This Project		-781	-14	-14	-28	-44	-44	-88
Trips To-From Other Proposed Projects		-862	-1	-1	-2	-32	-32	-63
New External Trips		31,107	623	244	867	1,450	1,799	3,248
Existing Site								
Office (General Office Building)	281KSF	2,959	378	51	429	67	327	394
Retail (Shopping Center)	873KSF	27,775	350	224	574	1,256	1,361	2,617
Multiplex Movie Theater	2,320Seats	0	0	0	0	67	119	186
Total Project Trips		30,734	728	275	1,003	1,390	1,807	3,197
Transit Adjustments		-939	-50	-11	-61	-36	-70	-106
Walk, Bike & Other Non-Auto Travel Adjustments		-3,305	-52	-27	-79	-155	-181	-336
Internal Trips		-943	-12	-12	-24	-41	-41	-82
Existing External Trips		25,547	614	225	839	1,158	1,515	2,673
Net New External Trips		5,560	9	19	28	292	284	575

Table 9 Trip Generation for Proposed Projects

Land Use	Amount	Weekday	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
831 L Street								
Proposed Project								
Office (General Office Building)	140KSF	1,729	216	30	246	40	196	236
Retail (Shopping Center)	10KSF	1,520	24	15	39	66	71	137
Total Project Trips		3,249	240	45	285	106	267	373
Transit Adjustments		-225	-25	-3	-28	-5	-24	-29
Walk, Bike & Other Non-Auto Travel Adjustments		-224	-9	-3	-12	-9	-14	-23
Internal Trips Within This Project		-92	-1	-1	-2	-3	-3	-6
Trips To-From Other Proposed Projects		-363	-7	-7	-14	-16	-16	-31
New External Trips		2,345	198	31	230	73	210	284
500 Capitol Mall								
Proposed Project								
Office (General Office Building)	503KSF	4,628	601	82	683	109	533	642
Retail (Shopping Center)	15KSF	1,996	31	20	51	87	94	181
Restaurant	20KSF	2,568	121	112	233	135	86	221
Total Project Trips		9,192	753	214	967	331	713	1,044
Transit Adjustments		-614	-70	-12	-82	-17	-63	-80
Walk, Bike & Other Non-Auto Travel Adjustments		-659	-35	-17	-52	-29	-36	-65
Internal Trips Within This Project		-276	-6	-6	-12	-8	-8	-17
Trips To-From Other Proposed Projects		-1,026	-23	-23	-46	-44	-44	-88
New External Trips		6,618	619	156	775	233	562	795

Table 9 Trip Generation for Proposed Projects

Land Use	Amount	Trips Generated						
		Weekday	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
The Metropolitan (10th & J)								
Proposed Project								
Retail (Shopping Center)	13KSF	1,803	28	18	46	78	85	163
High Rise Residential Condominium	340Units	1,505	24	103	127	81	50	131
Total Project Trips		3,308	52	121	173	159	135	294
Transit Adjustments		-79	-2	-3	-5	-4	-4	-8
Walk, Bike & Other Non-Auto Travel Adjustments		-353	-5	-10	-15	-16	-14	-30
Internal Trips Within This Project		-311	-4	-4	-8	-15	-15	-30
Trips To-From Other Proposed Projects		-264	-2	-2	-4	-6	-6	-12
New External Trips		2,302	39	102	141	118	96	215
Existing Site								
Office (General Office Building)	43KSF	697	84	11	95	22	105	127
Transit Adjustments		-77	-10	-1	-11	-2	-12	-14
Walk, Bike & Other Non-Auto Travel Adjustments		-20	-3	0	-3	-1	-3	-4
Existing External Trips		600	71	10	81	19	90	109
Net New External Trips		1,702	-32	92	60	99	6	106
Epic Tower								
Proposed Project								
Office (General Office Building)	39KSF	646	77	11	88	21	101	122
Retail (Shopping Center)	27KSF	2,889	43	28	71	126	137	263
High Rise Residential Condominium	354Units	1,558	25	107	132	84	52	136
Total Project Trips		5,093	145	146	291	231	290	521
Transit Adjustments		-177	-11	-5	-16	-7	-17	-24
Walk, Bike & Other Non-Auto Travel Adjustments		-503	-9	-11	-20	-23	-23	-46
Internal Trips Within This Project		-683	-8	-8	-16	-31	-31	-62
Trips To-From Other Proposed Projects		-500	-7	-7	-13	-19	-19	-39
New External Trips		3,229	110	115	226	151	200	350

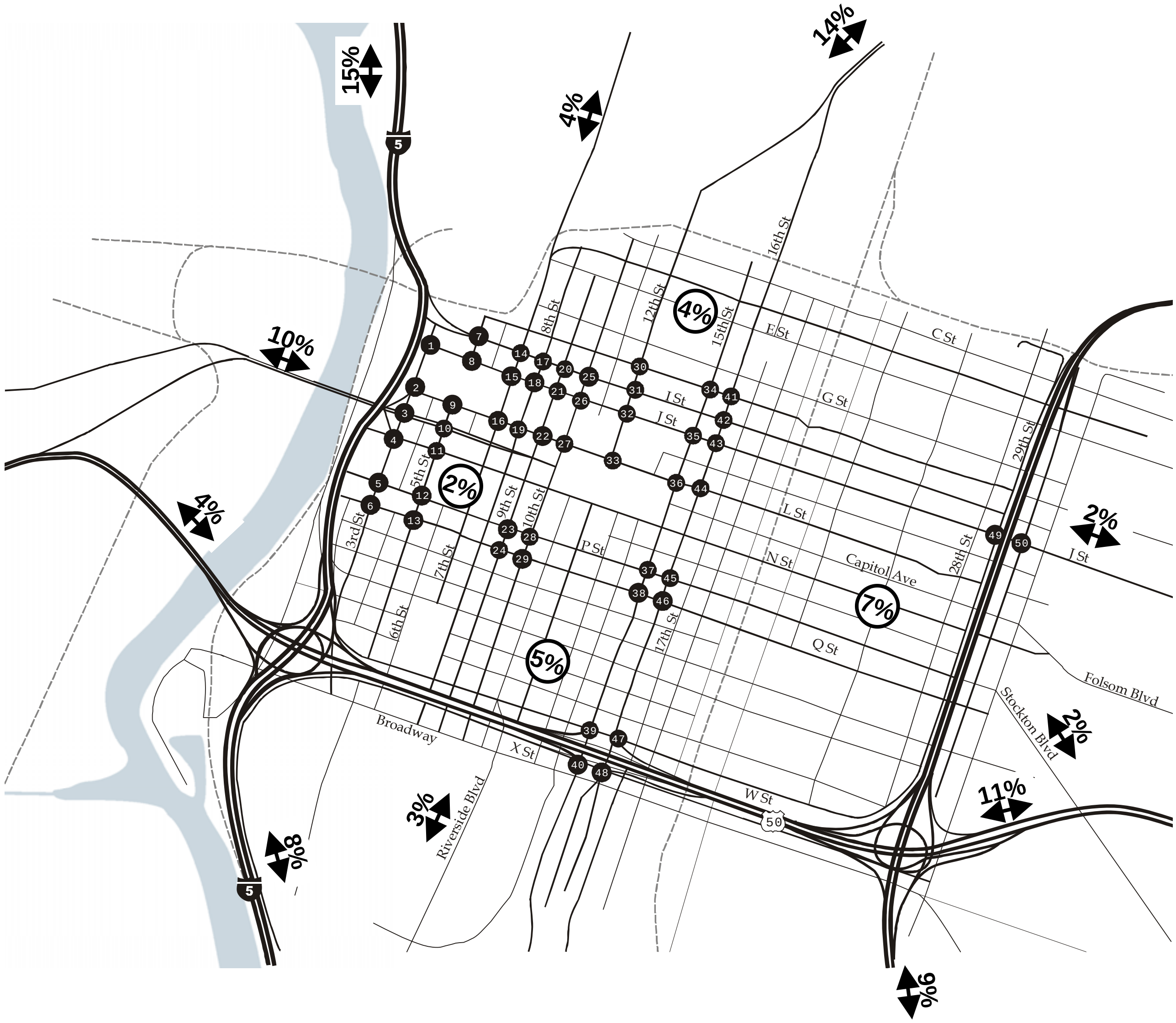
Table 9 Trip Generation for Proposed Projects

Land Use	Amount	Trips Generated						
		Weekday	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Cathedral Square (11th & J)								
Proposed Project								
Retail (Shopping Center)	7KSF	1,238	20	13	33	53	58	111
High Rise Residential Condominium	242Units	1,136	19	80	99	61	37	98
Total Project Trips		2,374	39	93	132	114	95	209
Transit Adjustments		-57	-2	-2	-4	-3	-2	-5
Walk, Bike & Other Non-Auto Travel Adjustments		-253	-4	-8	-12	-11	-10	-21
Internal Trips Within This Project		-214	-3	-3	-6	-10	-10	-20
Trips To-From Other Proposed Projects		-35	-2	-2	-4	-1	-1	-2
New External Trips		1,815	28	78	107	89	72	161
Existing Site								
Retail (Shopping Center)	13KSF	1,786	28	18	46	77	84	161
Storage (Warehousing)	12KSF	57	4	1	5	1	4	5
Total Project Trips		1,843	32	19	51	78	88	166
Transit Adjustments		-41	-1	0	-1	-2	-2	-4
Walk, Bike & Other Non-Auto Travel Adjustments		-214	-4	-2	-6	-9	-10	-19
Existing External Trips		1,588	27	17	44	67	76	143
Net New External Trips		227	1	61	63	22	-4	18
701 L Street								
Proposed Project								
Office (General Office Building)	240KSF	2,618	333	45	378	59	289	348
Retail (Shopping Center)	11KSF	1,569	24	16	40	68	73	141
High Rise Apartment	80Units	336	6	18	24	17	11	28
Total Project Trips		4,523	363	79	442	144	373	517
Transit Adjustments		-335	-38	-6	-44	-9	-34	-43
Walk, Bike & Other Non-Auto Travel Adjustments		-287	-14	-5	-18	-11	-17	-28
Internal Trips Within This Project		-314	-4	-4	-9	-13	-13	-27
Trips To-From Other Proposed Projects		-481	-10	-10	-21	-21	-21	-42
New External Trips		3,106	296	53	351	90	288	378

Table 9 Trip Generation for Proposed Projects

Land Use	Amount	Trips Generated						
		Weekday	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
The Library Lofts (8th & I)								
Proposed Project								
Office (General Office Building)	35KSF	594	71	10	81	20	98	118
Retail (Shopping Center)	12KSF	1,712	27	17	44	74	80	154
High Rise Residential Condominium	330Units	1,468	24	101	125	79	49	128
Total Project Trips		3,774	122	128	250	173	227	400
Transit Adjustments		-142	-10	-4	-14	-5	-15	-20
Walk, Bike & Other Non-Auto Travel Adjustments		-357	-7	-10	-17	-17	-15	-32
Internal Trips Within This Project		-409	-5	-5	-10	-19	-19	-38
Trips To-From Other Proposed Projects		-385	-6	-6	-12	-15	-15	-31
New External Trips		2,482	94	103	197	117	163	280
Total New External Trips for All Proposed Projects								
Total New External Trips		28,111	1,639	738	2,379	1,157	1,999	3,154

Source: Dowling Associates, Inc. 2006



KEY

10% = Percent of project trips to and from downtown

5% = Percent of project trips remaining downtown

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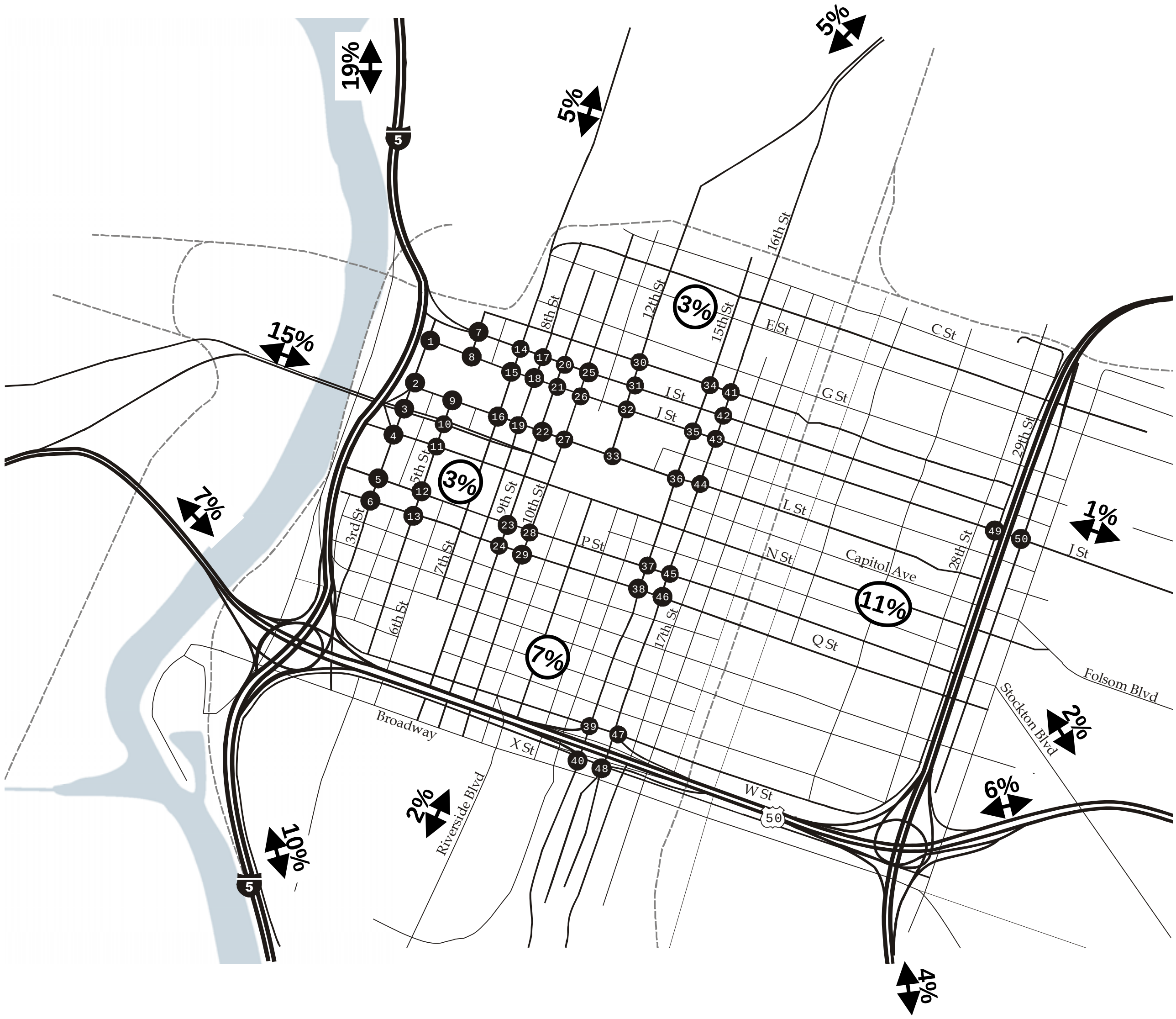
Figure 6
OFFICE & RETAIL TRIP DISTRIBUTION FOR PROPOSED PROJECTS



KEY

10% = Percent of project trips to and from downtown

5% = Percent of project trips remaining downtown

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N W E S

Figure 7
RESIDENTIAL TRIP DISTRIBUTION FOR PROPOSED PROJECTS

Transit Ridership

The number of new transit riders expected to be generated by the proposed Downtown projects are shown in Table 10. Transit ridership estimates were based on the information contained in the *Pre-Census Travel Behavior Report: Analysis of the 2000 SACOG Household Travel Survey* (DKS, 2001). The proposed projects are expected to generate approximately 2,200 new transit trips during the average weekday, approximately 240 during the a.m. peak hour, and approximately 275 during the p.m. peak hour.

Table 10
Transit Trips for Proposed Projects

Land Use	Transit Trips						
	Weekday	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
800 K Street							
Proposed Project	489	52	11	63	13	48	61
Existing Use	63	1	1	2	3	3	6
Net New Transit Trips	426	51	10	61	10	45	55
831 L Street							
New Transit Trips	256	28	4	32	7	27	34
Westfield Shoppingtown Downtown Plaza							
Proposed Project	1,231	50	12	62	52	83	135
Existing Use	1,092	57	12	69	42	80	122
Net New Transit Trips	139	-7	0	-7	10	3	13
500 Capitol Mall							
New Transit Trips	698	79	13	92	20	70	90
The Metropolitan (10th & J)							
Proposed Project	95	2	4	6	5	4	9
Existing Use	87	11	1	12	3	13	16
Net New Transit Trips	8	-9	3	-6	2	-9	-7
Cathedral Square (11th & J)							
Proposed Project	68	2	3	5	3	4	7
Existing Use	48	1	0	1	2	2	4
Net New Transit Trips	20	1	3	4	1	2	3
Epic Tower							
New Transit Trips	206	12	6	18	9	18	27
701 L Street							
New Transit Trips	379	42	7	49	10	39	49
The Library Lofts (8th & I)							
New Transit Trips	166	11	5	16	8	16	24
Total New Transit Trips for All Proposed Projects							
Total New Transit Trips	2,298	208	51	259	77	211	288

Sources:
Pre-Census Travel Behavior Report: Analysis of the 2000 SACOG Household Travel Survey (DKS, 2001
Dowling Associates, Inc. 2006

Baseline Levels of Service

An analysis of baseline no-project conditions was performed to provide a common basis for project-specific studies that will be conducted for each of the nine proposed Downtown projects. No analysis of baseline plus project impacts was performed for this study.

The analysis of baseline conditions will consider the potential traffic impacts of proposed Downtown projects in the context of other projects in the Downtown vicinity that have already been approved. The following projects have been approved that would potentially affect traffic conditions:

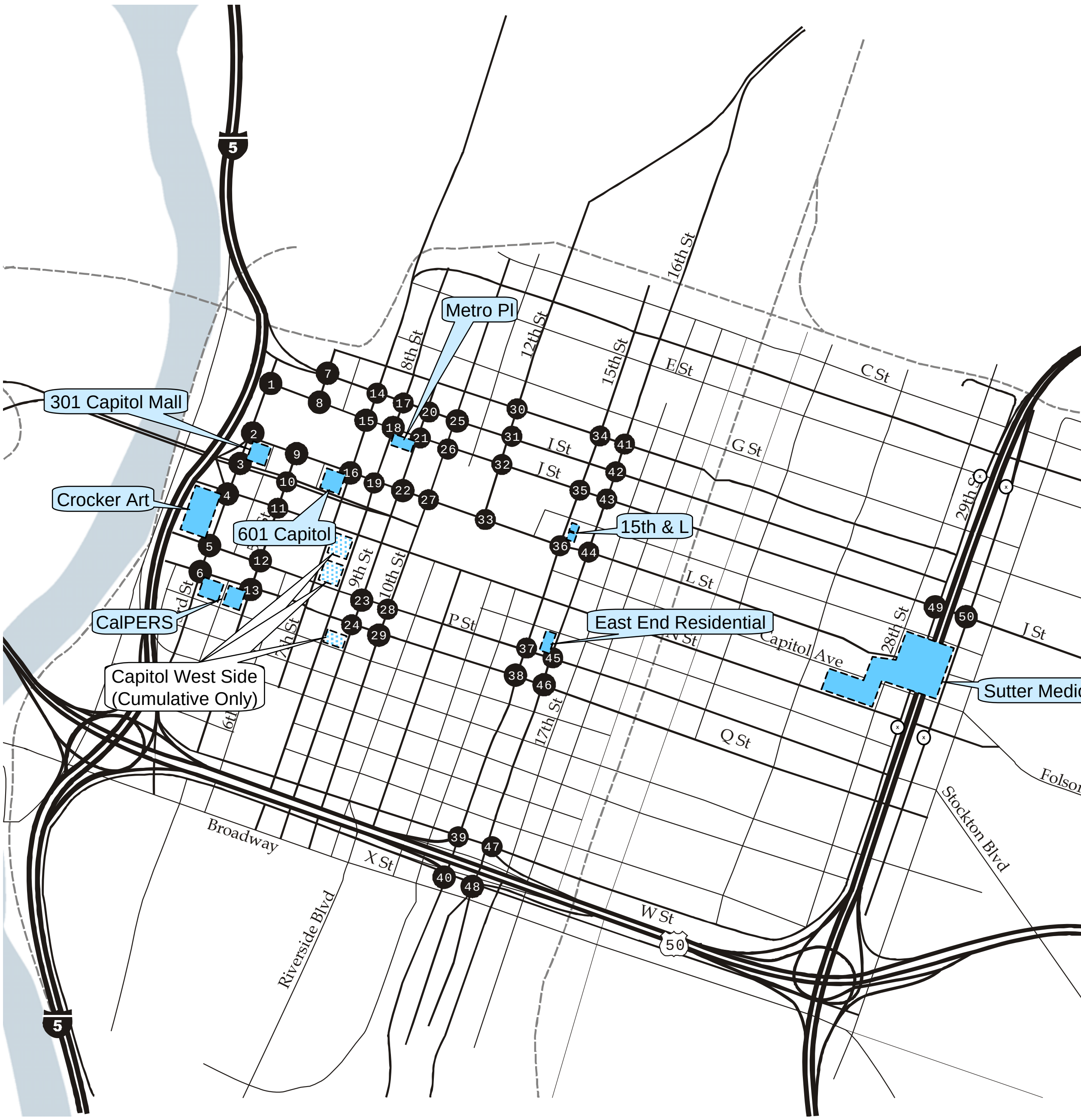
1. Crocker Art Museum Expansion
2. 301 Capitol Mall
3. 601 Capitol Mall
4. Metro Place Office / Residential
5. 15th & L Street Hotel
6. CalPERS Headquarters Expansion
7. Sutter Medical Center and the Trinity Cathedral
8. CADA East End Gateway Residential
9. Capitol West Side Projects[3]
10. Conversion of 3rd Street to two-way operations between I and J Streets
11. Amtrak/Folsom Corridor Light Rail Extension – Amtrak Extension (Regional Transit)

The locations of the baseline projects (including the Capitol West Side Projects) are in shown in Figure 8. The Light Rail - Amtrak Extension would affect the following intersections:

- 5th Street / I Street, where two new southbound right turn lanes will be provided (with no change to the existing signal timing);
- 8th Street / I Street, where a new northbound left-turn lane will be added to 8th Street; and
- 8th Street / L Street, where a northbound combination left-through lane on 8th Street will be converted to a left-turn only lane.

The Light Rail – Amtrak Extension changes would not affect signal timing at any of the intersections.

[3] The Capitol West Side Project includes two components: the Central Plant Renovation and the West End Office Complex. Only the Central Plant Renovation was assumed to be part of baseline conditions and is expected to generate only a nominal number of trips. The West End Office Complex is not expected to occur until 2013, were considered in the evaluation of cumulative conditions.



KEY

40 = Study intersection

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Figure 8
LOCATIONS OF BASELINE PROJECTS

A summary of intersection operations for baseline conditions is provided in Table 11. After completion of the baseline projects listed above, levels of service are expected to comply with the City's LOS C traffic operations standard at all but the following three (3) locations:

- 3rd Street / J Street, where the intersection would operate at LOS E during the a.m. peak hour;
- 3rd Street / L Street, where the intersection would operate at LOS D during the p.m. peak hour; and
- 15th Street / J Street, where the intersection would operate at LOS D during the p.m. peak hour.

Table 11
Intersection Levels of Service – Baseline Conditions

Intersection	AM Peak Hour		PM Peak Hour	
	LOS[1]	Delay[2]	LOS[1]	Delay[2]
1) 3rd St/J St	E	59.9	B	18.2
2) 3rd St/L St	B	18.6	D	43.8
3) 3rd St/Capitol Mall	C	21.2	C	23.2
4) 3rd St/N St	C	20.9	B	19.6
5) 3rd St/P St	A	9.2	C	27.6
6) 3rd St/Q St	B	11.6	A	9.7
7) 5th St/I St	B	11.1	C	20.6
8) 5th St/J St	C	21.7	B	11.6
9) 5th St/L St	B	14.0	C	24.3
10) 5th St/Capitol Mall	B	19.2	B	19.0
11) 5th St/N St	B	13.4	B	13.8
12) 5th St/P St	B	10.7	B	16.1
13) 5th St/Q St	B	11.1	A	9.8
14) 7th St/I St	A	10.0	B	18.6
15) 7th St/J St	B	17.8	B	13.6
16) 7th St/L St	B	11.5	B	15.4
17) 8th St/I St	B	10.3	B	18.4
18) 8th S/tJ St	B	18.0	B	14.6
19) 8th St/L St	B	12.5	B	16.3
20) 9th St/I St	B	13.0	C	20.8
21) 9th St/J St	C	21.0	B	17.0
22) 9th St/L St	B	10.4	B	12.0
23) 9th St/P St	A	9.5	B	11.4
24) 9th St/Q St	B	11.5	B	11.6
25) 10th St/I St	B	14.9	C	21.9
26) 10th St/J St	C	22.0	C	21.0

Table 11
Intersection Levels of Service – Baseline Conditions

Intersection	AM Peak Hour		PM Peak Hour	
	LOS[1]	Delay[2]	LOS[1]	Delay[2]
27) 10th St/L St	B	12.7	B	14.8
28) 10th St/P St	B	11.8	A	8.9
29) 10th St/Q St	B	11.0	A	8.8
30) 12th St/H St	B	18.1	B	13.7
31) 12th St/I St	A	6.6	A	7.6
32) 12th St/J St	B	18.8	C	21.2
33) 12th St/L St	B	13.2	B	14.6
34) 15th St/H St	A	9.7	B	11.9
35) 15th St/J St	B	11.6	D	49.2
36) 15th St/L St	B	11.5	B	11.7
37) 15th St/P St	B	11.4	B	11.3
38) 15th St/Q St	B	10.1	B	11.4
39) 15th St/W St	B	12.4	B	14.5
40) 15th St/X St	C	22.5	C	32.1
41) 16th St/H St	B	11.5	C	21.6
42) 16th St/I St	B	10.4	B	11.7
43) 16th St/J St	B	11.7	B	13.5
44) 16th St/L St	B	11.0	B	11.9
45) 16th St/P St	B	11.8	B	10.9
46) 16th St/Q St	B	11.9	B	10.2
47) 16th St/W St	C	24.0	C	24.1
48) 16th St/X St	B	13.8	B	16.3
49) 29th St/J St	C	34.1	C	22.8
50) 30th St/J St	B	12.6	B	14.8

Source: Dowling Associates, Inc., 2006.
[1] LOS = Level of Service
[2] Weighted average control delay in seconds

Summaries of freeway operations for baseline conditions are provided in Table 12 for freeway mainline segments, Table 13 for freeway interchange operations, and Table 14 for vehicle queues at freeway ramps.

Table 12
Freeway Mainline Operations – Baseline Conditions

Location	AM Peak Hour			PM Peak Hour		
	Volume	V/C[1]	LOS[2]	Volume	V/C[1]	LOS[2]
Northbound I-5						
South of US 50 on-ramp	3,539	0.56	C	2,959	0.47	**F**[3]
North of US 50 on-ramp	7,249	0.86	D	5,346	0.64	**F**[3]
South of L Street on-ramp	5,330	0.85	D	4,960	0.79	**F**[3]
South of I Street on-ramp	5,522	0.66	C	5,717	0.68	**F**[3]
South of Richards Blvd off-ramp	5,881	0.59	C	7,196	0.72	**F**[3]
Southbound I-5						
North of Richards Blvd on-ramp	8,124	0.97	E	6,086	0.72	C
North of J Street on-ramp	8,600	1.02	**F**	6,857	0.82	D
North of I Street on-ramp	6,607	0.79	D	6,281	0.75	**F**[3]
North of US 50 off-ramp	5,846	0.62	C	6,036	0.64	**F**[3]
Eastbound US 50						
West of I-5 on-ramp	3,197	0.38	B	1,446	0.17	A
West of 15th Street off-ramp	8,278	0.68	C	6,441	0.53	C
West of 10th Street on-ramp	7,629	0.73	C	5,765	0.55	C
West of 16th Street on-ramp	8,465	0.70	C	6,795	0.56	C
Westbound US 50						
East of Hwy 51/US 99 on-ramp	4,065	0.41	B	3,447	0.34	B
East of 10th Street off-ramp	6,854	0.65	C	6,281	0.60	C
East of 15th Street on-ramp	5,645	0.54	C	5,857	0.56	C
East of I-5 off ramp	6,124	0.49	B	6,530	0.52	B

Source: Dowling Associates, Inc., 2006.
[1] V/C = Volume / Capacity
[2] LOS = Level of Service
[3] Queuing extends from downstream bottlenecks.

After completion of the baseline projects, levels of service on freeway mainline segments are shown to comply with Caltrans' LOS E traffic operations standard at all locations except for areas on I-5 during the p.m. peak hour that would be affected by downstream bottlenecks and the southbound section of I-5 before the J Street on-ramp during the a.m. peak hour.

Table 13
Freeway Interchange Operations – Baseline Conditions

Ramp	AM Peak Hour			PM Peak Hour		
	LOS[1]	Density[2] (Flow)	Volume	LOS[1]	Density[2] (Flow)	Volume
Northbound I-5						
US 50 on-ramp	**F**	42.16	3,277	D	29.37	2,021
P Street to J Street weave	C	24.15	7,487	C	21.11	6,345
L Street on-ramp	C	(209)	192	C	(826)	757
I Street on-ramp	B	11.90	359	C	21.22	1,479
Richards Boulevard off-ramp	B	19.31	659	C	26.69	349
Southbound I-5						
Richards Boulevard on-ramp	C	(519)	476	C	(841)	771
J Street off-ramp	C	20.56	1,993	B	16.39	576
I Street to Q Street weave	B	19.74	6,904	C	23.76	7,356
US 50 off-ramp	**F**	13.97	3,809	**F**	14.43	4,301
Eastbound U.S. 50						
I-5 on-ramp	**F**	45.58	5,081	**F**	41.77	4,995
15th Street off-ramp	D	32.74	649	C	25.32	676
10th Street on-ramp	B	19.47	836	B	17.70	1,030
16th Street to Business 80/SR99 weave	D	32.77	9153	D	28.24	7206
Westbound U.S. 50						
Business 80 to 16th Street weave	B	17.52	5,343	B	17.37	5147
10th Street off-ramp	D	29.86	1,209	C	23.33	424
15th Street on-ramp	D	28.25	479	D	30.75	673
I-5 off-ramp	**F**	(4313)	3,934	B	(3732)	3,404

Source: Dowling Associates, Inc., 2006.

[1] LOS = Level of Service

[2] Numbers with decimals indicate the density of passenger vehicles per mile per lane in the merge or diverge area. Whole numbers indicate the ramp flow rate in passenger car equivalents where a lane is added to the freeway at an on-ramp.

Levels of service at freeway ramp terminals for baseline conditions are expected to operate at slightly higher levels of congestion than for existing conditions.

For baseline conditions, the northbound I-5 off ramp to J Street would have inadequate storage capacity during the a.m. peak hour, during which time the queues would extend onto the freeway. The baseline queue at this ramp would be approximately 500 feet longer than existing conditions.

The southbound I-5 off ramp to J Street would have inadequate storage capacity during the a.m. peak hour, during which time the queues would extend into the ramp deceleration area. This condition does not typically occur during existing conditions.

Table 14
Freeway Ramp Queues - Baseline Conditions

Location	Storage Capacity (feet)	AM Peak Hour		PM Peak Hour	
		Queue (feet)	Adequate Capacity	Queue (feet)	Adequate Capacity
I-5 NB Q Street off-ramp	3500	1000	Yes	250	Yes
I-5 NB J Street off-ramp	1750	3975	**No**	1050	Yes
I-5 SB J Street off-ramp	3600	3800	**No**	800	Yes
US 50 EB 15th Street off-ramp	1600	600	Yes	650	Yes
US 50 WB 16th Street off-ramp	1625	1125	Yes	975	Yes

Source: Dowling Associates, Inc., 2006

Note: **Bold** values show substandard traffic operations.

Cumulative Conditions

The analysis of transportation and circulation under cumulative conditions focused on near-term (Year 2013) and long-term (Year 2030) conditions. Cumulative traffic volumes were produced using the SACMET 2013 and 2027 models, which reflect approved land use changes in the project area. The SACMET models contain the roadway network described in the SACOG Metropolitan Transportation Plan and include High Occupancy Vehicle lanes on I-5 and U.S. 50.

The land use data provided in the SACMET model were checked to determine if the baseline projects and the proposed Downtown projects could reasonably be assumed to be included in the growth assumed to occur in the model. Where it was determined that there was insufficient growth in the model to represent inclusion of the baseline and proposed projects, increases in land use assumptions were made to ensure the models would reflect all anticipated growth for cumulative conditions.

The SACMET model incorporated planned network improvements that are expected to be implemented for near-term and long-term conditions. The City of Sacramento plans to convert the following street segments from one-way to two-way operations and provide necessary improvements:

- 3rd Street from I Street to J Street, resulting in one northbound lane and two southbound lanes
- J Street from 29th Street to Alhambra Boulevard, resulting in two eastbound lanes and one westbound lane
- L Street from 16th to 29th Street, resulting in one lane in each direction

- N Street from 16th to 28th Street, resulting in one lane in each direction
- P Street from 16th to 29th Street, resulting in one lane in each direction
- Q Street from 16th to 29th Street, resulting in one lane in each direction
- 9th Streets from E Street to G Street, resulting in one lane in each direction
- 10th Street from E Street to G Street, resulting in one lane in each direction

The City also plans to convert the following street segments from three-lane one-way operations to two-lane one-way operations to accommodate bike lanes on both sides of the streets:

- 19th Street from H Street to Broadway
- 21st Street from I Street to W Street

The street modifications described above were reflected in refined versions of the SACMET model (for 2000 and 2025) used to forecast traffic volumes for the *Draft Environmental Impact Report: Central City Two-Way Conversion Study* (Planning Dynamics Group 2006). In these models, developed by DKS Associates, the Downtown transportation analysis zones (TAZs) of the SACMET models were disaggregated (divided) into smaller city blocks, and the trips to and from each Downtown TAZ were allocated to each block based on the land uses and trip making characteristics of the land uses on each block.

The current versions of the SACMET model for 2005 and 2027 were used as the basis for developing long-range travel demand forecasts for the Sacramento Downtown Traffic Study by applying similar procedures to those used in the Two-Way Conversion Study. Trips between all pairs of TAZs (trip tables) were developed using the 2005 and 2027 SACMET travel demand models. The trip tables were split to the block level using factors developed for the Two-Way Conversion Study (after modifications to the factors were made to account for the proposed Downtown projects). The traffic volume increases from 2005 to 2027 shown in the modeling process were added to existing traffic volumes to produce the long-range forecasts. The long-range forecasts produced in this manner are assumed to represent year 2030 conditions.[4]

Near-term travel demand forecasts were developed by interpolation between existing traffic volumes and long-range forecasts. The level of increase in traffic volume for near-term conditions was based on the relative amount of traffic growth forecast using the 2005, 2013, and 2027 SACMET models.

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[4] Because the 2027 model represents full buildout scenario of the surrounding community, no further growth is, therefore, by definition, considered to be feasible.

The analysis of cumulative conditions was performed using the TRAFFIX traffic impact analysis software package. Traffic volumes for cumulative No-Project conditions were developed by subtracting traffic for the proposed Downtown projects from the traffic forecasts for cumulative near-term and long-term conditions. Peak hour turning movement traffic volumes for cumulative conditions are shown in Appendix C.

Near-Term (2013) Impacts and Mitigation Measures

The following section is provided to serve as the assessment of cumulative impacts of all the proposed Downtown projects in combination with other reasonably foreseeable projects expected to occur for near-term (2013) conditions.

Impact 1 – Intersections (Near-Term Cumulative)

Intersection operating conditions for near-term cumulative conditions are summarized in Table 15. The proposed Downtown projects would add traffic to study intersections and cause significant impacts for near-term cumulative conditions at the following intersections:

(a) 3rd Street / J Street, where the level of service without the proposed projects would be LOS F during the a.m. peak hour and project generated traffic would increase the average vehicle delay by 34.7 seconds. This is considered a ***significant impact***.

(b) 3rd Street / L Street, where the level of service without the proposed projects would be LOS E during the p.m. peak hour and project generated traffic would increase the average vehicle delay by 43.9 seconds. This is considered a ***significant impact***.

(c) 3rd Street / N Street, where the traffic generated by the project would degrade the level of service from LOS C to LOS D during the a.m. peak hour. This is considered a ***significant impact***.

(d) 3rd Street / P Street, where the traffic generated by the project would degrade the level of service from LOS C to LOS D during the p.m. peak hour. This is considered a ***significant impact***.

(e) 5th Street / L Street, where the traffic generated by the project would degrade the level of service from LOS C to LOS E during the p.m. peak hour. This is considered a ***significant impact***.

(f) 7th Street / L Street, where the traffic generated by the project would degrade the level of service from LOS B to LOS D during the p.m. peak hour. This is considered a ***significant impact***.

(g) 8th Street / L Street, where the traffic generated by the project would degrade the level of service from LOS B to LOS D during the p.m. peak hour. This is considered a ***significant impact***.

(h) 9th Street / J Street, where the traffic generated by the project would degrade the level of service from LOS B to LOS E during the p.m. peak hour. This is considered a ***significant impact***.

(i) 10th Street / J Street, where the traffic generated by the project would degrade the level of service from LOS C to LOS E during the p.m. peak hour. This is considered a ***significant impact***.

(j) 12th Street / J Street, where the traffic generated by the project would degrade the level of service from LOS C to LOS E during the p.m. peak hour. This is considered a ***significant impact***.

(k) 15th Street / J Street, where the level of service without the proposed projects would be LOS D during the p.m. peak hour and project generated traffic would increase the average vehicle delay by 54.4 seconds. This is considered a ***significant impact***.

(l) 15th Street / X Street, where the level of service without the proposed projects would be LOS E during the p.m. peak hour and project generated traffic would increase the average vehicle delay by 21.5 seconds. This is considered a ***significant impact***.

(m) 16th Street / H Street, where the traffic generated by the project would degrade the level of service from LOS C to LOS D during the p.m. peak hour. This is considered a ***significant impact***.

Mitigation Measures

1(a) *At the 3rd Street / J Street intersection, modify the traffic signal phase splits during the a.m. peak period by increasing the phase time for the southbound I-5 off-ramp approach (eastbound) to 40 seconds, maintaining the 50 second phase time for the northbound I-5 off-ramp, and decreasing the north and southbound 3rd Street phase time to 10 seconds. This mitigation measure would reduce average vehicle delay by 33 seconds during the a.m. peak hour and would reduce the near-term cumulative impact to a* ***less-than-significant*** *level.*

1(b) *At the 3rd Street / L Street intersection, modify the westbound approach to provide one left-turn lane, two through lanes (to the northbound I-5 on-ramp), and one right-turn lane. This mitigation measure would reduce average vehicle delay by 40 seconds during the p.m. peak hour and maintain LOS C operations during the a.m. peak hour. The mitigation measure would reduce the near-term cumulative impact to a* ***less-than-significant*** *level.*

1(c) *At the 3rd Street / N Street intersection, modify the traffic signal phase splits during the a.m. peak period by increasing the southbound 3rd Street signal phase time to 34 seconds, decreasing the eastbound N Street approach to 15 seconds, and maintaining the phase time for the eastbound Tower Bridge approach at 21 seconds. This mitigation measure would improve traffic operations to LOS C during the a.m.*

*peak hour and would reduce the near-term cumulative impact to a **less-than-significant** level.*

1(d) *At the 3rd Street / P Street intersection, modify the traffic signal phase splits during the p.m. peak period by increasing the signal phase time to 32 seconds for the westbound P Street approach and decreasing the southbound 3rd Street approach to 18 seconds. This mitigation measure would improve traffic operations to LOS C during the p.m. peak hour and would reduce the near-term cumulative impact to a **less-than-significant** level.*

1(e) *At the 5th Street / L Street intersection, modify the traffic signal phase splits during the p.m. peak period by increasing the signal phase time to 28 seconds for the westbound L Street approach and decreasing the northbound and southbound 5th Street approaches to 42 seconds. This mitigation measure would improve traffic operations to LOS C during the p.m. peak hour and would reduce the near-term cumulative impact to a **less-than-significant** level.*

1(f) *At the 7th Street / L Street intersection, modify the traffic signal phase splits during the p.m. peak period by increasing the signal phase time to 22 seconds for the westbound L Street approach and decreasing the northbound and southbound 5th Street approaches to 28 seconds. This mitigation measure would improve traffic operations to LOS C during the p.m. peak hour and would reduce the near-term cumulative impact to a **less-than-significant** level.*

1(g) *At the 8th Street / L Street intersection, modify the traffic signal phase splits during the p.m. peak period by increasing the signal phase time to 25 seconds for the westbound L Street approach and decreasing the northbound 8th Street signal phase time to 25 seconds. This mitigation measure would improve traffic operations to LOS B during the p.m. peak hour and would reduce the near-term cumulative impact to a **less-than-significant** level.*

1(h) *At the 9th Street / J Street intersection, modify the traffic signal phase splits during the p.m. peak period by increasing the signal phase time to 28 seconds for the eastbound J Street approach and decreasing the southbound 9th Street signal phase time to 22 seconds. This mitigation measure would improve traffic operations to LOS C during the p.m. peak hour and would reduce the near-term cumulative impact to a **less-than-significant** level.*

1(i) *At the 10th Street / J Street intersection, modify the traffic signal phase splits during the p.m. peak period by increasing the signal phase time to 28 seconds for the eastbound J Street approach and decreasing the northbound 10th Street signal phase time to 22 seconds. This mitigation measure would improve traffic operations to LOS C during the p.m. peak hour and would reduce the near-term cumulative impact to a **less-than-significant** level.*

1(j) *At the 12^{th} Street / J Street intersection, , modify the traffic signal phase splits during the p.m. peak period by increasing the signal phase time to 22 seconds for the eastbound J Street approach and decreasing the 12^{th} Street signal phase time to 28 seconds. This mitigation measure would improve traffic operations to LOS C during the p.m. peak hour and would reduce the near-term cumulative impact to a **less-than-significant** level.*

1(k) *At the 15^{th} Street / J Street intersection, modify the traffic signal phase splits during the p.m. peak period by increasing the phase time for the eastbound J Street approach to 30 seconds, and decreasing the southbound 15^{th} Street signal phase time to 20 seconds. This mitigation measure would reduce average vehicle delay by 61.4 seconds during the p.m. peak hour and would reduce the near-term cumulative impact to a **less-than-significant** level.*

1(l) *At the 15^{th} Street / X Street intersection, modify the traffic signal phase splits during the p.m. peak period by increasing the phase time for the southbound 15^{th} Street approach to 28 seconds, decreasing the eastbound U.S. 50 off-ramp phase time to 28 seconds, and maintaining 17 seconds for the X Street approach. This mitigation measure would reduce average vehicle delay by 34.4 seconds during the p.m. peak hour and would reduce the near-term cumulative impact to a **less-than-significant** level.*

1(m) *At the 16^{th} Street / H Street intersection, modify the traffic signal phase splits during the p.m. peak period by increasing the phase time for the northbound 15^{th} Street approach to 26 seconds, decreasing the phase times for the eastbound H Street left and through movements to 18 and 24 seconds, respectively, and maintaining 6 seconds for the westbound H Street right-turning movement. This mitigation measure would improve traffic operations to LOS C during the p.m. peak hour and would reduce the near-term cumulative impact to a **less-than-significant** level.*

Table 15
Intersection Levels of Service – Near-Term Cumulative Conditions (2013)

Intersection	Without Projects				With Projects			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS[1]	Delay[2]	LOS[1]	Delay[2]	LOS[1]	Delay[2]	LOS[1]	Delay[2]
1) 3rd St/J St	F	104.5	C	22.0	**F**	**139.2**	C	26.5
2) 3rd St/L St	B	19.7	E	55.3	C	20.7	**F**	**99.2**
3) 3rd St/Capitol Mall	C	21.1	C	23.3	C	21.8	C	26.2
4) 3rd St/N St	C	26.7	C	20.2	D	37.7	C	21.2
5) 3rd St/P St	A	9.4	C	27.9	A	9.7	**D**	**38.0**
6) 3rd St/Q St	B	12.8	B	10.1	B	14.6	A	10.0
7) 5th St/I St	B	11.3	C	23.2	B	11.8	C	30.6
8) 5th St/J St	C	22.3	B	11.8	C	24.9	B	12.7
9) 5th St/L St	B	13.9	C	23.9	B	14.9	**E**	**58.5**
10) 5th St/Capitol Mall	C	20.1	B	19.3	C	20.6	C	20.9
11) 5th St/N St	B	14.0	B	13.9	B	15.6	B	14.5
12) 5th St/P St	B	10.8	B	16.9	B	11.6	C	20.7
13) 5th St/Q St	B	11.4	B	12.2	B	12.1	B	12.1
14) 7th St/I St	B	10.0	B	19.0	B	10.7	B	19.6
15) 7th St/J St	B	17.8	B	14.4	C	21.4	C	24.6
16) 7th St/L St	B	11.5	B	15.2	B	12.2	**D**	**38.3**
17) 8th St/I St	B	10.3	B	18.6	B	10.6	C	20.2
18) 8th S/tJ St	B	18.0	B	14.6	C	20.6	C	31.0
19) 8th St/L St	B	12.5	B	16.3	B	16.2	**D**	**48.3**
20) 9th St/I St	B	13.9	C	22.1	B	14.1	C	22.2
21) 9th St/J St	C	21.0	B	16.7	C	27.4	**E**	**68.6**
22) 9th St/L St	B	10.4	B	14.8	B	13.3	B	18.4
23) 9th St/P St	A	9.5	B	11.7	A	9.7	B	12.4
24) 9th St/Q St	B	12.1	B	11.6	B	12.2	B	12.8
25) 10th St/I St	B	15.0	C	23.6	B	15.9	C	24.8
26) 10th St/J St	C	23.1	C	20.9	C	24.0	**E**	**72.6**
27) 10th St/L St	B	13.3	B	15.6	B	16.0	B	19.1
28) 10th St/P St	B	12.9	A	8.7	B	14.6	A	9.3
29) 10th St/Q St	B	11.5	A	9.2	B	12.1	A	9.3
30) 12th St/H St	B	17.6	B	13.7	B	19.2	B	14.1
31) 12th St/I St	A	6.9	A	7.9	A	7.3	A	8.4
32) 12th St/J St	B	18.8	C	21.7	C	31.5	**E**	**73.0**
33) 12th St/L St	B	13.3	B	14.6	B	14.6	B	15.5
34) 15th St/H St	A	9.9	B	12.7	A	10.0	B	12.9
35) 15th St/J St	B	11.6	D	46.0	B	12.3	**F**	**100.4**
36) 15th St/L St	B	11.5	B	11.9	B	13.0	B	12.6
37) 15th St/P St	B	11.7	B	11.8	B	11.8	B	12.4
38) 15th St/Q St	B	10.3	B	11.7	B	10.3	B	12.2
39) 15th St/W St	B	12.5	B	14.6	B	12.6	B	14.9
40) 15th St/X St	C	23.1	E	59.8	C	23.1	**F**	**81.3**

Table 15
Intersection Levels of Service – Near-Term Cumulative Conditions (2013)

Intersection	Without Projects				With Projects			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS[1]	Delay[2]	LOS[1]	Delay[2]	LOS[1]	Delay[2]	LOS[1]	Delay[2]
41) 16th St/H St	B	11.6	C	21.5	B	11.7	**D**	**37.2**
42) 16th St/I St	B	10.6	B	15.2	B	10.7	B	15.4
43) 16th St/J St	B	11.9	B	13.8	B	12.1	B	14.8
44) 16th St/L St	B	11.5	B	12.6	B	12.2	B	13.0
45) 16th St/P St	B	14.4	B	12.7	B	15.2	B	13.0
46) 16th St/Q St	B	12.9	B	10.3	B	13.6	B	10.6
47) 16th St/W St	C	25.2	C	25.4	C	26.6	C	27.3
48) 16th St/X St	B	14.1	B	19.1	B	14.2	C	20.4
49) 29th St/J St	D	39.7	C	34.1	D	39.7	C	34.7
50) 30th St/J St	B	14.9	B	17.7	B	14.9	B	17.8

Source*:* Dowling Associates, Inc., 2006.
[1] LOS = Level of Service
[2] Weighted average control delay in seconds
Note: **Bold** values indicate a potential significant impact.

Impact 2 – Freeway Mainline (Near-Term Cumulative)

Freeway mainline operating conditions for near-term cumulative conditions are summarized in Table 16. The proposed Downtown projects would add traffic to freeway mainline segments but would not cause freeway levels of service to deteriorate beyond LOS E. The projects would add traffic to I-5 freeway segments that would operate at LOS F without the projects. This is considered a ***significant impact***.

Mitigation Measures

No feasible mitigation measures were identified that would reduce the impact of the project on I-5 freeway mainline segments. Widening the freeway would reduce the impact but was not considered feasible. The impacts of proposed projects on I-5 freeway segments would remain ***significant-and-unavoidable.***

Table 16
Freeway Mainline Operations – Near-Term Cumulative Conditions (2013)

Location	Without Projects						With Projects					
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
	Volume	V/C[1]	LOS[2]	Volume	V/C[1]	LOS[2]	Volume	V/C[1]	LOS[2]	Volume	V/C[1]	LOS[2]
Northbound I-5												
South of US 50 on-ramp	3,694	0.59	C	3,297	0.52	**F**[3]	3,734	0.59	C	3,381	0.54	**F**[3]
North of US 50 on-ramp	7,686	0.92	E	5,942	0.71	**F**[3]	7,727	0.92	E	6,071	0.72	**F**[3]
South of L Street on-ramp	5,715	0.91	E	5,242	0.83	**F**[3]	5,715	0.91	E	5,242	0.83	**F**[3]
South of I Street on-ramp	6,229	0.74	D	6,457	0.77	**F**[3]	6,229	0.74	D	6,457	0.77	**F**[3]
South of Richards Blvd off-ramp	6,646	0.66	C	8,106	0.81	**F**[3]	6,743	0.67	C	8,270	0.83	**F**[3]
Southbound I-5												
North of Richards Blvd on-ramp	9,019	1.07	**F**	6,804	0.81	D	9,268	1.10	**F**	6,988	0.83	D
North of J Street on-ramp	9,707	1.16	**F**	7,818	0.93	E	9,956	1.19	**F**	8,002	0.95	E
North of I Street on-ramp	7,321	0.87	D	7,158	0.85	**F**[3]	7,321	0.87	D	7,158	0.85	**F**[3]
North of US 50 off-ramp	6,860	0.72	C	7,093	0.75	**F**[3]	6,908	0.73	C	7,136	0.75	**F**[3]
Eastbound US 50												
West of I-5 on-ramp	4,066	0.48	B	2,382	0.28	A	4,066	0.48	B	2,382	0.28	A
West of 15th Street off-ramp	9,270	0.77	D	7,653	0.63	C	9,299	0.77	D	7,771	0.64	C
West of 10th Street on-ramp	8,590	0.82	D	6,871	0.65	C	8,619	0.82	D	6,989	0.67	C
West of 16th Street on-ramp	9,380	0.78	D	7,683	0.63	C	9,423	0.78	D	7,883	0.65	C
Westbound US 50												
East of Hwy 51/US 99 on-ramp	3,938	0.39	B	3,456	0.35	B	4,258	0.43	B	3,661	0.37	B
East of 10th Street off-ramp	7,145	0.68	C	6,430	0.61	C	7,319	0.70	C	6,533	0.62	C
East of 15th Street on-ramp	5,910	0.56	C	6,067	0.58	C	5,991	0.57	C	6,152	0.59	C
East of I-5 off ramp	6,527	0.52	B	6,925	0.55	C	6,608	0.52	B	7,010	0.56	C

Source: Dowling Associates, Inc., 2006.
[1] V/C = Volume / Capacity
[2] LOS = Level of Service
[3] Queuing extends from downstream bottlenecks.
Note: **Bold** values show substandard traffic operations.

Impact 3 – Freeway Merge / Diverge / Weave Areas (Near-Term Cumulative)

Freeway interchange operations for near-term cumulative conditions are summarized in Table 17. The proposed Downtown projects would add traffic to freeway ramps and weaving areas but would not cause levels of service to deteriorate beyond LOS E on these facilities. The projects would add traffic to I-5 and U.S. 50 freeway ramps that would operate at LOS F without the projects. This is considered a ***significant impact***.

Mitigation Measures

*No feasible mitigation measures were identified that would reduce the impact of the project on I-5 and U.S. 50 freeway ramps. Widening the freeway would reduce the impact but was not considered feasible. The impacts of proposed projects on freeway ramps would remain **significant-and-unavoidable.***

Impact 4 – Freeway Ramp Queues (Near-Term Cumulative)

Expected freeway ramp queues for near-term cumulative conditions are shown in Table 18. The proposed Downtown projects would add traffic to the northbound I-5 off ramp to J Street, which currently experiences queues during the a.m. peak hour that extend onto the freeway mainline. In addition, the proposed Downtown projects would cause queues for the southbound I-5 off ramp to J Street to extend onto the freeway mainline during the a.m. peak hour. This is considered a ***significant impact***.

Mitigation Measures

*Mitigation measure 1(a) would reduce the queue for the southbound I-5 off ramp at J Street to 6,125 feet during the a.m. peak hour, but this would not be enough to eliminate the near-term cumulative impact. This mitigation measure would not affect the northbound I-5 off ramp queue at J Street, and no other feasible mitigation measures were identified that would reduce the impact of the projects at that location. Widening the freeway would reduce the impact but was not considered feasible. The impacts of the proposed projects on freeway ramp queues would remain **significant and unavoidable**.*

Table 17
Freeway Interchange Operations – Near-Term Cumulative Conditions (2013)

Ramp	Without Projects						With Projects					
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
	LOS[1]	Density[2] (Flow)	Volume	LOS[1]	Density[2] (Flow)	Volume	LOS[1]	Density[2] (Flow)	Volume	LOS[1]	Density[2] (Flow)	Volume
Northbound I-5												
US 50 on-ramp	**F**	44.46	3,473	D	33.02	2,279	**F**	44.66	3,474	D	33.78	2,324
P Street to J Street weave	C	25.14	7,873	C	20.85	6,627	C	25.38	7,914	C	21.61	6,756
L Street on-ramp	C	(561)	514	C	(1325)	1,215	C	(561)	514	C	(1325)	1,215
I Street on-ramp	B	13.62	417	C	23.89	1,649	B	14.40	514	C	25.21	1,813
Richards Boulevard off-ramp	C	20.61	659	D	30.68	396	C	21	659	D	31	396
Southbound I-5												
Richards Boulevard on-ramp	C	(751)	688	C	(1106)	1,014	C	(751)	688	C	(1106)	1,014
J Street off-ramp	C	23.20	2,386	B	18.69	660	C	23.80	2,635	B	19.12	844
I Street to Q Street weave	C	22.07	7,752	C	26.89	8,352	C	22.32	7,800	C	27.15	8,395
US 50 off-ramp	**F**	16.40	4,302	**F**	16.95	4,758	**F**	16.51	4,320	**F**	17.06	4,769
Eastbound US 50												
I-5 on-ramp	**F**	48.10	5,204	**F**	45.65	5,271	**F**	48.34	5,233	**F**	46.59	5,389
15th Street off-ramp	E	36.98	680	D	30.87	782	E	37.10	680	D	31.35	782
10th Street on-ramp	C	20.81	790	B	17.93	812	C	20.97	804	B	18.79	894
16th Street to Business 80/SR99 weave	E	35.20	10036	D	30.43	7942	E	35.94	10143	D	32.77	8307
Westbound US 50												
Business 80 to 16th Street weave	B	17.17	5,219	B	17.15	5089	B	18.48	5,539	B	18.02	5294
10th Street off-ramp	D	31.19	1,235	C	23.62	363	D	32.40	1,328	C	24.14	381
15th Street on-ramp	D	30.54	617	D	33.17	858	D	30.90	617	D	33.55	858
I-5 off-ramp	**F**	(4493)	4,098	**F**	(3939)	3,592	**F**	(4582)	4,179	**F**	(4031)	3,677

Source: Dowling Associates, Inc., 2006.

[1] LOS = Level of Service

[2] Numbers with decimals indicate the density of passenger vehicles per mile per lane in the merge or diverge area. Whole numbers indicate the ramp flow rate in passenger car equivalents where a lane is added to the freeway at an on-ramp.

Note: **Bold** values show substandard traffic operations.

Table 18
Freeway Ramp Queues - Near-Term Cumulative Conditions (2013)

Location	Storage Capacity (feet)	Without Projects				With Projects			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Queue (feet)	Adequate Capacity	Queue (feet)	Adequate Capacity	Queue (feet)	Adequate Capacity	Queue (feet)	Adequate Capacity
I-5 NB Q Street off-ramp	3500	1150	Yes	300	Yes	1400	Yes	300	Yes
I-5 NB J Street off-ramp	1750	3975	**No**	1200	Yes	4200	**No**	1500	Yes
I-5 SB J Street off-ramp	3600	5875	**No**	850	Yes	7325	**No**	1225	Yes
US 50 EB 15th Street off-ramp	1600	600	Yes	800	Yes	600	Yes	800	Yes
US 50 WB 16th Street off-ramp	1625	1125	Yes	1125	Yes	1475	Yes	1350	Yes

Source: Dowling Associates, Inc., 2006

Note: **Bold** values show substandard traffic operations.

Impact 5 – Transit System (Near-Term Cumulative)

The proposed Downtown projects would increase demand for transit services. Peak period transit trips generated by the project are estimated to be approximately 259 during the a.m. peak hour, and approximately 288 during the p.m. peak hour. Although particular light rail trains and buses operate at or near capacity during the peak commuter periods, there is ample capacity on the Regional Transit system to support this increase in trips. Additional light rail service to Downtown is anticipated with the South Sacramento Corridor, Folsom Corridor extension, and extension to the Amtrak Station. These light rail projects are scheduled for completion by the opening date of the Proposed Project. Because the existing and future transit system capacity would be sufficient to accommodate the increased transit ridership, the impact would be ***less than significant***.

Mitigation Measures

None required.

Impact 6 –Bikeways (Near-Term Cumulative)

The proposed Downtown projects would result in the addition of employees, visitors, and other patrons to each site, some who would travel by bicycle. The proposed Downtown projects are not anticipated to hinder or eliminate an existing designated bikeway or interfere with implementation of a proposed bikeway. None of the proposed projects are anticipated to result in unsafe conditions for bicyclists, including unsafe bicycle / pedestrian or bicycle / motor vehicle conflicts. Therefore, bicycle impacts would be ***less than significant***.

Mitigation Measures

None required.

Impact 7 –Pedestrian Circulation (Near-Term Cumulative)

The proposed Downtown projects would result in the addition of employees, visitors, and other patrons to each site. Considerable direct access will be by pedestrian mode. The proposed Downtown projects are not anticipated to result in unsafe conditions for pedestrians, including unsafe bicycle / pedestrian or pedestrian / motor vehicle conflicts. Therefore, pedestrian impacts are considered ***less than significant***.

Mitigation Measures

None required.

Long-Term (2030) Impacts and Mitigation Measures

The following section is provided to serve as the assessment of cumulative impacts of all the proposed Downtown projects in combination with other reasonably foreseeable projects expected to occur for long-term (2030) conditions.

The evaluation of the long-term conditions addresses impacts that differ from the near-term conditions with regard to intersection operations and freeway operations. Cumulative conditions would not result in additional impacts beyond those already identified as near-term cumulative impacts in the areas of transit service, bikeways and pedestrian circulation.

Impact 8 – Intersections (Long-Term Cumulative)

Intersection operating conditions for long-term cumulative conditions are summarized in Table 19. The proposed Downtown projects would add traffic to study intersections and cause significant impacts for long-term cumulative conditions at the following intersections:

(a) 3rd Street / J Street, where the level of service without the proposed projects would be LOS F during the a.m. peak hour and project generated traffic would increase the average vehicle delay by 34.2 seconds; and where the level of service without the proposed projects would be LOS D during the p.m. peak hour and project generated traffic would increase the average vehicle delay by 6.8 seconds. This is considered a ***significant impact***.

(b) 3rd Street / L Street, where the level of service without the proposed projects would be LOS E during the p.m. peak hour and project generated traffic would increase the average vehicle delay by 44.1 seconds. This is considered a ***significant impact***.

(c) 3rd Street / N Street, where the traffic generated by the project would degrade the level of service from LOS C to LOS D during the a.m. peak hour. This is considered a ***significant impact***.

(d) 3rd Street / P Street, where the traffic generated by the project would degrade the level of service from LOS C to LOS D during the p.m. peak hour. This is considered a significant impact.

(e) 5th Street / I Street, where the level of service without the proposed projects would be LOS E during the p.m. peak hour and project generated traffic would increase the average vehicle delay by 6.1 seconds. This is considered a significant impact.

(f) 5th Street / L Street, where the traffic generated by the project would degrade the level of service from LOS C to LOS D during the p.m. peak hour. This is considered a significant impact.

(g) 7th Street / L Street, where the traffic generated by the project would degrade the level of service from LOS B to LOS D during the p.m. peak hour. This is considered a significant impact.

(h) 8th Street / L Street, where the traffic generated by the project would degrade the level of service from LOS B to LOS D during the p.m. peak hour. This is considered a ***significant impact***.

(i) 9th Street / J Street, where the traffic generated by the project would degrade the level of service from LOS B to LOS E during the p.m. peak hour. This is considered a ***significant impact***.

(j) 10th Street / J Street, where the traffic generated by the project would degrade the level of service from LOS C to LOS E during the p.m. peak hour. This is considered a ***significant impact***.

Table 19
Intersection Levels of Service – Long-Term Cumulative Conditions (2030)

Intersection	Without Projects				With Projects			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS[1]	Delay[2]	LOS[1]	Delay[2]	LOS[1]	Delay[2]	LOS[1]	Delay[2]
1) 3rd St/J St	F	104.0	D	40.4	**F**	**138.2**	**D**	**47.2**
2) 3rd St/L St	B	19.7	E	64.5	C	20.7	**F**	**108.6**
3) 3rd St/Capitol Mall	C	21.8	C	24.4	C	22.7	C	28.0
4) 3rd St/N St	C	27.5	C	22.6	**D**	**37.9**	C	23.8
5) 3rd St/P St	A	9.9	C	28.7	B	10.2	**D**	**39.2**
6) 3rd St/Q St	B	18.4	B	11.2	C	28.6	B	11.1
7) 5th St/I St	B	13.1	E	72.7	B	13.7	**E**	**78.8**
8) 5th St/J St	C	24.0	B	13.0	C	27.7	B	14.3
9) 5th St/L St	B	13.9	C	22.7	B	14.9	**D**	**54.7**
10) 5th St/Capitol Mall	C	28.7	C	21.5	C	31.4	C	23.4
11) 5th St/N St	B	14.2	B	14.8	B	15.9	B	15.5
12) 5th St/P St	B	11.3	B	18.4	B	12.0	C	24.7
13) 5th St/Q St	B	12.0	B	12.0	B	12.7	B	12.0
14) 7th St/I St	B	11.3	C	22.9	B	12.1	C	25.3
15) 7th St/J St	B	18.8	B	14.7	C	22.4	C	24.2
16) 7th St/L St	B	12.1	B	15.0	B	13.5	**D**	35.6
17) 8th St/I St	B	11.2	B	19.3	B	11.7	C	21.0
18) 8th S/tJ St	B	19.1	B	14.6	C	21.6	C	31.0
19) 8th St/L St	B	12.2	B	16.1	B	15.9	**D**	**47.1**
20) 9th St/I St	B	14.5	C	27.4	B	15.0	C	27.7
21) 9th St/J St	C	21.0	B	16.7	C	27.4	**E**	**68.2**
22) 9th St/L St	B	10.4	B	14.8	B	13.3	B	18.4
23) 9th St/P St	A	9.7	B	12.3	A	9.9	B	13.4
24) 9th St/Q St	B	12.1	B	12.2	B	12.2	B	13.6
25) 10th St/I St	B	16.2	C	27.7	B	17.4	C	29.6

Table 19
Intersection Levels of Service – Long-Term Cumulative Conditions (2030)

Intersection	Without Projects				With Projects			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS[1]	Delay[2]	LOS[1]	Delay[2]	LOS[1]	Delay[2]	LOS[1]	Delay[2]
26) 10th St/J St	C	24.2	C	20.9	C	25.0	**E**	**72.3**
27) 10th St/L St	B	15.3	B	17.8	B	19.1	C	25.4
28) 10th St/P St	B	12.9	A	9.5	B	14.6	B	10.1
29) 10th St/Q St	B	11.7	A	9.8	B	12.3	B	10.0
30) 12th St/H St	B	16.8	B	14.3	B	18.3	B	14.6
31) 12th St/I St	A	8.3	A	9.5	A	8.8	B	10.4
32) 12th St/J St	B	18.8	C	23.5	C	31.3	**E**	**76.6**
33) 12th St/L St	B	13.3	B	15.1	B	14.6	B	16.2
34) 15th St/H St	B	10.4	B	13.9	B	10.4	B	14.2
35) 15th St/J St	B	11.7	D	45.2	B	12.3	**F**	**98.1**
36) 15th St/L St	B	11.5	B	12.3	B	13.0	B	13.1
37) 15th St/P St	B	11.7	B	12.0	B	11.8	B	12.6
38) 15th St/Q St	B	10.9	B	12.9	B	10.9	B	13.4
39) 15th St/W St	B	12.7	B	14.6	B	12.8	B	14.9
40) 15th St/X St	C	25.0	E	58.9	C	25.0	**E**	**79.7**
41) 16th St/H St	B	11.9	C	22.7	B	12.1	**D**	**37.5**
42) 16th St/I St	B	11.4	B	15.6	B	11.5	B	15.8
43) 16th St/J St	B	13.1	B	16.2	B	13.3	B	18.0
44) 16th St/L St	B	11.9	B	13.0	B	12.5	B	13.4
45) 16th St/P St	B	15.1	B	13.8	B	16.2	B	14.2
46) 16th St/Q St	B	13.3	B	10.9	B	14.0	B	11.3
47) 16th St/W St	C	27.4	C	25.2	C	28.7	C	27.0
48) 16th St/X St	B	14.8	C	20.2	B	14.9	C	23.4
49) 29th St/J St	D	39.7	D	41.3	D	39.7	D	44.7
50) 30th St/J St	B	16.6	B	19.1	B	16.6	B	19.2

Source*:* Dowling Associates, Inc., 2006.
[1] LOS = Level of Service
[2] Weighted average control delay in seconds
Note: **Bold** values indicate a potential significant impact.

(k) 12th Street / J Street, where the traffic generated by the project would degrade the level of service from LOS C to LOS E during the p.m. peak hour. This is considered a ***significant impact***.

(l) 15th Street / J Street, where the level of service without the proposed projects would be LOS D during the p.m. peak hour and project generated traffic would increase the average vehicle delay by 52.9 seconds. This is considered a significant impact.

(m) 15th Street / X Street, where the level of service without the proposed projects would be LOS E during the p.m. peak hour and project generated traffic would increase the average vehicle delay by 20.8 seconds. This is considered a ***significant impact***.

(n) 16th Street / H Street, where the traffic generated by the project would degrade the level of service from LOS C to LOS D during the p.m. peak hour. This is considered a ***significant impact***.

Mitigation Measures

8(a) At the 3rd Street / J Street intersection, implement the near-term Mitigation Measure 1(a) (modification of signal phase splits) and also modify the lanes on the southbound I-5 off-ramp approach (eastbound) to provide one combination left-through lane, one through lane, one combination through-right lane, and one exclusive right turn lane. This mitigation measure would reduce average vehicle delay during the a.m. peak hour by 32.5 seconds and would improve traffic operations during the p.m. peak hour to LOS C. This mitigation measure would reduce the long-term cumulative impact to a ***less-than-significant*** *level.*

8(b) At the 3rd Street / L Street intersection, implement the near-term Mitigation Measure 1(b) (modification of the westbound approach lanes) and also modify the traffic signal phase splits during the p.m. peak period by increasing the southbound 3rd Street approach to 23 seconds, decreasing the westbound L Street signal phase time to 38 seconds, and decreasing the northbound 3rd Street left-turning movement to 9 seconds. This mitigation measure would reduce average vehicle delay by 43.5 seconds during the p.m. peak hour and provide LOS C traffic operations during the a.m. peak hour. This mitigation measure would reduce the near-term cumulative impact to a ***less-than-significant*** *level.*

8(c) At the 3rd Street / N Street intersection, implement the near-term Mitigation Measure 1(c) (modification of signal phase splits). This mitigation measure would improve traffic operations to LOS C during the a.m. peak hour and would reduce the long-term cumulative impact to a ***less-than-significant*** *level.*

8(d) At the 3rd Street / P Street intersection, implement the near-term Mitigation Measure 1(d) (modification of signal phase splits). This mitigation measure would improve traffic operations to LOS C during the p.m. peak hour and would reduce the long-term cumulative impact to a ***less-than-significant*** *level.*

8(e) At the 5th Street / I Street intersection, modify the traffic signal phase splits during the p.m. peak period by increasing the signal phase time to 30 seconds for the northbound and southbound 5th Street approaches and decreasing the westbound I Street approach to 70 seconds. This mitigation measure would improve traffic operations to LOS C during *the p.m. peak hour and would reduce the long-term cumulative impact to a* ***less-than-significant*** *level.*

8(f) *At the 5th Street / L Street intersection, implement the near-term Mitigation Measure 1(e) (modification of signal phase splits). This mitigation measure would improve traffic operations to LOS C during the p.m. peak hour and would reduce the long-term cumulative impact to a* ***less-than-significant*** *level.*

8(g) *At the 7th Street / L Street intersection, implement the near-term Mitigation Measure 1(f) (modification of signal phase splits). This mitigation measure would improve traffic operations to LOS C during the p.m. peak hour and would reduce the long-term cumulative impact to a* ***less-than-significant*** *level.*

8(h) *At the 8th Street / L Street intersection, implement the near-term Mitigation Measure 1(g) (modification of signal phase splits). This mitigation measure would improve traffic operations to LOS B during the p.m. peak hour and would reduce the long-term cumulative impact to a* ***less-than-significant*** *level.*

8(i) *At the 9th Street / J Street intersection, implement the near-term Mitigation Measure 1(h) (modification of signal phase splits). This mitigation measure would improve traffic operations to LOS C during the p.m. peak hour and would reduce the long-term cumulative impact to a* ***less-than-significant*** *level.*

8(j) *At the 10th Street / J Street intersection, implement the near-term Mitigation Measure 1(i) (modification of signal phase splits). This mitigation measure would improve traffic operations to LOS C during the p.m. peak hour and would reduce the long-term cumulative impact to a* ***less-than-significant*** *level.*

8(k) *At the 12th Street / J Street intersection, modify the traffic signal phase splits during the p.m. peak period by increasing the eastbound J Street approach to 23 seconds and decreasing the southbound 12th Street and northbound right-turn movement signal phase time to 27 seconds. This mitigation measure would improve traffic operations to LOS C during the p.m. peak hour and would reduce the long-term cumulative impact to a* ***less-than-significant*** *level.*

8(l) *At the 15th Street / J Street intersection, implement the near-term Mitigation Measure 1(k) (modification of signal phase splits). This mitigation measure would reduce average delay by 59.2 seconds during the p.m. peak hour and would reduce the long-term cumulative impact to a* ***less-than-significant*** *level.*

8(m) *At the 15th Street / X Street intersection, implement the near-term Mitigation Measure 1(l) (modification of signal phase splits). This mitigation measure would reduce average vehicle delay by 32.8 seconds* *during the p.m. peak hour and would reduce the long-term cumulative impact to a **less-than-significant** level.*

*8(n) At the 16th Street / H Street intersection, implement the near-term Mitigation Measure 1(m) (modification of signal phase splits). This mitigation measure would improve traffic operations to LOS C during the p.m. peak hour and would reduce the long-term cumulative impact to a **less-than-significant** level.*

Impact 9 – Freeway Mainline (Long-Term Cumulative)

Freeway mainline operating conditions for long-term cumulative conditions are summarized in Table 20. The proposed Downtown projects would add traffic to freeway mainline segments but would not cause freeway levels of service to deteriorate beyond LOS E. The projects would add traffic to I-5 freeway segments that would operate at LOS F without the projects. This is considered a ***significant impact***.

Mitigation Measures

*No feasible mitigation measures were identified that would reduce the impact of the project on I-5 freeway mainline segments. Widening the freeway would reduce the impact but was not considered feasible. The impacts of proposed projects on I-5 freeway segments would remain **significant-and-unavoidable.***

Table 20
Freeway Mainline Operations – Long-Term Cumulative Conditions (2030)

Location	Without Projects						With Projects					
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
	Volume	V/C[1]	LOS[2]	Volume	V/C[1]	LOS[2]	Volume	V/C[1]	LOS[2]	Volume	V/C[1]	LOS[2]
Northbound I-5												
South of US 50 on-ramp	4,425	0.70	C	3,538	0.56	**F**[3]	4,465	0.71	C	3,622	0.57	**F**[3]
North of US 50 on-ramp	8,834	1.05	**F**	7,222	0.86	**F**[3]	8,875	1.06	**F**	7,351	0.88	**F**[3]
South of L Street on-ramp	7,096	1.13	**F**	6,986	1.11	**F**[3]	7,096	1.13	**F**	6,986	1.11	**F**[3]
South of I Street on-ramp	7,414	0.88	D	7,851	0.93	**F**[3]	7,414	0.88	D	7,851	0.93	**F**[3]
South of Richards Blvd off-ramp	7,927	0.79	D	9,759	0.98	**F**[3]	8,024	0.80	D	9,923	0.99	**F**[3]
Southbound I-5												
North of Richards Blvd on-ramp	9,767	1.16	**F**	8,846	1.05	**F**	10,016	1.19	**F**	9,030	1.08	**F**
North of J Street on-ramp	10,243	1.22	**F**	9,860	1.17	**F**	10,492	1.25	**F**	10,044	1.20	**F**
North of I Street on-ramp	8,012	0.95	E	9,055	1.08	**F**[3]	8,012	0.95	E	9,055	1.08	**F**[3]
North of US 50 off-ramp	7,138	0.75	D	8,594	0.90	**F**[3]	7,186	0.76	D	8,637	0.91	**F**[3]
Eastbound US 50												
West of I-5 on-ramp	4,285	0.51	B	3,529	0.42	B	4,285	0.51	B	3,529	0.42	B
West of 15th Street off-ramp	9,598	0.79	D	9,109	0.75	D	9,627	0.80	D	9,227	0.76	D
West of 10th Street on-ramp	8,851	0.84	D	8,181	0.78	D	8,880	0.85	D	8,299	0.79	D
West of 16th Street on-ramp	9,925	0.82	D	8,934	0.74	C	9,968	0.82	D	9,134	0.75	D
Westbound US 50												
East of Hwy 51/US 99 on-ramp	4,971	0.50	B	4,308	0.43	B	5,291	0.53	B	4,513	0.45	B
East of 10th Street off-ramp	8,113	0.77	D	7,306	0.70	C	8,287	0.79	D	7,409	0.71	C
East of 15th Street on-ramp	6,855	0.65	C	6,724	0.64	C	6,936	0.66	C	6,809	0.65	C
East of I-5 off ramp	7,657	0.61	C	7,478	0.59	C	7,738	0.61	C	7,563	0.60	C

Source: Dowling Associates, Inc., 2006.

[1] V/C = Volume / Capacity

[2] LOS = Level of Service

Note: **Bold** values show substandard traffic operations.

Impact 10 – Freeway Merge / Diverge / Weave Areas (Long-Term Cumulative)

Freeway interchange operations for long-term cumulative conditions are summarized in Table 21. The proposed Downtown projects would add traffic to freeway ramps and weaving areas but would not cause levels of service to deteriorate beyond LOS E on these facilities. The projects would add traffic to I-5 and U.S. 50 freeway ramps that would operate at LOS F without the projects. This is considered a ***significant impact***.

Mitigation Measures

No feasible mitigation measures were identified that would reduce the impact of the project on I-5 and U.S. 50 freeway ramps. Widening the freeway would reduce the impact but was not considered feasible. The impacts of proposed projects on freeway ramps would remain ***significant-and-unavoidable.***

Impact 11 – Freeway Ramp Queues (Long-Term Cumulative)

Expected freeway ramp queues for long-term cumulative conditions are shown in Table 22. The proposed Downtown projects would add traffic to the northbound I-5 off ramp to J Street during both the a.m. and p.m. peak hours, when the queue would exceed the ramp's storage capacity without the proposed projects. Similarly, the proposed Downtown projects would add traffic to the southbound I-5 off ramp to J Street during the a.m. peak hour, when the queue would exceed the ramp's storage capacity without the proposed projects. This is considered a ***significant impact***.

Table 21
Freeway Interchange Operations – Long-Term Cumulative Conditions (2030)

Ramp	Without Projects						With Projects					
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
	LOS[1]	Density[2] (Flow)	Volume	LOS[1]	Density[2] (Flow)	Volume	LOS[1]	Density[2] (Flow)	Volume	LOS[1]	Density[2] (Flow)	Volume
Northbound I-5												
US 50 on-ramp	**F**	49.59	3,683	**F**	39.80	2,984	**F**	49.79	3,684	**F**	40.56	3,029
P Street to J Street weave	D	30.01	9,256	C	27.14	8,371	D	30.27	9,297	C	27.96	8,500
L Street on-ramp	C	(347)	318	C	(944)	865	C	(347)	318	C	(944)	865
I Street on-ramp	B	16.50	513	D	28.44	1,908	B	17.27	610	D	29.76	2,072
Richards Boulevard off-ramp	C	24.83	659	**F**	37.23	349	C	25	659	**F**	38	349
Southbound I-5												
Richards Boulevard on-ramp	c	(519)	476	C	(1106)	1,014	C	(519)	476	C	(1106)	1,014
J Street off-ramp	C	24.48	2,231	**F**	23.57	805	C	25.08	2,480	**F**	24.01	989
I Street to Q Street weave	C	24.51	8,371	E	35.21	10,374	C	24.77	8,419	E	35.49	10,417
US 50 off-ramp	**F**	17.06	4,613	**F**	20.54	5,087	**F**	17.17	4,631	**F**	20.64	5,098
Eastbound US 50												
I-5 on-ramp	**F**	49.37	5,313	**F**	50.16	5,580	**F**	49.60	5,342	**F**	51.11	5,698
15th Street off-ramp	E	38.68	747	E	37.63	928	E	38.80	747	E	38.12	928
10th Street on-ramp	C	23.55	1,074	B	19.78	753	C	23.70	1,088	C	20.65	835
16th Street to Business 80/SR99 weave	E	39.53	10813	D	34.34	9138	E	40.30	10920	E	36.77	9504
Westbound US 50												
Business 80 to 16th Street weave	C	22.16	6,602	C	20.32	6063	C	23.54	6,922	C	21.21	6268
10th Street off-ramp	E	35.29	1,258	D	28.38	582	E	36.50	1,351	D	28.90	600
15th Street on-ramp	**F**	36.24	802	**F**	35.28	754	**F**	36.60	802	**F**	35.66	754
I-5 off-ramp	**F**	(4608)	4,203	**F**	(3904)	3,561	**F**	(4696)	4,284	**F**	(3997)	3,646

Source: Dowling Associates, Inc., 2006.

[1] LOS = Level of Service

[2] Numbers with decimals indicate the density of passenger vehicles per mile per lane in the merge or diverge area. Whole numbers indicate the ramp flow rate in passenger car equivalents where a lane is added to the freeway at an on-ramp.

Note: **Bold** values show substandard traffic operations.

Table 22
Freeway Ramp Queues - Long-Term Cumulative Conditions (2030)

Location	Storage Capacity (feet)	Without Projects				With Projects			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Queue (feet)	Adequate Capacity	Queue (feet)	Adequate Capacity	Queue (feet)	Adequate Capacity	Queue (feet)	Adequate Capacity
I-5 NB Q Street off-ramp	3500	1688	Yes	375	Yes	2100	Yes	425	Yes
I-5 NB J Street off-ramp	1750	3975	**No**	2025	**No**	4200	**No**	2400	**No**
I-5 SB J Street off-ramp	3600	5875	**No**	1175	Yes	7325	**No**	1425	Yes
US 50 EB 15th Street off-ramp	1600	700	Yes	1000	Yes	700	Yes	1000	Yes
US 50 WB 16th Street off-ramp	1625	1125	Yes	1125	Yes	1475	Yes	1350	Yes

Source: Dowling Associates, Inc., 2006
Note: **Bold** values show substandard traffic operations.

Mitigation Measures

*Mitigation measure 8(a) would reduce the queue for the northbound I-5 off ramp queue at J Street during the p.m. peak hour to 1,725 lane feet and would reduce the long-term cumulative impact during this time period to a **less-than-significant** level. This mitigation measure would not significantly affect this northbound I-5 off ramp queue at J Street during the a.m. peak hour. The mitigation measure would reduce the queue for the southbound I-5 off ramp at J Street to 6,100 feet during the a.m. peak hour, but this would not be enough reduction to eliminate the long-range cumulative impact. Widening the freeway would reduce the impact but was not considered feasible. The impacts of the proposed projects on freeway ramp queues would remain **significant and unavoidable**.*

Appendix A Freeway Volumes and Calculations

Capacity Analysis of Freeway Mainline Segments
2000 Highway Capacity Manual
Capacity based on 2100 vphpl for freeway lanes, 1600 vphpl for auxiliary lanes

Mainline Segment	Dir	Frwy	Aux	Exising Conditions Without Project		Baseline Conditions Without Project		Near Term - Year 2013				Long Term - Year 2030			
								Without Project		With Project		Without Project		With Project	
		Lanes	Lanes	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Traffic Volume															
I-5, South of US 50 on-ramp	NB	3	0	3,417	2,872	3,539	2,959	3,694	3,297	3,734	3,381	4,425	3,538	4,465	3,622
I-5, North of US 50 on-ramp	NB	4	0	7,119	5,235	7,249	5,346	7,686	5,942	7,727	6,071	8,834	7,222	8,875	7,351
I-5, South of L Street on-ramp	NB	3	0	5,279	3,841	5,330	4,960	5,715	5,242	5,715	5,242	7,096	6,986	7,096	6,986
I-5, South of I Street on-ramp	NB	4	0	5,471	4,598	5,522	5,717	6,229	6,457	6,229	6,457	7,414	7,851	7,414	7,851
I-5, South of Richards Blvd off-ramp	NB	4	1	5,806	6,011	5,881	7,196	6,646	8,106	6,743	8,270	7,927	9,759	8,024	9,923
US-50, West of I-5 on-ramp	EB	4	0	3,176	1,434	3,197	1,446	4,066	2,382	4,066	2,382	4,285	3,529	4,285	3,529
US-50, West of 15th Street off-ramp	EB	5	1	8,183	6,334	8,278	6,441	9,270	7,653	9,299	7,771	9,598	9,109	9,627	9,227
US-50, West of 10th Street on-ramp	EB	5	0	7,534	5,658	7,629	5,765	8,590	6,871	8,619	6,989	8,851	8,181	8,880	8,299
US-50, West of 16th Street on-ramp	EB	5	1	8,319	6,403	8,465	6,795	9,380	7,683	9,423	7,883	9,925	8,934	9,968	9,134
Volume to Capacity (V/C)															
I-5, South of US 50 on-ramp	NB	3	0	0.54	0.46	0.56	0.47	0.59	0.52	0.59	0.54	0.70	0.56	0.71	0.57
I-5, North of US 50 on-ramp	NB	4	0	0.85	0.62	0.86	0.64	0.92	0.71	0.92	0.72	1.05	0.86	1.06	0.88
I-5, South of L Street on-ramp	NB	3	0	0.84	0.61	0.85	0.79	0.91	0.83	0.91	0.83	1.13	1.11	1.13	1.11
I-5, South of I Street on-ramp	NB	4	0	0.65	0.55	0.66	0.68	0.74	0.77	0.74	0.77	0.88	0.93	0.88	0.93
I-5, South of Richards Blvd off-ramp	NB	4	1	0.58	0.60	0.59	0.72	0.66	0.81	0.67	0.83	0.79	0.98	0.80	0.99
US-50, West of I-5 on-ramp	EB	4	0	0.38	0.17	0.38	0.17	0.48	0.28	0.48	0.28	0.51	0.42	0.51	0.42
US-50, West of 15th Street off-ramp	EB	5	1	0.68	0.52	0.68	0.53	0.77	0.63	0.77	0.64	0.79	0.75	0.80	0.76
US-50, West of 10th Street on-ramp	EB	5	0	0.72	0.54	0.73	0.55	0.82	0.65	0.82	0.67	0.84	0.78	0.85	0.79
US-50, West of 16th Street on-ramp	EB	5	1	0.69	0.53	0.70	0.56	0.78	0.63	0.78	0.65	0.82	0.74	0.82	0.75
Level of Service:															
I-5, South of US 50 on-ramp	NB			C	B	C	B	C	B	C	C	C	C	C	C
I-5, North of US 50 on-ramp	NB			D	C	D	C	*E*	C	*E*	C	*F*	D	*F*	D
I-5, South of L Street on-ramp	NB			D	C	D	D	*E*	D	*E*	D	*F*	*F*	*F*	*F*
I-5, South of I Street on-ramp	NB			C	C	C	C	D	D	D	D	D	*E*	D	*E*
I-5, South of Richards Blvd off-ramp	NB			C	C	C	C	C	D	C	D	D	*E*	D	*E*
US-50, West of I-5 on-ramp	EB			B	A	B	A	B	A	B	A	B	B	B	B
US-50, West of 15th Street off-ramp	EB			C	B	C	C	D	C	D	C	D	D	D	D
US-50, West of 10th Street on-ramp	EB			C	C	C	C	D	C	D	C	D	D	D	D
US-50, West of 16th Street on-ramp	EB			C	B	C	C	D	C	D	C	D	C	D	D

Freeway Capacity Source: 2000 Highway Capacity Manual

		V/C	LOS
Ideal Freeway Capacity =	2400 (p. 23-4)	0.32	A
Free-Flow Speed =	70 mph	0.53	B
Peak Hour Factor =	0.92	0.74	C
Percent Trucks =	5.0%	0.90	D
Actual Capacity / Ideal Capacity =	88%	1.00	E
Adjusted Freeway Capacity =	2100		

Capacity Analysis of Freeway Mainline Segments
2000 Highway Capacity Manual
Capacity based on vphpl for freeway lanes, 0 vphpl for auxiliary lanes

Mainline Segment	Dir	Frwy Lanes	Aux Lanes	Exising Conditions Without Project		Baseline Conditions Without Project		Near Term - Year 2013 Without Project		Near Term - Year 2013 With Project		Long Term - Year 2030 Without Project		Long Term - Year 2030 With Project	
				AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Traffic Volume															
I-5, North of Richards Blvd on-ramp	SB	4	0	7,628	5,797	8,124	6,086	9,019	6,804	9,268	6,988	9,767	8,846	10,016	9,030
I-5, North of J Street on-ramp	SB	4	0	8,104	6,568	8,600	6,857	9,707	7,818	9,956	8,002	10,243	9,860	10,492	10,044
I-5, North of I Street on-ramp	SB	4	0	6,437	6,295	6,607	6,281	7,321	7,158	7,321	7,158	8,012	9,055	8,012	9,055
I-5, North of US 50 off-ramp	SB	3	2	5,978	6,149	5,846	6,036	6,860	7,093	6,908	7,136	7,138	8,594	7,186	8,637
US-50, East of Hwy 51/US 99 on-ram	WB	4	1	3,637	3,250	4,065	3,447	3,938	3,456	4,258	3,661	4,971	4,308	5,291	4,513
US-50, East of 10th Street off-ramp	WB	5	0	6,483	6,058	6,854	6,281	7,145	6,430	7,319	6,533	8,113	7,306	8,287	7,409
US-50, East of 15th Street on-ramp	WB	5	0	5,555	5,709	5,645	5,857	5,910	6,067	5,991	6,152	6,855	6,724	6,936	6,809
US-50, East of I-5 off-ramp	WB	6	0	6,029	6,375	6,124	6,530	6,527	6,925	6,608	7,010	7,657	7,478	7,738	7,563
Volume to Capacity (V/C)															
I-5, North of Richards Blvd on-ramp	SB	4	0	0.91	0.69	0.97	0.72	1.07	0.81	1.10	0.83	1.16	1.05	1.19	1.08
I-5, North of J Street on-ramp	SB	4	0	0.96	0.78	1.02	0.82	1.16	0.93	1.19	0.95	1.22	1.17	1.25	1.20
I-5, North of I Street on-ramp	SB	4	0	0.77	0.75	0.79	0.75	0.87	0.85	0.87	0.85	0.95	1.08	0.95	1.08
I-5, North of US 50 off-ramp	SB	3	2	0.63	0.65	0.62	0.64	0.72	0.75	0.73	0.75	0.75	0.90	0.76	0.91
US-50, East of Hwy 51/US 99 on-ram	WB	4	1	0.36	0.33	0.41	0.34	0.39	0.35	0.43	0.37	0.50	0.43	0.53	0.45
US-50, East of 10th Street off-ramp	WB	5	0	0.62	0.58	0.65	0.60	0.68	0.61	0.70	0.62	0.77	0.70	0.79	0.71
US-50, East of 15th Street on-ramp	WB	5	0	0.53	0.54	0.54	0.56	0.56	0.58	0.57	0.59	0.65	0.64	0.66	0.65
US-50, East of I-5 off-ramp	WB	6	0	0.48	0.51	0.49	0.52	0.52	0.55	0.52	0.56	0.61	0.59	0.61	0.60
Level of Service:															
I-5, North of Richards Blvd on-ramp	SB			*E*	C	*E*	C	*F*	D	*F*	D	*F*	*F*	*F*	*F*
I-5, North of J Street on-ramp	SB			*E*	D	*F*	D	*F*	*E*	*F*	*E*	*F*	*F*	*F*	*F*
I-5, North of I Street on-ramp	SB			D	D	D	D	D	D	D	D	*E*	*F*	*E*	*F*
I-5, North of US 50 off-ramp	SB			C	C	C	C	C	D	C	D	D	*E*	D	*E*
US-50, East of Hwy 51/US 99 on-ram	WB			B	B	B	B	B	B	B	B	B	B	B	B
US-50, East of 10th Street off-ramp	WB			C	C	C	C	C	C	C	C	D	C	D	C
US-50, East of 15th Street on-ramp	WB			B	C	C	C	C	C	C	C	C	C	C	C
US-50, East of I-5 off-ramp	WB			B	B	B	B	B	C	B	C	C	C	C	C

Freeway Capacity Source: 2000 Highway Capacity Manual

		V/C	LOS
Ideal Freeway Capacity =	2400 (p. 23-4)		
Free-Flow Speed =	70 mph	0.32	A
Peak Hour Factor =	0.92	0.53	B
Percent Trucks =	5.0%	0.74	C
Actual Capacity / Ideal Capacity =	88%	0.90	D
Adjusted Freeway Capacity =	2100	1.00	E

EB US-50 - Weaving from 16th St to Hwy 51 / SR 99

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Weaving Analysis Type B

Type	B	
Existing Upstrm Frwy Lanes / Aux. Lanes	5	
Existing Dnstrm Frwy Lanes / Aux. Lanes	4	
Sacramento Factor. [Note: Capacity is fixed hence adjust volume]	1	eg. 2200/2400

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
PHF (Peak Hour Factor) =	1	1	1	1	1	1	1	1	1	1	1	1
f_{HV} (Adjustment factor for heavy vehicles) =	1	1	1	1	1	1	1	1	1	1	1	1
f_p (Adjustment factor for driver population) =	1	1	1	1	1	1	1	1	1	1	1	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
P_R (Proportioin of RVs in the traffic stream) =	0	0	0	0	0	0	0	0	0	0	0	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
L - Length of weaving segment (ft)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
N, Total number of lanes in the weaving segment	6	6	6	6	6	6	6	6	6	6	6	6
N_w, Number of lanes to be used by weaving vehicles if unconstrained operation is to be achived. note: Type-B, Ex 24-7	3.05491	4.245573	3.139685	4.400099	2.829104	3.980119	2.891765	4.153524	3.03342	3.542133	3.091227	3.715021
$N_{w(max)}$, Maximum number of lanes that can be used by weaving vehicles for a given configuration. note: A:1.4, B:3.5, C:3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
N_{nw}, Number of lanes used by nonweaving vehicles. note: Nw < Nw(max) implies unconstrained, and Nw >= Nw(max) implies constrained	5	5	5	5	5	5	5	5	5	5	5	5
v, Total flow rate in the weaving segment (pc/h)	8975	6743.167	9153	7205.75	10036	7941.75	10143	8307.167	10813	9138.25	10920	9503.667
v_{o1}, Larger of the two outer, or nonweaving, flow rates in the weaving segment (pc/h)	5645	3135	5669	3235.833	6646	4030.583	6643	4056.25	6927	5204.833	6924	5230.5
v_{o2}, Smaller of the two outer, or nonweaving, flow rates in the weaving segment (pc/h)	0	0	0	0	0	0	0	0	0	0	0	0
v_{w1}, Larger of two weaving flow rates in the weaving segment (pc/h)	2674	2983	2796	3265	2734	3286	2780	3458	2998	3256	3044	3428
v_{w2}, Smaller of two weaving flow rates in the weaving segment (pc/h)	656	625.1667	688	704.9167	656	625.1667	720	792.9167	888	677.4167	952	845.1667
v_w, Total weaving flow rate in the weaving segment (pc/h) ($v_w = v_{w1} + v_{w2}$)	3330	3608.167	3484	3969.917	3390	3911.167	3500	4250.917	3886	3933.417	3996	4273.167
v_{nw}, Total nonweaving flow rate in the weaving segment (pc/h) ($v_{nw} = v_{o1} + v_{o2}$)	5645	3135	5669	3235.833	6646	4030.583	6643	4056.25	6927	5204.833	6924	5230.5
VR, Volume ratio; the ratio of weaving flow rate to total flow rate in the weaving segment ($VR = v_w/v$)	0.371031	0.535085	0.38064	0.550937	0.337784	0.492482	0.345066	0.511717	0.359382	0.430434	0.365934	0.449633
R, Weaving ratio; the ratio of the smaller weaving flow rate to total flow rate (R = vw2/vw)	0.196997	0.173264	0.197474	0.177565	0.19351	0.159841	0.205714	0.186528	0.228513	0.172221	0.238238	0.197785
S_w, Speed of weaving vehicles in the weaving segment (mi/h)	44.80542	44.14186	44.40747	43.19427	44.47457	43.42018	44.20948	42.60017	43.27554	43.354	43.03546	42.57358
S_{nw}, Speed of nonweaving vehicles in the weaving segment (mi/h)	48.77669	43.4957	47.96909	41.73644	49.23816	43.56804	48.67727	41.89366	46.99086	45.13399	46.47141	43.50259
S, Speed of all vehicles in the weaving segment (mi/h) [Eq 24-5, HCM2000]	47.2237	43.83908	46.54805	42.52721	47.51895	43.49509	47.03699	42.25224	45.5844	44.35022	45.15223	43.07991
D, Density of all vehicles in the weaving segment (pc/mi/ln) [Eq 24-6, HCM2000]	31.67548	25.63606	32.77259	28.23977	35.19999	30.43159	35.9398	32.76815	39.53472	34.34124	40.30808	36.76759
W_w, Weaving intensity factor for prediction of weaving speed	0.845302	0.88732	0.870273	0.950751	0.866016	0.935245	0.88295	0.992741	0.945144	0.939762	0.961801	0.994663
W_{nw}, Weaving intensity factor for prediction of nonweaving speed	0.628342	0.930116	0.668229	1.057118	0.606395	0.925229	0.633149	1.045091	0.719241	0.825181	0.747618	0.929649
S_{min}, Minimum speed expected in a weaving segment (mi/h)	15	15	15	15	15	15	15	15	15	15	15	15
S_{max}, Maximum speed expected in a weaving segment (mi/h)	70	70	70	70	70	70	70	70	70	70	70	70
a (weaving) [Exhibit 24-6, Unconstrainted Case]	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
b (weaving)	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
c (weaving)	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
d (weaving)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
a (non-weaving)	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
b (non-weaving)	6	6	6	6	6	6	6	6	6	6	6	6
c (non-weaving)	1	1	1	1	1	1	1	1	1	1	1	1
d (non-weaving)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
LOS	**D**	**C**	**D**	**D**	**E**	**D**	**E**	**D**	**E**	**D**	**E**	**E**

WB US-50 - Weaving from Hwy 51 / SR 99 to 16th St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Weaving Analysis Type B

Type	B	
Existing Upstrm Frwy Lanes / Aux. Lanes	4	
Existing Dnstrm Frwy Lanes / Aux. Lanes	5	
Sacramento Factor. [Note: Capacity is fixed hence adjust volume]	1	eg. 2200/2400

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
PHF (Peak Hour Factor) =	1	1	1	1	1	1	1	1	1	1	1	1
f_{HV} (Adjustment factor for heavy vehicles) =	1	1	1	1	1	1	1	1	1	1	1	1
f_p (Adjustment factor for driver population) =	1	1	1	1	1	1	1	1	1	1	1	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
P_R (Proportioin of RVs in the traffic stream) =	0	0	0	0	0	0	0	0	0	0	0	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
L - Length of weaving segment (ft)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
N, Total number of lanes in the weaving segment	6	6	6	6	6	6	6	6	6	6	6	6
N_w, Number of lanes to be used by weaving vehicles if unconstrained operation is to be achived. note: Type-B, Ex 24-7	3.344402	3.613636	3.267712	3.608068	3.339643	3.617694	3.369233	3.640254	3.130142	3.255871	3.167853	3.287797
$N_{w(max)}$, Maximum number of lanes that can be used by weaving vehicles for a given configuration. note: A:1.4, B:3.5, C:3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
N_{nw}, Number of lanes used by nonweaving vehicles. note: Nw < Nw(max) implies unconstrained, and Nw >= Nw(max) implies constrained	5	5	5	5	5	5	5	5	5	5	5	5
v, Total flow rate in the weaving segment (pc/h)	4880	4883	5343	5147	5219	5089	5539	5294	6602	6063	6922	6268
v_{o1}, Larger of the two outer, or nonweaving, flow rates in the weaving segment (pc/h)	2757	2583	3093	2739	2966	2699	3140	2802	3999	3551	4173	3654
v_{o2}, Smaller of the two outer, or nonweaving, flow rates in the weaving segment (pc/h)	0	0	0	0	0	0	0	0	0	0	0	0
v_{w1}, Larger of two weaving flow rates in the weaving segment (pc/h)	1243	1633	1278	1700	1281	1633	1281	1633	1631	1755	1631	1755
v_{w2}, Smaller of two weaving flow rates in the weaving segment (pc/h)	880	667	972	708	972	757	1118	859	972	757	1118	859
v_w, Total weaving flow rate in the weaving segment (pc/h) ($v_w = v_{w1} + v_{w2}$)	2123	2300	2250	2408	2253	2390	2399	2492	2603	2512	2749	2614
v_{nw}, Total nonweaving flow rate in the weaving segment (pc/h) ($v_{nw} = v_{o1} + v_{o2}$)	2757	2583	3093	2739	2966	2699	3140	2802	3999	3551	4173	3654
VR, Volume ratio; the ratio of weaving flow rate to total flow rate in the weaving segment ($VR = v_w/v$)	0.435041	0.471022	0.421112	0.467845	0.431692	0.46964	0.433111	0.470722	0.394274	0.414316	0.39714	0.417039
R, Weaving ratio; the ratio of the smaller weaving flow rate to total flow rate (R = vw2/vw)	0.414508	0.29	0.432	0.29402	0.431425	0.316736	0.466028	0.344703	0.373415	0.301354	0.406693	0.328615
S_w, Speed of weaving vehicles in the weaving segment (mi/h)	49.16001	48.4447	48.61381	48.02249	48.61536	48.09165	48.03972	47.7048	47.21093	47.58663	46.70689	47.22043
S_{nw}, Speed of nonweaving vehicles in the weaving segment (mi/h)	52.95076	51.1478	52.57063	50.65308	52.31937	50.70321	51.52516	50.1497	51.39341	51.38769	50.65209	50.83221
S, Speed of all vehicles in the weaving segment (mi/h) [Eq 24-5, HCM2000]	51.23212	49.83796	50.82846	49.38739	50.65335	49.44227	49.95538	48.96835	49.65886	49.74153	49.0081	49.26087
D, Density of all vehicles in the weaving segment (pc/mi/ln) [Eq 24-6, HCM2000]	15.87546	16.32959	17.51971	17.36948	17.17228	17.15469	18.47982	18.01844	22.15784	20.31501	23.54033	21.20683
W_w, Weaving intensity factor for prediction of weaving speed	0.61007	0.644506	0.636232	0.665532	0.636157	0.662051	0.664663	0.68171	0.707495	0.687809	0.734639	0.706992
W_{nw}, Weaving intensity factor for prediction of nonweaving speed	0.449246	0.521531	0.46391	0.542644	0.473766	0.540478	0.505811	0.564736	0.511262	0.5115	0.542687	0.534932
S_{min}, Minimum speed expected in a weaving segment (mi/h)	15	15	15	15	15	15	15	15	15	15	15	15
S_{max}, Maximum speed expected in a weaving segment (mi/h)	70	70	70	70	70	70	70	70	70	70	70	70
a (weaving) [Exhibit 24-6, Unconstrainted Case]	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
b (weaving)	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
c (weaving)	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
d (weaving)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
a (non-weaving)	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
b (non-weaving)	6	6	6	6	6	6	6	6	6	6	6	6
c (non-weaving)	1	1	1	1	1	1	1	1	1	1	1	1
d (non-weaving)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
LOS	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**C**	**C**	**C**	**C**

NB I-5 - Weaving from P St to J St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Weaving Analysis Type B

Type	B	
Existing Upstrm Frwy Lanes / Aux. Lanes	4	
Existing Dnstrm Frwy Lanes / Aux. Lanes	4	
Sacramento Factor. [Note: Capacity is fixed hence adjust volume]	1	eg. 2200/2400

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
PHF (Peak Hour Factor) =	1	1	1	1	1	1	1	1	1	1	1	1
f_{HV} (Adjustment factor for heavy vehicles) =	1	1	1	1	1	1	1	1	1	1	1	1
f_p (Adjustment factor for driver population) =	1	1	1	1	1	1	1	1	1	1	1	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
P_R (Proportioin of RVs in the traffic stream) =	0	0	0	0	0	0	0	0	0	0	0	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
L - Length of weaving segment (ft)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
N, Total number of lanes in the weaving segment	6	6	6	6	6	6	6	6	6	6	6	6
N_w, Number of lanes to be used by weaving vehicles if unconstrained operation is to be achived. note: Type-B, Ex 24-7	2.473536	1.069067	2.60249	1.298211	2.450246	0.940426	2.47823	1.005599	2.344215	0.838086	2.36935	0.897892
$N_{w(max)}$, Maximum number of lanes that can be used by weaving vehicles for a given configuration. note: A:1.4, B:3.5, C:3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
N_{nw}, Number of lanes used by nonweaving vehicles. note: Nw < Nw(max) implies unconstrained, and Nw >= Nw(max) implies constrained	5	5	5	5	5	5	5	5	5	5	5	5
v, Total flow rate in the weaving segment (pc/h)	7306	5920	7487	6345	7873	6627	7914	6756	9256	8371	9297	8500
v_{o1}, Larger of the two outer, or nonweaving, flow rates in the weaving segment (pc/h)	5092	3960	5092	3961	5528	4557	5528	4557	6674	5837	6674	5837
v_{o2}, Smaller of the two outer, or nonweaving, flow rates in the weaving segment (pc/h)	0	0	0	0	0	0	0	0	0	0	0	0
v_{w1}, Larger of two weaving flow rates in the weaving segment (pc/h)	2027	1275	2157	1385	2158	1385	2199	1514	2160	1385	2201	1514
v_{w2}, Smaller of two weaving flow rates in the weaving segment (pc/h)	187	685	238	999	187	685	187	685	422	1149	422	1149
v_w, Total weaving flow rate in the weaving segment (pc/h) ($v_w = v_{w1} + v_{w2}$)	2214	1960	2395	2384	2345	2070	2386	2199	2582	2534	2623	2663
v_{nw}, Total nonweaving flow rate in the weaving segment (pc/h) ($v_{nw} = v_{o1} + v_{o2}$)	5092	3960	5092	3961	5528	4557	5528	4557	6674	5837	6674	5837
VR, Volume ratio; the ratio of weaving flow rate to total flow rate in the weaving segment ($VR = v_w/v$)	0.303039	0.331081	0.319888	0.375729	0.297853	0.312359	0.301491	0.325488	0.278954	0.302712	0.282134	0.313294
R, Weaving ratio; the ratio of the smaller weaving flow rate to total weaving flow rate (R = vw2/vw)	0.084463	0.34949	0.099374	0.419044	0.079744	0.330918	0.078374	0.311505	0.163439	0.453433	0.160884	0.431468
S_w, Speed of weaving vehicles in the weaving segment (mi/h)	48.244	41.06832	47.6443	39.41475	47.66881	40.4137	47.53878	39.9305	46.58661	38.41472	46.47147	38.03227
S_{nw}, Speed of nonweaving vehicles in the weaving segment (mi/h)	54.94289	61.86678	53.80723	59.83524	54.38084	61.67206	54.13378	61.0982	53.54229	60.2439	53.31862	59.72099
S, Speed of all vehicles in the weaving segment (mi/h) [Eq 24-5, HCM2000]	52.72434	52.98305	51.66923	50.08548	52.19194	52.96892	51.9605	52.1073	51.40143	51.40194	51.19063	50.66843
D, Density of all vehicles in the weaving segment (pc/mi/ln) [Eq 24-6, HCM2000]	23.09496	18.62231	24.15041	21.1139	25.14118	20.85185	25.38467	21.60926	30.01213	27.1423	30.26921	27.95955
W_w, Weaving intensity factor for prediction of weaving speed	0.654434	1.10984	0.684827	1.252737	0.683563	1.164187	0.690291	1.206133	0.741244	1.34895	0.747614	1.387954
W_{nw}, Weaving intensity factor for prediction of nonweaving speed	0.376966	0.173539	0.417262	0.226714	0.396618	0.178435	0.405436	0.193105	0.427004	0.215633	0.435334	0.229847
S_{min}, Minimum speed expected in a weaving segment (mi/h)	15	15	15	15	15	15	15	15	15	15	15	15
S_{max}, Maximum speed expected in a weaving segment (mi/h)	70	70	70	70	70	70	70	70	70	70	70	70
a (weaving) [Exhibit 24-6, AM:Unconstrainted, PM:Constrainted]	0.08	0.15	0.08	0.15	0.08	0.15	0.08	0.15	0.08	0.15	0.08	0.15
b (weaving)	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
c (weaving)	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
d (weaving)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
a (non-weaving)	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.001
b (non-weaving)	6	6	6	6	6	6	6	6	6	6	6	6
c (non-weaving)	1	1	1	1	1	1	1	1	1	1	1	1
d (non-weaving)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
LOS	**C**	**B**	**C**	**C**	**C**	**C**	**C**	**C**	**D**	**C**	**D**	**C**

SB I-5 - Weaving from I St to Q St

Highway Capacity Manual
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Capacity Analysis of Freeway Ramps

Weaving Analysis Type B

Type	B	
Existing Upstrm Frwy Lanes / Aux. Lanes	4	
Existing Dnstrm Frwy Lanes / Aux. Lanes	5	
Sacramento Factor. [Note: Capacity is fixed hence adjust volume]	1	eg. 2200/2400

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
PHF (Peak Hour Factor) =	1	1	1	1	1	1	1	1	1	1	1	1
f_{HV} (Adjustment factor for heavy vehicles) =	1	1	1	1	1	1	1	1	1	1	1	1
f_p (Adjustment factor for driver population) =	1	1	1	1	1	1	1	1	1	1	1	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
P_R (Proportioin of RVs in the traffic stream) =	0	0	0	0	0	0	0	0	0	0	0	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
L - Length of weaving segment (ft)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
N, Total number of lanes in the weaving segment	6	6	6	6	6	6	6	6	6	6	6	6
N_w, Number of lanes to be used by weaving vehicles if unconstrained operation is to be achived. note: Type-B, Ex 24-7	1.512992	2.489416	1.755705	2.640769	1.590737	2.431984	1.621263	2.460207	1.708441	2.52825	1.738339	2.552501
$N_{w(max)}$, Maximum number of lanes that can be used by weaving vehicles for a given configuration. note: A:1.4, B:3.5, C:3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
N_{nw}, Number of lanes used by nonweaving vehicles. note: Nw < Nw(max) implies unconstrained, and Nw >= Nw(max) implies constrained	5	5	5	5	5	5	5	5	5	5	5	5
v, Total flow rate in the weaving segment (pc/h)	6725	7342	6904	7356	7752	8352	7800	8395	8371	10374	8419	10417
v_{o1}, Larger of the two outer, or nonweaving, flow rates in the weaving segment (pc/h)	5690	5102	5549	4961	6429	5899	6429	5899	6779	7275	6779	7275
v_{o2}, Smaller of the two outer, or nonweaving, flow rates in the weaving segment (pc/h)	0	0	0	0	0	0	0	0	0	0	0	0
v_{w1}, Larger of two weaving flow rates in the weaving segment (pc/h)	747	1193	1058	1320	892	1259	892	1259	1233	1780	1233	1780
v_{w2}, Smaller of two weaving flow rates in the weaving segment (pc/h)	288	1047	297	1075	431	1194	479	1237	359	1319	407	1362
v_w, Total weaving flow rate in the weaving segment (pc/h) ($v_w = v_{w1} + v_{w2}$)	1035	2240	1355	2395	1323	2453	1371	2496	1592	3099	1640	3142
v_{nw}, Total nonweaving flow rate in the weaving segment (pc/h) ($v_{nw} = v_{o1} + v_{o2}$)	5690	5102	5549	4961	6429	5899	6429	5899	6779	7275	6779	7275
VR, Volume ratio; the ratio of weaving flow rate to total flow rate in the weaving segment ($VR = v_w/v$)	0.153903	0.305094	0.196263	0.325585	0.170666	0.293702	0.175769	0.29732	0.19018	0.298728	0.194797	0.301622
R, Weaving ratio; the ratio of the smaller weaving flow rate to total weaving flow rate (R = vw2/vw)	0.278261	0.467411	0.219188	0.448852	0.325775	0.486751	0.34938	0.495593	0.225503	0.425621	0.248171	0.433482
S_w, Speed of weaving vehicles in the weaving segment (mi/h)	52.34759	48.15309	51.15655	47.68252	50.7393	47.21248	50.56508	47.0824	49.59639	45.04811	49.43544	44.94183
S_{nw}, Speed of nonweaving vehicles in the weaving segment (mi/h)	62.11585	54.78522	60.33186	53.71351	60.44236	53.93148	60.18482	53.68137	58.97175	51.07203	58.7143	50.85426
S, Speed of all vehicles in the weaving segment (mi/h) [Eq 24-5, HCM2000]	60.38175	52.57595	58.28032	51.58904	58.53205	51.7677	58.23741	51.53387	56.92526	49.11025	56.64326	48.91335
D, Density of all vehicles in the weaving segment (pc/mi/ln) [Eq 24-6, HCM2000]	18.56245	23.27427	19.74366	23.76474	22.07338	26.88936	22.32242	27.15043	24.50874	35.2065	24.772	35.49474
W_w, Weaving intensity factor for prediction of weaving speed	0.472652	0.658971	0.521163	0.682857	0.538922	0.707413	0.546461	0.714335	0.589761	0.830398	0.597192	0.836895
W_{nw}, Weaving intensity factor for prediction of nonweaving speed	0.167335	0.382423	0.213275	0.420693	0.210324	0.412738	0.217223	0.421873	0.250803	0.524727	0.25817	0.533988
S_{min}, Minimum speed expected in a weaving segment (mi/h)	15	15	15	15	15	15	15	15	15	15	15	15
S_{max}, Maximum speed expected in a weaving segment (mi/h)	70	70	70	70	70	70	70	70	70	70	70	70
a (weaving) [Exhibit 24-6, Unconstrainted]	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
b (weaving)	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
c (weaving)	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
d (weaving)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
a (non-weaving)	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
b (non-weaving)	6	6	6	6	6	6	6	6	6	6	6	6
c (non-weaving)	1	1	1	1	1	1	1	1	1	1	1	1
d (non-weaving)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
LOS	**B**	**C**	**B**	**C**	**C**	**C**	**C**	**C**	**C**	**E**	**C**	**E**

US-50 WB On-Ramp from Hwy51

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 6 lane freeway, 2 Lane On-Ramp (Pfm=0.555 for 2-lane ramp)

Existing Upstrm Frwy Lanes / Aux. Lanes 3
Existing Dnstrm Frwy Lanes / Aux. Lanes 4

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	3,417	2,872	3,539	2,959	3,694	3,297	3,734	3,381	4,425	3,538	4,465	3,622
Ramp Volume:	3,269	1,997	3,277	2,021	3,473	2,279	3,474	2,324	3,683	2,984	3,684	3,029
L_{Aeff} (Effective length of the acceleration lane, ft)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Sacto Adjusted Freeway Volume (Upstream):	3,728	3,133	3,861	3,228	4,030	3,597	4,073	3,688	4,827	3,860	4,871	3,951
Sacto Adjusted Ramp Volume:	3,566	2,179	3,575	2,205	3,789	2,486	3,790	2,535	4,018	3,255	4,019	3,304
V_{FO} Capacity (downstream segment capacity)	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600
Downstream Freeway V/C:	0.76	0.55	0.77	0.57	0.81	0.63	0.82	0.65	0.92	0.74	0.93	0.76
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	2,069	1,739	2,143	1,792	2,237	1,996	2,261	2,047	2,679	2,142	2,703	2,193
V_{R12} (Maximum total flow entering the ramp, merge influence area, two-lane volume):	5,635	3,918	5,718	3,997	6,026	4,482	6,051	4,582	6,697	5,397	6,722	5,497
V_{R12} Capacity:	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600
V_{R12} V/C:	1.23	0.85	1.24	0.87	1.31	0.97	1.32	1.00	1.46	1.17	1.46	1.20
D_R (Density of merge influence area (pc/mi/ln))	41.52	28.76	42.16	29.37	44.46	33.02	44.66	33.78	49.59	39.80	49.79	40.56
v_F (Maximum total flow approaching a major diverge area on the freeway) =	3,728	3,133	3,861	3,228	4,030	3,597	4,073	3,688	4,827	3,860	4,871	3,951
v_R (Maximum flow on a ramp) =	3,566	2,179	3,575	2,205	3,789	2,486	3,790	2,535	4,018	3,255	4,019	3,304
V_{FO} (Maximum total departing from a merge or diverge area on the freeway)	7,294	5,312	7,436	5,433	7,819	6,083	7,863	6,223	8,845	7,115	8,890	7,255
Level of Service:	F	D	F	D	F	D	F	D	F	F	F	F

Proportion in lanes 1,2 (P_{FM}):	0.555	HCM pg 25-9
PHF (Peak Hour Factor) =	1	
f_{HV} (Adjustment factor for heavy vehicles) =	1	
f_p (Adjustment factor for driver population) =	1	
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01	
P_R (Proportioin of RVs in the traffic stream) =	0	
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5	
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5	

I-5 NB On-Ramp from P Street

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Single Lane On-Ramp, Enters Own Lane

Existing Upstrm Frwy Lanes / Aux. Lanes 4
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ramp Volume:	187	685	238	999	187	685	187	685	422	1,149	422	1,149
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40
Adjusted Ramp Volume:	204	747	260	1,090	204	747	204	747	460	1,253	460	1,253
Service Flow Rate @ LOS "A"	0	0	0	0	0	0	0	0	0	0	0	0
Service Flow Rate @ LOS "B"	0	0	0	0	0	0	0	0	0	0	0	0
Service Flow Rate @ LOS "C"	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Service Flow Rate @ LOS "D"	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700
Service Flow Rate @ LOS "E"	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Level of Service:	C	C	C	C	C	C	C	C	C	C	C	C

I-5 SB off-ramp to J St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Major Diverge, 2 Lane Off-Ramp, P_{FD}=0.260

Existing Upstrm Frwy Lanes / Aux. Lanes 5
Existing Dnstrm Frwy Lanes / Aux. Lanes 4

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	7,306	5,920	7,487	6,345	7,873	6,627	7,914	6,756	9,256	8,371	9,297	8,500
Ramp Volume:	2,027	1,275	2,157	1,385	2,158	1,385	2,199	1,514	2,160	1,385	2,201	1,514
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	7,970	6,458	8,168	6,922	8,589	7,229	8,633	7,370	10,097	9,132	10,142	9,273
Sacto Adjusted Ramp Volume:	2,211	1,391	2,353	1,511	2,354	1,511	2,399	1,652	2,356	1,511	2,401	1,652
Sacto Adjusted Freeway Volume (Downstream):	5,759	5,067	5,815	5,411	6,235	5,718	6,234	5,718	7,741	7,621	7,741	7,621
v_F (Maximum total flow approaching a major diverge area on the freeway) =	8,010	6,490	8,209	6,957	8,632	7,265	8,676	7,407	10,147	9,178	10,193	9,319
V_{R12} (Off-ramp demand flow rate (pc/h)) =	2,222	1,398	2,365	1,519	2,366	1,519	2,411	1,660	2,368	1,519	2,413	1,660
Upstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Upstream Freeway V/C:	0.67	0.54	0.68	0.58	0.72	0.61	0.72	0.62	0.85	0.76	0.85	0.78
Downstream Freeway Capacity:	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600
Downstream Freeway V/C:	0.60	0.53	0.61	0.56	0.65	0.60	0.65	0.60	0.81	0.79	0.81	0.79
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	0.58	0.37	0.62	0.40	0.62	0.40	0.63	0.44	0.62	0.40	0.64	0.44
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	3,727	2,722	3,884	2,932	3,995	3,013	4,040	3,154	4,391	3,510	4,436	3,652
Density (pc/mi/ln):	17.46	14.15	17.90	15.17	18.82	15.84	18.91	16.15	22.12	20.01	22.22	20.32
V5	1,602	974	1,642	1,043	1,726	1,453	1,735	1,481	2,029	1,836	2,039	1,864
VF4eff	6,408	5,517	6,567	5,913	6,906	5,812	6,941	5,925	8,118	7,342	8,154	7,455
Level of Service:	B	B	B	B	B	B	B	B	C	C	C	C

Proportion in lanes 1,2 (P_{FD}):	0.260
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

I-5 NB on-ramp from L Street

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Single Lane On-Ramp, Enters Own Lane

Existing Upstrm Frwy Lanes / Aux. Lanes 3
Existing Dnstrm Frwy Lanes / Aux. Lanes 4

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ramp Volume:	192	757	192	757	514	1,215	514	1,215	318	865	318	865
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40
Adjusted Ramp Volume:	209	826	209	826	561	1,325	561	1,325	347	944	347	944
Service Flow Rate @ LOS "A"	0	0	0	0	0	0	0	0	0	0	0	0
Service Flow Rate @ LOS "B"	0	0	0	0	0	0	0	0	0	0	0	0
Service Flow Rate @ LOS "C"	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Service Flow Rate @ LOS "D"	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700
Service Flow Rate @ LOS "E"	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Level of Service:	C	C	C	C	C	C	C	C	C	C	C	C

I-5 NB On-Ramp from I St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 8 lane freeway, 2 Lane On-Ramp (Pfm=0.209 for 2-lane ramp)

Existing Upstrm Frwy Lanes / Aux. Lanes 4
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	5,471	4,598	5,522	5,717	6,229	6,457	6,229	6,457	7,414	7,851	7,414	7,851
Ramp Volume:	335	1,413	359	1,479	417	1,649	514	1,813	513	1,908	610	2,072
L_{Aeff} (Effective length of the acceleration lane, ft)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Sacto Adjusted Freeway Volume (Upstream):	5,968	5,016	6,024	6,237	6,795	7,044	6,795	7,044	8,088	8,565	8,088	8,565
Sacto Adjusted Ramp Volume:	365	1,541	392	1,613	455	1,799	561	1,978	560	2,081	665	2,260
V_{FO} Capacity (downstream segment capacity)	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Downstream Freeway V/C:	0.53	0.55	0.53	0.65	0.60	0.74	0.61	0.75	0.72	0.89	0.73	0.90
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	1,247	1,048	1,259	1,304	1,420	1,472	1,420	1,472	1,690	1,790	1,690	1,790
V_{R12} (Maximum total flow entering the ramp, merge influence area, two-lane volume):	1,612	2,589	1,651	2,917	1,875	3,271	1,981	3,450	2,250	3,871	2,355	4,050
V_{R12} Capacity:	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600
V_{R12} V/C:	0.35	0.56	0.36	0.63	0.41	0.71	0.43	0.75	0.49	0.84	0.51	0.88
D_R (Density of merge influence area (pc/mi/ln))	11.61	18.69	11.90	21.22	13.62	23.89	14.40	25.21	16.50	28.44	17.27	29.76
v_F (Maximum total flow approaching a major diverge area on the freeway) =	5,968	5,016	6,024	6,237	6,795	7,044	6,795	7,044	8,088	8,565	8,088	8,565
v_R (Maximum flow on a ramp) =	365	1,541	392	1,613	455	1,799	561	1,978	560	2,081	665	2,260
V_{FO} (Maximum total departing from a merge or diverge area on the freeway)	6,333	6,557	6,416	7,850	7,250	8,843	7,356	9,022	8,648	10,646	8,753	10,825
Level of Service:	B	B	B	C	B	C	B	C	B	D	B	D

Proportion in lanes 1,2 (P_{FM}):	0.209
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

I-5 NB Off-ramp to Richards Blvd

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 10 lane freeway, Single Lane Off-Ramp

Existing Upstrm Frwy Lanes / Aux. Lanes 5
Existing Dnstrm Frwy Lanes / Aux. Lanes 4

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	5,806	6,011	5,881	7,196	6,646	8,106	6,743	8,270	7,927	9,759	8,024	9,923
Ramp Volume:	659	349	659	349	659	396	659	396	659	349	659	349
L_D	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	6,334	6,557	6,416	7,850	7,250	8,843	7,356	9,022	8,648	10,646	8,753	10,825
Sacto Adjusted Ramp Volume:	719	381	719	381	719	432	719	432	719	381	719	381
Sacto Adjusted Freeway Volume (Downstream):	5,615	6,176	5,697	7,469	6,531	8,411	6,637	8,590	7,929	10,265	8,034	10,444
v_F (Maximum total flow approaching a major diverge area on the freeway) =	6,366	6,590	6,448	7,889	7,286	8,887	7,393	9,067	8,691	10,699	8,797	10,879
V_{R12} (Off-ramp demand flow rate (pc/h)) =	723	383	723	383	723	434	723	434	723	383	723	383
Upstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Upstream Freeway V/C:	0.53	0.55	0.54	0.66	0.61	0.74	0.62	0.76	0.72	0.89	0.73	0.91
Downstream Freeway Capacity:	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600
Downstream Freeway V/C:	0.58	0.64	0.59	0.78	0.68	0.88	0.69	0.89	0.83	1.07	0.84	1.09
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	0.19	0.10	0.19	0.10	0.19	0.11	0.19	0.11	0.19	0.10	0.19	0.10
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	2,767	3,089	2,797	3,656	2,949	4,120	2,986	4,198	3,439	4,881	3,476	4,959
Density (pc/mi/ln):	19.05	21.82	19.31	26.69	20.61	30.68	20.93	31.36	24.83	37.23	25.14	37.90
V5	955	988	967	1,578	1,457	1,777	1,479	1,813	1,738	2,140	1,759	2,176
VF4eff	5,411	5,601	5,481	6,311	5,829	7,110	5,914	7,254	6,953	8,559	7,037	8,703
Level of Service:	B	C	B	C	C	D	C	D	C	F	C	F

Proportion in lanes 1,2 (P_{FD}):	0.436
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

I-5 NB On-Ramp from Richards Blvd

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

ıalysis Type: Single Lane On-Ramp, Enters Own Lane

Existing Upstrm Frwy Lanes / Aux. Lanes 4
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ramp Volume:	499	1,458	499	1,458	595	1,665	595	1,665	729	1,743	729	1,743
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40
Adjusted Ramp Volume:	544	1,591	544	1,591	649	1,816	649	1,816	795	1,901	795	1,901
Service Flow Rate @ LOS "A"	0	0	0	0	0	0	0	0	0	0	0	0
Service Flow Rate @ LOS "B"	0	0	0	0	0	0	0	0	0	0	0	0
Service Flow Rate @ LOS "C"	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Service Flow Rate @ LOS "D"	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700
Service Flow Rate @ LOS "E"	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Level of Service:	C	D	C	D	C	E	C	E	C	E	C	E

I-5 SB On-Ramp from Richards Blvd

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Single Lane On-Ramp, Enters Own Lane

Existing Upstrm Frwy Lanes / Aux. Lanes 4
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ramp Volume:	476	771	476	771	688	1,014	688	1,014	476	1,014	476	1,014
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40
Adjusted Ramp Volume:	519	841	519	841	751	1,106	751	1,106	519	1,106	519	1,106
Service Flow Rate @ LOS "A"	0	0	0	0	0	0	0	0	0	0	0	0
Service Flow Rate @ LOS "B"	0	0	0	0	0	0	0	0	0	0	0	0
Service Flow Rate @ LOS "C"	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Service Flow Rate @ LOS "D"	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700
Service Flow Rate @ LOS "E"	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Level of Service:	C	C	C	C	C	C	C	C	C	C	C	C

I-5 SB off-ramp to J St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Major Diverge, 2 Lane Off-Ramp, P_{FD}=0.260

Existing Upstrm Frwy Lanes / Aux. Lanes 5
Existing Dnstrm Frwy Lanes / Aux. Lanes 4

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	8,104	6,568	8,600	6,857	9,707	7,818	9,956	8,002	10,243	9,860	10,492	10,044
Ramp Volume:	1,667	273	1,993	576	2,386	660	2,635	844	2,231	805	2,480	989
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	8,841	7,165	9,382	7,480	10,589	8,529	10,861	8,729	11,174	10,756	11,446	10,957
Sacto Adjusted Ramp Volume:	1,819	298	2,174	628	2,603	720	2,875	921	2,434	878	2,705	1,079
Sacto Adjusted Freeway Volume (Downstream):	7,022	6,867	7,208	6,852	7,986	7,809	7,986	7,808	8,740	9,878	8,741	9,878
v_F (Maximum total flow approaching a major diverge area on the freeway) =	8,885	7,201	9,429	7,517	10,642	8,572	10,915	8,773	11,230	10,810	11,503	11,012
V_{R12} (Off-ramp demand flow rate (pc/h)) =	1,828	299	2,185	631	2,616	724	2,889	926	2,446	882	2,719	1,084
Upstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Upstream Freeway V/C:	0.74	0.60	0.79	0.63	0.89	0.71	0.91	0.73	0.94	0.90	0.96	0.92
Downstream Freeway Capacity:	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600
Downstream Freeway V/C:	0.73	0.72	0.75	0.71	0.83	0.81	0.83	0.81	0.91	1.03	0.91	1.03
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	0.48	0.08	0.57	0.17	0.69	0.19	0.76	0.24	0.64	0.23	0.72	0.29
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	3,663	2,094	4,068	2,422	4,703	2,764	4,976	2,966	4,730	3,464	5,003	3,666
Density (pc/mi/ln):	19.37	15.70	20.56	16.39	23.20	18.69	23.80	19.12	24.48	23.57	25.08	24.01
V5	1,777	1,440	1,886	1,503	2,128	1,714	2,183	1,755	2,246	2,162	2,301	2,202
VF4eff	7,108	5,761	7,543	6,014	8,514	6,857	8,732	7,018	8,984	8,648	9,203	8,809
Level of Service:	B	B	C	B	C	B	C	B	C	F	C	F

Proportion in lanes 1,2 (P_{FD}):	0.260
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

I-5 SB On-Ramp from I Street

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Single Lane On-Ramp, Enters Own Lane

Existing Upstrm Frwy Lanes / Aux. Lanes 4
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ramp Volume:	288	1,047	297	1,075	431	1,194	479	1,237	359	1,319	407	1,362
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40
Adjusted Ramp Volume:	314	1,142	324	1,173	470	1,303	523	1,349	392	1,439	444	1,486
Service Flow Rate @ LOS "A"	0	0	0	0	0	0	0	0	0	0	0	0
Service Flow Rate @ LOS "B"	0	0	0	0	0	0	0	0	0	0	0	0
Service Flow Rate @ LOS "C"	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Service Flow Rate @ LOS "D"	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700
Service Flow Rate @ LOS "E"	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Level of Service:	C	C	C	C	C	C	C	C	C	D	C	D

I-5 NB Off-ramp to Richards Blvd

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 10 lane freeway, Single Lane Off-Ramp

Existing Upstrm Frwy Lanes / Aux. Lanes 5
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	6,725	7,342	6,904	7,356	7,752	8,352	7,800	8,395	8,371	10,374	8,419	10,417
Ramp Volume:	747	1,193	1,058	1,320	892	1,259	892	1,259	1,233	1,780	1,233	1,780
L_D	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	7,336	8,009	7,532	8,025	8,457	9,111	8,509	9,158	9,132	11,317	9,184	11,364
Sacto Adjusted Ramp Volume:	815	1,301	1,154	1,440	973	1,373	973	1,373	1,345	1,942	1,345	1,942
Sacto Adjusted Freeway Volume (Downstream):	6,521	6,708	6,378	6,585	7,484	7,738	7,536	7,785	7,787	9,375	7,839	9,422
v_F (Maximum total flow approaching a major diverge area on the freeway) =	7,373	8,049	7,570	8,065	8,499	9,157	8,552	9,204	9,178	11,374	9,230	11,421
V_{R12} (Off-ramp demand flow rate (pc/h)) =	819	1,308	1,160	1,447	978	1,380	978	1,380	1,352	1,952	1,352	1,952
Upstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Upstream Freeway V/C:	0.61	0.67	0.63	0.67	0.71	0.76	0.71	0.77	0.76	0.95	0.77	0.95
Downstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Downstream Freeway V/C:	0.54	0.56	0.53	0.55	0.62	0.64	0.63	0.65	0.65	0.78	0.65	0.79
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	0.22	0.34	0.31	0.38	0.26	0.36	0.26	0.36	0.36	0.51	0.36	0.51
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	3,676	4,247	3,954	4,333	4,257	4,771	4,280	4,791	4,764	6,060	4,787	6,080
Density (pc/mi/ln):	26.87	31.77	29.26	32.51	31.86	36.28	32.06	36.46	36.22	47.36	36.42	47.54
V5	1,475	1,610	1,514	1,613	1,700	1,831	1,710	1,841	1,836	2,275	1,846	2,284
VF4eff	5,898	6,439	6,056	6,452	6,799	7,325	6,841	7,363	7,342	9,099	7,384	9,137
Level of Service:	C	D	D	D	D	E	D	E	E	E	E	E

Proportion in lanes 1,2 (P_{FD}):	0.436
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

I-5 SB off-ramp to US 50

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Major Diverge, 2 Lane Off-Ramp

Existing Upstrm Frwy Lanes / Aux. Lanes 5
Existing Dnstrm Frwy Lanes / Aux. Lanes 3

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	5,978	6,149	5,846	6,036	6,860	7,093	6,908	7,136	7,138	8,594	7,186	8,637
Ramp Volume:	3,809	4,301	3,809	4,301	4,302	4,758	4,320	4,769	4,613	5,087	4,631	5,098
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	6,521	6,708	6,377	6,585	7,484	7,738	7,536	7,785	7,787	9,375	7,839	9,422
Sacto Adjusted Ramp Volume:	4,155	4,692	4,155	4,692	4,693	5,191	4,713	5,203	5,032	5,549	5,052	5,561
Sacto Adjusted Freeway Volume (Downstream):	2,366	2,016	2,222	1,893	2,791	2,547	2,823	2,582	2,755	3,826	2,787	3,861
v_F (Maximum total flow approaching a major diverge area on the freeway) =	6,554	6,742	6,409	6,618	7,521	7,777	7,574	7,824	7,826	9,422	7,878	9,469
V_{R12} (Off-ramp demand flow rate (pc/h)) =	4,176	4,715	4,176	4,715	4,716	5,217	4,737	5,229	5,057	5,577	5,077	5,589
Upstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Upstream Freeway V/C:	0.55	0.56	0.53	0.55	0.63	0.65	0.63	0.65	0.65	0.79	0.66	0.79
Downstream Freeway Capacity:	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200
Downstream Freeway V/C:	0.33	0.28	0.31	0.26	0.39	0.35	0.39	0.36	0.38	0.53	0.39	0.54
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	1.10	1.24	1.10	1.24	1.24	1.37	1.25	1.38	1.33	1.47	1.34	1.47
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	4,794	5,242	4,756	5,210	5,446	5,882	5,474	5,904	5,777	6,576	5,806	6,598
Density (pc/mi/ln):	14.29	14.70	13.97	14.43	16.40	16.95	16.51	17.06	17.06	20.54	17.17	20.64
V5	983	1,011	961	993	1,504	1,555	1,515	1,565	1,565	1,884	1,576	1,894
VF4eff	5,571	5,730	5,448	5,625	6,017	6,221	6,059	6,259	6,261	7,538	6,303	7,575
Level of Service:	F	F	F	F	F	F	F	F	F	F	F	F

Proportion in lanes 1,2 (P_{FD}):	0.260
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

US 50 EB On-Ramp from I-5

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 12 lane freeway, 3 Lane On-Ramp

Existing Upstrm Frwy Lanes / Aux. Lanes 3
Existing Dnstrm Frwy Lanes / Aux. Lanes 6

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	3,176	1,434	3,197	1,446	4,066	2,382	4,066	2,382	4,285	3,529	4,285	3,529
Ramp Volume:	5,007	4,900	5,081	4,995	5,204	5,271	5,233	5,389	5,313	5,580	5,342	5,698
L_{Aeff} (Effective length of the acceleration lane, ft)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Sacto Adjusted Freeway Volume (Upstream):	3,465	1,564	3,488	1,577	4,436	2,599	4,436	2,599	4,675	3,850	4,675	3,850
Sacto Adjusted Ramp Volume:	5,462	5,345	5,543	5,449	5,677	5,750	5,709	5,879	5,796	6,087	5,828	6,216
V_{FO} Capacity (downstream segment capacity)	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400
Downstream Freeway V/C:	0.62	0.48	0.63	0.49	0.70	0.58	0.70	0.59	0.73	0.69	0.73	0.70
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	724	327	729	330	927	543	927	543	977	805	977	805
V_{R12} (Maximum total flow entering the ramp, merge influence area, two-lane volume):	6,186	5,672	6,272	5,779	6,604	6,293	6,636	6,422	6,773	6,892	6,805	7,021
V_{R12} Capacity:	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600
V_{R12} V/C:	1.34	1.23	1.36	1.26	1.44	1.37	1.44	1.40	1.47	1.50	1.48	1.53
D_R (Density of merge influence area (pc/mi/ln))	44.94	40.99	45.58	41.77	48.10	45.65	48.34	46.59	49.37	50.16	49.60	51.11
v_F (Maximum total flow approaching a major diverge area on the freeway) =	3,465	1,564	3,488	1,577	4,436	2,599	4,436	2,599	4,675	3,850	4,675	3,850
v_R (Maximum flow on a ramp) =	5,462	5,345	5,543	5,449	5,677	5,750	5,709	5,879	5,796	6,087	5,828	6,216
V_{FO} (Maximum total departing from a merge or diverge area on the freeway)	8,927	6,909	9,031	7,026	10,113	8,349	10,145	8,478	10,471	9,937	10,503	10,066
Level of Service:	F	F	F	F	F	F	F	F	F	F	F	F

Proportion in lanes 1,2 (P_{FM}):	0.209
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

US 50 EB Off-ramp to 15th St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Major Diverge, 1 Lane Off-Ramp, P_{FD}=0.260

Existing Upstrm Frwy Lanes / Aux. Lanes 6
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	8,183	6,334	8,278	6,441	9,270	7,653	9,299	7,771	9,598	9,109	9,627	9,227
Ramp Volume:	649	676	649	676	680	782	680	782	747	928	747	928
L_D	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	8,927	6,910	9,031	7,027	10,113	8,349	10,144	8,477	10,471	9,937	10,502	10,066
Sacto Adjusted Ramp Volume:	708	737	708	737	742	853	742	853	815	1,012	815	1,012
Sacto Adjusted Freeway Volume (Downstream):	8,219	6,173	8,323	6,290	9,371	7,496	9,402	7,624	9,656	8,925	9,687	9,054
v_F (Maximum total flow approaching a major diverge area on the freeway) =	8,972	6,945	9,076	7,062	10,164	8,391	10,195	8,519	10,523	9,987	10,555	10,116
V_{R12} (Off-ramp demand flow rate (pc/h)) =	712	741	712	741	746	857	746	857	819	1,017	819	1,017
Upstream Freeway Capacity:	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400
Upstream Freeway V/C:	0.62	0.48	0.63	0.49	0.71	0.58	0.71	0.59	0.73	0.69	0.73	0.70
Downstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Downstream Freeway V/C:	0.68	0.51	0.69	0.52	0.78	0.62	0.78	0.64	0.80	0.74	0.81	0.75
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	0.19	0.19	0.19	0.19	0.20	0.23	0.20	0.23	0.22	0.27	0.22	0.27
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	4,313	3,446	4,359	3,497	4,852	4,142	4,865	4,198	5,050	4,928	5,064	4,984
Density (pc/mi/ln):	32.34	24.88	32.74	25.32	36.98	30.87	37.10	31.35	38.68	37.63	38.80	38.12
V5-6	1,495	868	1,513	1,177	1,694	1,398	1,699	1,420	1,754	1,664	1,759	1,686
VF4eff	7,476	6,076	7,563	5,885	8,470	6,992	8,496	7,099	8,769	8,322	8,795	8,430
Level of Service:	D	C	D	C	E	D	E	D	E	E	E	E

Proportion in lanes 1,2 (P_{FD}):	0.436
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

US 50 EB On-Ramp from 10th St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 10 lane freeway, 1 Lane On-Ramp (Exhibit 25-5, Eq4)

Existing Upstrm Frwy Lanes / Aux. Lanes 5
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	7,534	5,658	7,629	5,765	8,590	6,871	8,619	6,989	8,851	8,181	8,880	8,299
Ramp Volume:	785	745	836	1,030	790	812	804	894	1,074	753	1,088	835
L_{Aeff} (Effective length of the acceleration lane, ft)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Sacto Adjusted Freeway Volume (Upstream):	8,219	6,172	8,323	6,289	9,371	7,496	9,403	7,624	9,656	8,925	9,687	9,053
Sacto Adjusted Ramp Volume:	856	813	912	1,124	862	886	877	975	1,172	821	1,187	911
V_{FO} Capacity (downstream segment capacity)	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Downstream Freeway V/C:	0.49	0.39	0.50	0.40	0.57	0.46	0.58	0.45	0.60	0.54	0.60	0.55
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	1,718	1,290	1,740	1,314	1,959	1,567	1,965	1,593	2,018	1,865	2,025	1,892
V_{R12} (Maximum total flow entering the ramp, merge influence area, two-lane volume):	2,574	2,103	2,652	2,438	2,821	2,453	2,842	2,568	3,190	2,686	3,212	2,803
V_{R12} Capacity:	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600
V_{R12} V/C:	0.56	0.46	0.58	0.53	0.61	0.53	0.62	0.56	0.69	0.58	0.70	0.61
D_R (Density of merge influence area (pc/mi/ln))	18.89	15.23	19.47	17.70	20.81	17.93	20.97	18.79	23.55	19.78	23.71	20.65
v_F (Maximum total flow approaching a major diverge area on the freeway) =	8,219	6,172	8,323	6,289	9,371	7,496	9,403	7,624	9,656	8,925	9,687	9,053
v_R (Maximum flow on a ramp) =	856	813	912	1,124	862	886	877	975	1,172	821	1,187	911
V_{FO} (Maximum total departing from a merge or diverge area on the freeway)	6,733	6,985	6,863	7,413	7,733	8,382	7,780	8,599	8,328	9,746	8,374	9,964
V5	2,342	1,481	2,372	1,509	2,500	2,024	2,500	2,173	2,500	2,500	2,500	2,500
VF4eff	5,877	4,691	5,951	4,780	6,871	5,472	6,903	5,451	7,156	6,425	7,187	6,553
Level of Service:	B	B	B	B	C	B	C	B	C	B	C	C

Proportion in lanes 1,2 (P_{FM}):	0.209
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

US 50 WB off-ramp to 10th St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 10 lane freeway, Single Lane Off-Ramp

Existing Upstrm Frwy Lanes / Aux. Lanes 5
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	6,483	6,058	6,854	6,281	7,145	6,430	7,319	6,533	8,113	7,306	8,287	7,409
Ramp Volume:	928	349	1,209	424	1,235	363	1,328	381	1,258	582	1,351	600
L_D	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	7,072	6,609	7,477	6,852	7,795	7,015	7,984	7,127	8,851	7,970	9,040	8,083
Sacto Adjusted Ramp Volume:	1,012	381	1,319	463	1,347	396	1,449	416	1,372	635	1,474	655
Sacto Adjusted Freeway Volume (Downstream):	6,060	6,228	6,158	6,389	6,448	6,619	6,535	6,711	7,479	7,335	7,566	7,428
v_F (Maximum total flow approaching a major diverge area on the freeway) =	7,107	6,642	7,514	6,886	7,834	7,050	8,024	7,163	8,895	8,010	9,085	8,123
V_{R12} (Off-ramp demand flow rate (pc/h)) =	1,017	383	1,326	465	1,354	398	1,456	418	1,379	638	1,481	658
Upstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Upstream Freeway V/C:	0.59	0.55	0.63	0.57	0.65	0.59	0.67	0.60	0.74	0.67	0.76	0.68
Downstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Downstream Freeway V/C:	0.51	0.52	0.51	0.53	0.54	0.55	0.54	0.56	0.62	0.61	0.63	0.62
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	0.27	0.10	0.35	0.12	0.36	0.10	0.38	0.11	0.36	0.17	0.39	0.17
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	3,672	3,112	4,024	3,265	4,179	3,298	4,320	3,359	4,656	3,852	4,797	3,913
Density (pc/mi/ln):	26.83	22.01	29.86	23.33	31.19	23.62	32.40	24.14	35.29	28.38	36.50	28.90
V5	1,421	996	1,503	1,033	1,567	1,410	1,605	1,433	1,779	1,602	1,817	1,625
VF4eff	5,686	5,646	6,012	5,853	6,267	5,640	6,419	5,730	7,116	6,408	7,268	6,499
Level of Service:	C	C	D	C	D	C	D	C	E	D	E	D

Proportion in lanes 1,2 (P_{FD}):	0.436
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

US50 WB On-Ramp from 15th St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 10 lane freeway, 1 Lane On-Ramp

Existing Upstrm Frwy Lanes / Aux. Lanes 5
Existing Dnstrm Frwy Lanes / Aux. Lanes 6

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	5,555	5,709	5,645	5,857	5,910	6,067	5,991	6,152	6,855	6,724	6,936	6,809
Ramp Volume:	474	666	479	673	617	858	617	858	802	754	802	754
L_{Aeff} (Effective length of the acceleration lane, ft)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Sacto Adjusted Freeway Volume (Upstream):	6,060	6,228	6,158	6,389	6,447	6,619	6,536	6,711	7,478	7,335	7,567	7,428
Sacto Adjusted Ramp Volume:	517	727	523	734	673	936	673	936	875	823	875	823
V_{FO} Capacity (downstream segment capacity)	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400
Downstream Freeway V/C:	0.46	0.48	0.46	0.49	0.49	0.52	0.50	0.53	0.58	0.57	0.59	0.57
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	3,181	3,269	3,232	3,353	3,384	3,474	3,430	3,522	3,925	3,850	3,971	3,899
V_{R12} (Maximum total flow entering the ramp, merge influence area, two-lane volume):	3,698	3,996	3,755	4,087	4,057	4,410	4,103	4,458	4,800	4,673	4,846	4,722
V_{R12} Capacity:	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600
V_{R12} V/C:	0.80	0.87	0.82	0.89	0.88	0.96	0.89	0.97	1.04	1.02	1.05	1.03
D_R (Density of merge influence area (pc/mi/ln))	27.81	30.04	28.25	30.75	30.54	33.17	30.90	33.55	36.24	35.28	36.60	35.66
v_F (Maximum total flow approaching a major diverge area on the freeway) =	6,060	6,228	6,158	6,389	6,447	6,619	6,536	6,711	7,478	7,335	7,567	7,428
v_R (Maximum flow on a ramp) =	517	727	523	734	673	936	673	936	875	823	875	823
V_{FO} (Maximum total departing from a merge or diverge area on the freeway)	6,577	6,955	6,681	7,123	7,120	7,555	7,209	7,647	8,353	8,158	8,442	8,251
V5	1,454	1,495	1,478	1,533	1,547	1,787	1,765	1,812	2,019	1,980	2,157	2,006
VF4eff	4,606	4,733	4,680	4,856	4,900	4,832	4,771	4,899	5,459	5,355	5,410	5,422
Level of Service:	C	D	D	D	D	D	D	D	F	F	F	F

Proportion in lanes 1,2 (P_{FM}):	0.525
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

US 50 WB Off-ramp to I-5

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Major Diverge, 2 Lane Off-Ramp, P_{FD}=0.260

Existing Upstrm Frwy Lanes / Aux. Lanes 6
Existing Dnstrm Frwy Lanes / Aux. Lanes 4

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	6,029	6,375	6,124	6,530	6,527	6,925	6,608	7,010	7,657	7,478	7,738	7,563
Ramp Volume:	3,853	3,276	3,934	3,404	4,098	3,592	4,179	3,677	4,203	3,561	4,284	3,646
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	6,577	6,955	6,681	7,124	7,120	7,555	7,209	7,647	8,353	8,158	8,441	8,251
Sacto Adjusted Ramp Volume:	4,203	3,574	4,292	3,713	4,471	3,919	4,559	4,011	4,585	3,885	4,673	3,977
Sacto Adjusted Freeway Volume (Downstream):	2,374	3,381	2,389	3,411	2,649	3,636	2,650	3,636	3,768	4,273	3,768	4,274
v_F (Maximum total flow approaching a major diverge area on the freeway) =	6,610	6,990	6,714	7,160	7,156	7,593	7,245	7,685	8,395	8,199	8,483	8,292
V_{R12} (Off-ramp demand flow rate (pc/h)) =	4,224	3,592	4,313	3,732	4,493	3,939	4,582	4,031	4,608	3,904	4,696	3,997
Upstream Freeway Capacity:	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400
Upstream Freeway V/C:	0.40	0.42	0.41	0.41	0.41	0.44	0.42	0.44	0.49	0.47	0.49	0.48
Downstream Freeway Capacity:	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600
Downstream Freeway V/C:	0.25	0.35	0.25	0.36	0.28	0.38	0.28	0.38	0.39	0.45	0.39	0.45
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	1.11	0.95	1.14	0.98	1.18	1.04	1.21	1.06	1.21	1.03	1.24	1.05
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	5,264	5,073	5,360	5,226	5,654	5,532	5,743	5,624	6,259	5,777	6,347	5,870
Density (pc/mi/ln):	12.01	12.70	12.20	13.01	13.00	13.79	13.16	13.96	15.25	14.89	15.41	15.06
V5-6	826	874	839	1,193	1,193	1,265	1,208	1,281	1,399	1,366	1,414	1,382
VF4eff	5,784	6,116	5,875	5,966	5,963	6,327	6,038	6,404	6,996	6,832	7,069	6,910
Level of Service:	F	B	F	B	F	F	F	F	F	F	F	F

Proportion in lanes 1,2 (P_{FD}):	0.436
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

US-50 EB On-Ramp from 16th St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Single Lane On-Ramp, Enters Own Lane

Existing Upstrm Frwy Lanes / Aux. Lanes 5
Existing Dnstrm Frwy Lanes / Aux. Lanes 6

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ramp Volume:	656	682	688	769	656	682	720	865	888	739	952	922
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40
Adjusted Ramp Volume:	716	744	751	839	716	744	785	944	969	806	1,039	1,006
Service Flow Rate @ LOS "A"	0	0	0	0	0	0	0	0	0	0	0	0
Service Flow Rate @ LOS "B"	0	0	0	0	0	0	0	0	0	0	0	0
Service Flow Rate @ LOS "C"	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Service Flow Rate @ LOS "D"	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700
Service Flow Rate @ LOS "E"	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Level of Service:	C	C	C	C	C	C	C	C	C	C	C	C

US 50 EB Off-ramp to Hwy 51

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: Major Diverge, 2 Lane Off-Ramp, P_{FD}=0.260

Existing Upstrm Frwy Lanes / Aux. Lanes 6
Existing Dnstrm Frwy Lanes / Aux. Lanes 4

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	8,975	7,085	9,153	7,564	10,036	8,365	10,143	8,748	10,813	9,673	10,920	10,056
Ramp Volume:	2,674	2,983	2,796	3,265	2,734	3,286	2,780	3,458	2,998	3,256	3,044	3,428
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	9,791	7,729	9,985	8,252	10,948	9,125	11,065	9,543	11,796	10,552	11,913	10,970
Sacto Adjusted Ramp Volume:	2,917	3,254	3,050	3,562	2,983	3,585	3,033	3,772	3,271	3,552	3,321	3,740
Sacto Adjusted Freeway Volume (Downstream):	6,874	4,475	6,935	4,690	7,965	5,540	8,032	5,771	8,525	7,000	8,592	7,230
v_F (Maximum total flow approaching a major diverge area on the freeway) =	9,840	7,768	10,035	8,293	11,003	9,171	11,120	9,591	11,855	10,605	11,973	11,025
V_{R12} (Off-ramp demand flow rate (pc/h)) =	2,932	3,270	3,065	3,580	2,998	3,603	3,048	3,791	3,287	3,570	3,338	3,759
Upstream Freeway Capacity:	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400
Upstream Freeway V/C:	0.68	0.54	0.70	0.58	0.76	0.64	0.77	0.67	0.82	0.74	0.83	0.77
Downstream Freeway Capacity:	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600
Downstream Freeway V/C:	0.72	0.47	0.72	0.49	0.83	0.58	0.84	0.60	0.89	0.73	0.90	0.75
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	0.77	0.86	0.81	0.94	0.79	0.95	0.80	1.00	0.87	0.94	0.88	0.99
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	5,944	5,231	6,104	5,635	6,488	6,030	6,568	6,320	7,023	6,637	7,102	6,927
Density (pc/mi/ln):	17.88	14.11	18.23	15.07	19.99	16.66	20.20	17.42	21.54	19.27	21.75	20.03
V5-6	1,640	1,295	1,672	1,382	1,834	1,528	1,853	1,598	1,976	1,767	1,995	1,837
VF4eff	8,200	6,473	8,362	6,911	9,169	7,642	9,267	7,992	9,879	8,837	9,977	9,187
Level of Service:	B	B	B	B	B	B	C	B	C	B	C	C

Proportion in lanes 1,2 (P_{FD}):	0.436
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

US-50 WB On-Ramp from Hwy51

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 8 lane freeway, 2 Lane On-Ramp (Pfm=0.209 for 2-lane ramp)

Existing Upstrm Frwy Lanes / Aux. Lanes	4
Existing Dnstrm Frwy Lanes / Aux. Lanes	5

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	3,637	3,250	4,065	3,447	3,938	3,456	4,258	3,661	4,971	4,308	5,291	4,513
Ramp Volume:	1,243	1,633	1,278	1,700	1,281	1,633	1,281	1,633	1,631	1,755	1,631	1,755
L_{Aeff} (Effective length of the acceleration lane, ft)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Sacto Adjusted Freeway Volume (Upstream):	3,968	3,545	4,435	3,760	4,296	3,770	4,645	3,994	5,423	4,700	5,772	4,923
Sacto Adjusted Ramp Volume:	1,356	1,781	1,394	1,855	1,397	1,781	1,397	1,781	1,779	1,915	1,779	1,915
V_{FO} Capacity (downstream segment capacity)	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Downstream Freeway V/C:	0.44	0.44	0.49	0.47	0.47	0.46	0.50	0.48	0.60	0.55	0.63	0.57
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	829	741	927	786	898	788	971	835	1,133	982	1,206	1,029
V_{R12} (Maximum total flow entering the ramp, merge influence area, two-lane volume):	2,185	2,522	2,321	2,641	2,295	2,569	2,368	2,616	2,912	2,897	2,985	2,944
V_{R12} Capacity:	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600
V_{R12} V/C:	0.48	0.55	0.50	0.57	0.50	0.56	0.51	0.57	0.63	0.63	0.65	0.64
D_R (Density of merge influence area (pc/mi/ln))	15.62	18.06	16.67	18.95	16.46	18.42	17.03	18.79	21.10	20.92	21.67	21.29
v_F (Maximum total flow approaching a major diverge area on the freeway) =	3,968	3,545	4,435	3,760	4,296	3,770	4,645	3,994	5,423	4,700	5,772	4,923
v_R (Maximum flow on a ramp) =	1,356	1,781	1,394	1,855	1,397	1,781	1,397	1,781	1,779	1,915	1,779	1,915
V_{FO} (Maximum total departing from a merge or diverge area on the freeway)	5,324	5,326	5,829	5,615	5,693	5,551	6,042	5,775	7,202	6,615	7,551	6,838
Level of Service:	B	B	B	B	B	B	B	B	C	C	C	C

Proportion in lanes 1,2 (P_{FM}):	0.209
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

US 50 WB off-ramp to 16th St

Highway Capacity Manual
2000 Edition
Capacity Analysis of Freeway Ramps

Ramp Analysis Type: 10 lane freeway, Single Lane Off-Ramp

Existing Upstrm Frwy Lanes / Aux. Lanes 6
Existing Dnstrm Frwy Lanes / Aux. Lanes 5

	Existing		Baseline		2013				2027			
	Without Project		Without Project		Without Project		With Project		Without Project		With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	7,363	6,725	7,826	6,989	8,117	7,187	8,437	7,392	9,085	8,063	9,405	8,268
Ramp Volume:	880	667	972	708	972	757	1,118	859	972	757	1,118	859
L_D	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40
Sacto Adjusted Freeway Volume (Upstream):	8,032	7,336	8,537	7,624	8,855	7,840	9,204	8,064	9,911	8,796	10,260	9,020
Sacto Adjusted Ramp Volume:	960	728	1,060	772	1,060	826	1,220	937	1,060	826	1,220	937
Sacto Adjusted Freeway Volume (Downstream):	7,072	6,608	7,477	6,852	7,795	7,014	7,984	7,127	8,851	7,970	9,040	8,083
v_F (Maximum total flow approaching a major diverge area on the freeway) =	8,072	7,373	8,580	7,662	8,899	7,879	9,250	8,104	9,961	8,840	10,311	9,065
V_{R12} (Off-ramp demand flow rate (pc/h)) =	965	732	1,065	776	1,065	830	1,226	942	1,065	830	1,226	942
Upstream Freeway Capacity:	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400
Upstream Freeway V/C:	0.56	0.51	0.60	0.53	0.62	0.55	0.64	0.56	0.69	0.61	0.72	0.63
Downstream Freeway Capacity:	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Downstream Freeway V/C:	0.59	0.55	0.62	0.57	0.65	0.58	0.67	0.59	0.74	0.66	0.75	0.67
Ramp Capacity:	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800
Ramp V/C:	0.25	0.19	0.28	0.20	0.28	0.22	0.32	0.25	0.28	0.22	0.32	0.25
V_{12} (Maximum total flow entering the ramp, diverge influence area, two-lane volume):	4,064	3,627	4,342	3,778	4,481	3,904	4,725	4,065	4,944	4,322	5,187	4,483
Density (pc/mi/ln):	30.20	26.45	32.59	27.75	33.79	28.82	35.88	30.21	37.77	32.42	39.86	33.81
V5-6	1,345	1,229	1,430	1,277	1,483	1,313	1,542	1,351	1,660	1,473	1,719	1,511
VF4eff	6,727	6,144	7,150	6,385	7,416	6,566	7,708	6,754	8,300	7,367	8,593	7,554
Level of Service:	D	C	D	C	D	D	E	D	E	D	E	D

Proportion in lanes 1,2 (P_{FD}):	0.436
PHF (Peak Hour Factor) =	1
f_{HV} (Adjustment factor for heavy vehicles) =	1.00
f_p (Adjustment factor for driver population) =	1
P_T (Proportioin of trucks/buses in the traffic stream) =	0.01
P_R (Proportioin of RVs in the traffic stream) =	0
E_T (Passenger-car equivalents for trucks/buses in the traffic stream) =	1.5
E_R (Passenger-car equivalents for RVs in the traffic stream) =	1.5

Appendix B Trip Generation Worksheets

Downtown Sacramento Traffic Study
Trip Generation for 8th & K Development
Proposed Project

Trip Generation Land Use Category	Amount	Source	Trips Generated Weekday	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Distribution AM Peak In	Distribution AM Peak Out	Distribution PM Peak In	Distribution PM Peak Out
800 K Street													
Office (General Office Building)	300.0 KSF	ITE (710)	3,109	398	54	452	71	344	415	88%	12%	17%	83%
Retail (Shopping Center)	17.7 KSF	ITE (820)	2,206	34	21	55	96	104	200	61%	39%	48%	52%
High Rise Residential Condominium	300 Units	ITE (232)	1,355	22	94	116	73	44	117	19%	81%	62%	38%
Other													
Total Project Trips			6,670	454	169	623	240	492	732				
Transit Adjustments													
Office (-11.1%)			-345	-44	-6	-50	-8	-38	-46				
Retail (-2.2%)			-49	-1	0	-1	-2	-2	-4				
Residential (Daily -2.6%, a.m. -3.4%, p.m. -3.1%)			-35	-1	-3	-4	-2	-2	-4				
Other													
Total Transit Adjustments			-429	-46	-9	-55	-12	-42	-54				
Walk, Bike & Other Non-Auto Travel Adjustments													
Office (-2.8%)			-87	-11	-2	-13	-2	-10	-12				
Retail (-11.6%)			-256	-4	-2	-6	-11	-12	-23				
Residential (Daily -9.6%, a.m. -7.9%, p.m. -8.6%)			-130	-2	-7	-9	-6	-4	-10				
Other													
Total Walk, Bike & Other Non-Auto Travel Adjustments			-473	-17	-11	-28	-19	-26	-45				
Internal Trips Within This Project			-549	-6	-6	-13	-24	-24	-48				
Trips To-From Other Proposed Projects			-440	-13	-13	-26	-20	-20	-41				
New External Trips													
Office (General Office Building)				331	41	372	52	279	331				
Retail (Shopping Center)				25	14	39	66	72	138				
High Rise Residential Condominium				16	74	90	47	29	75				
Total			4,778	371	129	501	165	380	544				
New External Trips Percent of Total Project Trips			72%	82%	77%	80%	69%	77%	74%				
Transit Trips													
Office (12.5%)			389	50	7	57	9	43	52				
Retail (2.6%)			57	1	0	1	2	3	5				
Residential (Daily 3.2%, a.m. 4.1%, p.m. 3.7%)			43	1	4	5	2	2	4				
Total Transit Trips			489	52	11	63	13	48	61				

Downtown Sacramento Traffic Study
Trip Generation for Proposed Projects

Trip Generation Land Use Category	Amount	Source	Trips Generated Weekday	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Distribution AM Peak In	Distribution AM Peak Out	Distribution PM Peak In	Distribution PM Peak Out
831 L Street													
Office (General Office Building)	140.0 KSF	ITE (710)	1,729	216	30	246	40	196	236	88%	12%	17%	83%
Retail (Shopping Center)	10.0 KSF	ITE (820)	1,520	24	15	39	66	71	137	61%	39%	48%	52%
Other													
Total Project Trips			3,249	240	45	285	106	267	373				
Transit Adjustments													
Office (-11.1%)			-192	-24	-3	-27	-4	-22	-26				
Retail (-2.2%)			-33	-1	0	-1	-1	-2	-3				
Residential (Daily -2.6%, a.m. -3.4%, p.m. -3.1%)			0	0	0	0	0	0	0				
Other													
Total Transit Adjustments			-225	-25	-3	-28	-5	-24	-29				
Walk, Bike & Other Non-Auto Travel Adjustments													
Office (-2.8%)			-48	-6	-1	-7	-1	-6	-7				
Retail (-11.6%)			-176	-3	-2	-5	-8	-8	-16				
Residential (Daily -9.6%, a.m. -7.9%, p.m. -8.6%)			0	0	0	0	0	0	0				
Other													
Total Walk, Bike & Other Non-Auto Travel Adjustments			-224	-9	-3	-12	-9	-14	-23				
Internal Trips Within This Project			-92	-1	-1	-2	-3	-3	-6				
Trips To-From Other Proposed Projects			-363	-7	-7	-14	-16	-16	-31				
New External Trips													
Office (General Office Building)				179	21	201	27	155	183				
Retail (Shopping Center)				19	10	29	46	55	101				
Total			2,345	198	31	230	73	210	284				
New External Trips Percent of Total Project Trips			72%	83%	70%	81%	69%	79%	76%				
Transit Trips													
Office (12.5%)			216	27	4	31	5	25	30				
Retail (2.6%)			40	1	0	1	2	2	4				
Residential (Daily 3.2%, a.m. 4.1%, p.m. 3.7%)			0	0	0	0	0	0	0				
Total Transit Trips			256	28	4	32	7	27	34				

Downtown Sacramento Traffic Study
Trip Generation for Proposed Projects

Trip Generation Land Use Category	Amount	Source	Trips Generated Weekday	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Distribution AM Peak In	Distribution AM Peak Out	Distribution PM Peak In	Distribution PM Peak Out
Westfield Shoppingtown Downtown Plaza													
Office (General Office Building)	220.6 KSF	ITE (710)	2,453	311	42	353	55	271	326	88%	12%	17%	83%
Retail (Shopping Center)	842.7 KSF	ITE (820)	27,140	343	219	562	1,227	1,329	2,556	61%	39%	48%	52%
Free Standing Discount Store	150.0 KSF	ITE (815)	8,403	86	40	126	380	380	759	68%	32%	50%	50%
Multiplex Movie Theater	3,800 Seats	ITE (445)					109	195	304			36%	64%
Total Project Trips			37,996	740	301	1,041	1,771	2,175	3,945				
Transit Adjustments													
Office (-11.1%)			-272	-34	-5	-39	-6	-30	-36				
Retail/Theater (-2.2%)			-782	-9	-6	-15	-38	-42	-80				
Total Transit Adjustments			-1,054	-43	-11	-54	-44	-72	-116				
Walk, Bike & Other Non-Auto Travel Adjustments													
Office (-2.8%)			-69	-9	-1	-10	-2	-7	-9				
Retail/Theater (-11.6%)			-4,123	-50	-30	-80	-199	-221	-420				
Total Walk, Bike & Other Non-Auto Travel Adjustments			-4,192	-59	-31	-90	-201	-228	-429				
Internal Trips Within This Project			-781	-14	-14	-28	-44	-44	-88				
Trips To-From Other Proposed Projects			-862	-1	-1	-2	-32	-32	-63				
New External Trips													
Office (General Office Building)				261	28	289	31	200	232				
Retail (Shopping Center)				362	216	578	1,419	1,599	3,017				
Total			31,107	623	244	867	1,450	1,799	3,248				
New External Trips Percent of Total Project Trips			82%	84%	81%	83%	82%	83%	82%				
Transit Trips													
Office (12.5%)			307	39	5	44	7	34	41				
Retail/Theater (2.6%)			924	11	7	18	45	49	94				
Total Transit Trips			1,231	50	12	62	52	83	135				

Downtown Sacramento Traffic Study
Trip Generation for Proposed Projects

Trip Generation Land Use Category	Amount	Source	Trips Generated Weekday	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Distribution AM Peak In	Distribution AM Peak Out	Distribution PM Peak In	Distribution PM Peak Out
500 Capitol Mall													
Office (General Office Building)	503.0 KSF	ITE (710)	4,628	601	82	683	109	533	642	88%	12%	17%	83%
Retail (Shopping Center)	15.2 KSF	ITE (820)	1,996	31	20	51	87	94	181	61%	39%	48%	52%
Restaurant	20.2 KSF	ITE (932)	2,568	121	112	233	135	86	221	52%	48%	61%	39%
Total Project Trips			9,192	753	214	967	331	713	1,044				
Transit Adjustments													
Office (-11.1%)			-514	-67	-9	-76	-12	-59	-71				
Retail/Restaurant (-2.2%)			-100	-3	-3	-6	-5	-4	-9				
Total Transit Adjustments			-614	-70	-12	-82	-17	-63	-80				
Walk, Bike & Other Non-Auto Travel Adjustments													
Office (-2.8%)			-130	-17	-2	-19	-3	-15	-18				
Retail/Restaurant (-11.6%)			-529	-18	-15	-33	-26	-21	-47				
Total Walk, Bike & Other Non-Auto Travel Adjustments			-659	-35	-17	-52	-29	-36	-65				
Internal Trips Within This Project			-276	-6	-6	-12	-8	-8	-17				
Trips To-From Other Proposed Projects			-1,026	-23	-23	-46	-44	-44	-88				
New External Trips													
Office (General Office Building)				495	60	555	75	422	497				
Retail (Shopping Center)				124	96	220	158	139	297				
Total			6,618	619	156	775	233	562	795				
New External Trips Percent of Total Project Trips			72%	82%	73%	80%	70%	79%	76%				
Transit Trips													
Office (12.5%)			579	75	10	85	14	66	80				
Retail/Restaurant (2.6%)			119	4	3	7	6	4	10				
Total Transit Trips			698	79	13	92	20	70	90				

Downtown Sacramento Traffic Study
Trip Generation for Proposed Projects

Trip Generation	Amount	Source	Trips Generated							Distribution			
Land Use Category			Weekday	AM Peak Hour			PM Peak Hour			AM Peak		PM Peak	
				In	Out	Total	In	Out	Total	In	Out	In	Out
The Metropolitan (10th & J)													
Retail (Shopping Center)	13.0 KSF	ITE (820)	1,803	28	18	46	78	85	163	61%	39%	48%	52%
High Rise Residential Condominium	340 Units	ITE (232)	1,505	24	103	127	81	50	131	19%	81%	62%	38%
Other													
Total Project Trips			3,308	52	121	173	159	135	294				
Transit Adjustments													
Office (-11.1%)			0	0	0	0	0	0	0				
Retail (-2.2%)			-40	-1	0	-1	-2	-2	-4				
Residential (Daily -2.6%, a.m. -3.4%, p.m. -3.1%)			-39	-1	-3	-4	-2	-2	-4				
Other													
Total Transit Adjustments			-79	-2	-3	-5	-4	-4	-8				
Walk, Bike & Other Non-Auto Travel Adjustments													
Office (-2.8%)			0	0	0	0	0	0	0				
Retail (-11.6%)			-209	-3	-2	-5	-9	-10	-19				
Residential (Daily -9.6%, a.m. -7.9%, p.m. -8.6%)			-144	-2	-8	-10	-7	-4	-11				
Other													
Total Walk, Bike & Other Non-Auto Travel Adjustments			-353	-5	-10	-15	-16	-14	-30				
Internal Trips Within This Project			-311	-4	-4	-8	-15	-15	-30				
Trips To-From Other Proposed Projects			-264	-2	-2	-4	-6	-6	-12				
New External Trips													
Retail (Shopping Center)				21	14	35	58	61	119				
High Rise Residential Condominium				18	88	107	60	36	96				
Total			2,302	39	102	141	118	96	215				
New External Trips Percent of Total Project Trips			70%	75%	84%	82%	74%	71%	73%				
Transit Trips													
Office (12.5%)			0	0	0	0	0	0	0				
Retail (2.6%)			47	1	0	1	2	2	4				
Residential (Daily 3.2%, a.m. 4.1%, p.m. 3.7%)			48	1	4	5	3	2	5				
Total Transit Trips			95	2	4	6	5	4	9				

Downtown Sacramento Traffic Study
Trip Generation for Proposed Projects

Trip Generation Land Use Category	Amount	Source	Trips Generated Weekday	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Distribution AM Peak In	Distribution AM Peak Out	Distribution PM Peak In	Distribution PM Peak Out
Cathedral Square (11th & J)													
Retail (Shopping Center)	7.3 KSF	ITE (820)	1,238	20	13	33	53	58	111	61%	39%	48%	52%
High Rise Residential Condominium	242 Units	ITE (232)	1,136	19	80	99	61	37	98	19%	81%	62%	38%
Other													
Total Project Trips			2,374	39	93	132	114	95	209				
Transit Adjustments													
Office (-11.1%)			0	0	0	0	0	0	0				
Retail (-2.2%)			-27	-1	0	-1	-1	-1	-2				
Residential (Daily -2.6%, a.m. -3.4%, p.m. -3.1%)			-30	-1	-2	-3	-2	-1	-3				
Other													
Total Transit Adjustments			-57	-2	-2	-4	-3	-2	-5				
Walk, Bike & Other Non-Auto Travel Adjustments													
Office (-2.8%)			0	0	0	0	0	0	0				
Retail (-11.6%)			-144	-2	-2	-4	-6	-7	-13				
Residential (Daily -9.6%, a.m. -7.9%, p.m. -8.6%)			-109	-2	-6	-8	-5	-3	-8				
Other													
Total Walk, Bike & Other Non-Auto Travel Adjustments			-253	-4	-8	-12	-11	-10	-21				
Internal Trips Within This Project			-214	-3	-3	-6	-10	-10	-20				
Trips To-From Other Proposed Projects			-35	-2	-2	-4	-1	-1	-2				
New External Trips													
Retail (Shopping Center)				15	9	24	41	43	85				
High Rise Residential Condominium				14	69	83	47	28	76				
Total			1,815	28	78	107	89	72	161				
New External Trips Percent of Total Project Trips			76%	73%	84%	81%	78%	76%	77%				
Transit Trips													
Office (12.5%)			0	0	0	0	0	0	0				
Retail (2.6%)			32	1	0	1	1	2	3				
Residential (Daily 3.2%, a.m. 4.1%, p.m. 3.7%)			36	1	3	4	2	2	4				
Total Transit Trips			68	2	3	5	3	4	7				

Downtown Sacramento Traffic Study
Trip Generation for Proposed Projects

Trip Generation Land Use Category	Amount	Source	Trips Generated Weekday	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Distribution AM Peak In	Distribution AM Peak Out	Distribution PM Peak In	Distribution PM Peak Out
Epic Tower													
Office (General Office Building)	39.0 KSF	ITE (710)	646	77	11	88	21	101	122	88%	12%	17%	83%
Retail (Shopping Center)	26.9 KSF	ITE (820)	2,889	43	28	71	126	137	263	61%	39%	48%	52%
High Rise Residential Condominium	354 Units	ITE (232)	1,558	25	107	132	84	52	136	19%	81%	62%	38%
Other													
Total Project Trips			5,093	145	146	291	231	290	521				
Transit Adjustments													
Office (-11.1%)			-72	-9	-1	-10	-2	-12	-14				
Retail (-2.2%)			-64	-1	-1	-2	-3	-3	-6				
Residential (Daily -2.6%, a.m. -3.4%, p.m. -3.1%)			-41	-1	-3	-4	-2	-2	-4				
Other													
Total Transit Adjustments			-177	-11	-5	-16	-7	-17	-24				
Walk, Bike & Other Non-Auto Travel Adjustments													
Office (-2.8%)			-18	-2	0	-2	-1	-2	-3				
Retail (-11.6%)			-335	-5	-3	-8	-15	-16	-31				
Residential (Daily -9.6%, a.m. -7.9%, p.m. -8.6%)			-150	-2	-8	-10	-7	-5	-12				
Other													
Total Walk, Bike & Other Non-Auto Travel Adjustments			-503	-9	-11	-20	-23	-23	-46				
Internal Trips Within This Project			-683	-8	-8	-16	-31	-31	-62				
Trips To-From Other Proposed Projects			-500	-7	-7	-13	-19	-19	-39				
New External Trips													
Office (General Office Building)				62	9	70	13	77	89				
Retail (Shopping Center)				31	19	50	86	91	177				
High Rise Residential Condominium				18	88	105	52	32	84				
Total			3,229	110	115	226	151	200	350				
New External Trips Percent of Total Project Trips			63%	76%	79%	78%	65%	69%	67%				
Transit Trips													
Office (12.5%)			81	10	1	11	3	12	15				
Retail (2.6%)			75	1	1	2	3	4	7				
Residential (Daily 3.2%, a.m. 4.1%, p.m. 3.7%)			50	1	4	5	3	2	5				
Total Transit Trips			206	12	6	18	9	18	27				

Downtown Sacramento Traffic Study
Trip Generation for Proposed Projects

Trip Generation	Amount	Source	Trips Generated							Distribution			
Land Use Category			Weekday	AM Peak Hour			PM Peak Hour			AM Peak		PM Peak	
				In	Out	Total	In	Out	Total	In	Out	In	Out
701 L Street													
Office (General Office Building)	240.0 KSF	ITE (710)	2,618	333	45	378	59	289	348	88%	12%	17%	83%
Retail (Shopping Center)	10.5 KSF	ITE (820)	1,569	24	16	40	68	73	141	61%	39%	48%	52%
High Rise Apartment	80 Units	ITE (222)	336	6	18	24	17	11	28	25%	75%	61%	39%
Other													
Total Project Trips			4,523	363	79	442	144	373	517				
Transit Adjustments													
Office (-11.1%)			-291	-37	-5	-42	-7	-32	-39				
Retail (-2.2%)			-35	-1	0	-1	-1	-2	-3				
Residential (Daily -2.6%, a.m. -3.4%, p.m. -3.1%)			-9	0	-1	-1	-1	0	-1				
Other													
Total Transit Adjustments			-335	-38	-6	-44	-9	-34	-43				
Walk, Bike & Other Non-Auto Travel Adjustments													
Office (-2.8%)			-73	-10	-1	-11	-2	-8	-10				
Retail (-11.6%)			-182	-3	-2	-5	-8	-8	-16				
Residential (Daily -9.6%, a.m. -7.9%, p.m. -8.6%)			-32	-1	-2	-2	-1	-1	-2				
Other													
Total Walk, Bike & Other Non-Auto Travel Adjustments			-287	-14	-5	-18	-11	-17	-28				
Internal Trips Within This Project			-314	-4	-4	-9	-13	-13	-27				
Trips To-From Other Proposed Projects			-481	-10	-10	-21	-21	-21	-42				
New External Trips													
Office (General Office Building)				276	33	309	40	231	271				
Retail (Shopping Center)				17	10	27	43	52	95				
High Rise Apartment				3	11	14	8	4	12				
Total			3,106	296	53	351	90	288	378				
New External Trips Percent of Total Project Trips			69%	82%	68%	79%	62%	77%	73%				
Transit Trips													
Office (12.5%)			327	41	6	47	7	37	44				
Retail (2.6%)			41	1	0	1	2	2	4				
Residential (Daily 3.2%, a.m. 4.1%, p.m. 3.7%)			11	0	1	1	1	0	1				
Total Transit Trips			379	42	7	49	10	39	49				

Downtown Sacramento Traffic Study
Trip Generation for Proposed Projects

Trip Generation Land Use Category	Amount	Source	Trips Generated Weekday	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Distribution AM Peak In	Distribution AM Peak Out	Distribution PM Peak In	Distribution PM Peak Out
The Library Lofts (8th & I)													
Office (General Office Building)	35.0 KSF	ITE (710)	594	71	10	81	20	98	118	88%	12%	17%	83%
Retail (Shopping Center)	12.0 KSF	ITE (820)	1,712	27	17	44	74	80	154	61%	39%	48%	52%
High Rise Residential Condominium	330 Units	ITE (232)	1,468	24	101	125	79	49	128	19%	81%	62%	38%
Other													
Total Project Trips			3,774	122	128	250	173	227	400				
Transit Adjustments													
Office (-11.1%)			-66	-8	-1	-9	-2	-11	-13				
Retail (-2.2%)			-38	-1	0	-1	-1	-2	-3				
Residential (Daily -2.6%, a.m. -3.4%, p.m. -3.1%)			-38	-1	-3	-4	-2	-2	-4				
Other													
Total Transit Adjustments			-142	-10	-4	-14	-5	-15	-20				
Walk, Bike & Other Non-Auto Travel Adjustments													
Office (-2.8%)			-17	-2	0	-2	-1	-2	-3				
Retail (-11.6%)			-199	-3	-2	-5	-9	-9	-18				
Residential (Daily -9.6%, a.m. -7.9%, p.m. -8.6%)			-141	-2	-8	-10	-7	-4	-11				
Other													
Total Walk, Bike & Other Non-Auto Travel Adjustments			-357	-7	-10	-17	-17	-15	-32				
Internal Trips Within This Project			-409	-5	-5	-10	-19	-19	-38				
Trips To-From Other Proposed Projects			-385	-6	-6	-12	-15	-15	-31				
New External Trips													
Office (General Office Building)				57	8	65	13	76	89				
Retail (Shopping Center)				19	12	31	50	53	104				
High Rise Residential Condominium				18	83	101	53	34	87				
Total			2,482	94	103	197	117	163	280				
New External Trips Percent of Total Project Trips			66%	77%	81%	79%	68%	72%	70%				
Transit Trips													
Office (12.5%)			74	9	1	10	3	12	15				
Retail (2.6%)			45	1	0	1	2	2	4				
Residential (Daily 3.2%, a.m. 4.1%, p.m. 3.7%)			47	1	4	5	3	2	5				
Total Transit Trips			166	11	5	16	8	16	24				

Downtown Sacramento Traffic Study
Trip Generation for Existing Land Uses

Trip Generation Land Use Category	Amount	Source	Trips Generated Weekday	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Distribution AM Peak In	AM Peak Out	PM Peak In	PM Peak Out
800 K Street													
Retail (Shopping Center)	17.6 KSF	ITE (820)	2,195	34	21	55	96	103	199	61%	39%	48%	52%
Mid Rise Apartment	26 Units	ITE (220)	175	4	9	13	9	7	16	31%	69%	58%	42%
Total Project Trips			2,370	38	30	68	105	110	215				
Transit Adjustments													
Retail (-2.2%)			-48	-1	0	-1	-2	-2	-4				
Residential (Daily -2.6%, a.m. -3.4%, p.m. -3.1%)			-5	0	0	0	0	0	0				
Total Transit Adjustments			-53	-1	0	-1	-2	-2	-4				
Walk, Bike & Other Non-Auto Travel Adjustments													
Retail (-11.6%)			-255	-4	-2	-6	-11	-12	-23				
Residential (Daily -9.6%, a.m. -7.9%, p.m. -8.6%)			-17	0	-1	-1	-1	0	-1				
Total Walk, Bike & Other Non-Auto Travel Adjustments			-272	-4	-3	-7	-12	-12	-24				
Internal Trips			-109	-4	-4	-8	-6	-6	-12				
Existing External Trips													
0				0	0	0	0	0	0				
Retail (Shopping Center)				26	18	44	79	87	166				
Mid Rise Apartment				3	5	8	6	3	9				
Total			1,936	29	23	52	85	90	175				
Existing External Trips Percent of Total Project Trips			82%	76%	77%	76%	81%	82%	81%				
Transit Trips													
Retail (2.6%)			57	1	0	1	2	3	5				
Residential (Daily 3.2%, a.m. 4.1%, p.m. 3.7%)			6	0	1	1	1	0	1				
Total Transit Trips			63	1	1	2	3	3	6				

Downtown Sacramento Traffic Study
Trip Generation for Existing Land Uses

Trip Generation Land Use Category	Amount	Source	Trips Generated Weekday	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Distribution AM Peak In	Distribution AM Peak Out	Distribution PM Peak In	Distribution PM Peak Out
Westfield Shoppingtown Downtown Plaza													
Office (General Office Building)	281.4 KSF	ITE (710)	2,959	378	51	429	67	327	394	88%	12%	17%	83%
Retail (Shopping Center)	873.2 KSF	ITE (820)	27,775	350	224	574	1,256	1,361	2,617	61%	39%	48%	52%
Multiplex Movie Theater	2,320 Seats	ITE (445)					67	119	186			36%	64%
Total Project Trips			30,734	728	275	1,003	1,390	1,807	3,197				
Transit Adjustments													
Office (-11.1%)			-328	-42	-6	-48	-7	-37	-44				
Retail/Theater (-2.2%)			-611	-8	-5	-13	-29	-33	-62				
Total Transit Adjustments			-939	-50	-11	-61	-36	-70	-106				
Walk, Bike & Other Non-Auto Travel Adjustments													
Office (-2.8%)			-83	-11	-1	-12	-2	-9	-11				
Retail/Theater (-11.6%)			-3,222	-41	-26	-67	-153	-172	-325				
Total Walk, Bike & Other Non-Auto Travel Adjustments			-3,305	-52	-27	-79	-155	-181	-336				
Internal Trips			-943	-12	-12	-24	-41	-41	-82				
Existing External Trips													
Office (General Office Building)				319	38	357	40	258	298				
Retail (Shopping Center)				295	187	482	1,118	1,257	2,375				
0													
Total			25,547	614	225	839	1,158	1,515	2,673				
Existing External Trips Percent of Total Project Trips			83%	84%	82%	84%	83%	84%	84%				
Transit Trips													
Office (12.5%)			370	48	6	54	8	41	49				
Retail/Theater (2.6%)			722	9	6	15	34	39	73				
Total Transit Trips			1,092	57	12	69	42	80	122				

Downtown Sacramento Traffic Study
Trip Generation for Existing Land Uses

Trip Generation Land Use Category	Amount	Source	Trips Generated Weekday	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Distribution AM Peak In	Distribution AM Peak Out	Distribution PM Peak In	Distribution PM Peak Out
The Metropolitan (10th & J)													
Office (General Office Building)	43.0 KSF	ITE (710)	697	84	11	95	22	105	127	88%	12%	17%	83%
Total Project Trips			697	84	11	95	22	105	127				
Transit Adjustments													
Office (-11.1%)			-77	-10	-1	-11	-2	-12	-14				
Total Transit Adjustments			-77	-10	-1	-11	-2	-12	-14				
Walk, Bike & Other Non-Auto Travel Adjustments													
Office (-2.8%)			-20	-3	0	-3	-1	-3	-4				
Total Walk, Bike & Other Non-Auto Travel Adjustments			-20	-3	0	-3	-1	-3	-4				
Internal Trips													
Existing External Trips													
Office (General Office Building)			600	71	10	81	19	90	109				
0													
0													
Total			600	71	10	81	19	90	109				
Existing External Trips Percent of Total Project Trips			86%	85%	91%	85%	86%	86%	86%				
Transit Trips													
Office (12.5%)			87	11	1	12	3	13	16				
Total Transit Trips			87	11	1	12	3	13	16				

Downtown Sacramento Traffic Study
Trip Generation for Existing Land Uses

Trip Generation Land Use Category	Amount	Source	Trips Generated Weekday	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Distribution AM Peak In	Distribution AM Peak Out	Distribution PM Peak In	Distribution PM Peak Out
Cathedral Square (11th & J)													
Retail (Shopping Center)	12.8 KSF	ITE (820)	1,786	28	18	46	77	84	161	61%	39%	48%	52%
Storage (Warehousing)	11.5 KSF	ITE (150)	57	4	1	5	1	4	5	82%	18%	25%	75%
Total Project Trips			1,843	32	19	51	78	88	166				
Transit Adjustments													
Retail/Storage (-2.2%)			-41	-1	0	-1	-2	-2	-4				
Total Transit Adjustments			-41	-1	0	-1	-2	-2	-4				
Walk, Bike & Other Non-Auto Travel Adjustments													
Retail/Storage (-11.6%)			-214	-4	-2	-6	-9	-10	-19				
Total Walk, Bike & Other Non-Auto Travel Adjustments			-214	-4	-2	-6	-9	-10	-19				
Internal Trips													
Existing External Trips													
0													
Retail (Shopping Center)			1,588	27	17	44	67	76	143				
0													
Total			1,588	27	17	44	67	76	143				
Existing External Trips Percent of Total Project Trips			86%	84%	89%	86%	86%	86%	86%				
Transit Trips													
Retail/Storage (2.6%)			48	1	0	1	2	2	4				
Total Transit Trips			48	1	0	1	2	2	4				

Downtown Sacramento Traffic Study
Adjustments to ITE Trip Generation Rates for High Non-Auto Travel

Shares of Total Trips				
Transit Shares	**Work Trips[a]**	**Non-Work Trips[b]**		**Total**
Walk Access				
Downtown	7.4%	1.8%		
Suburban	1.4%	0.3%		
Increase Above Suburban Conditions	6.0%	1.5%		
Drive Access				
Downtown	6.2%	1.2%		
Suburban	0.1%	0.3%		
Increase Above Suburban Conditions	6.1%	0.9%		
Walk, Bike & Other Non-Auto Shares				
Downtown	4.5%	18.8%		
Suburban	2.8%	6.5%		
Increase Above Suburban Conditions	1.7%	12.3%		
Adjustments for Higher Transit Use Downtown				
Office[1]	10.9%	0.2%		11.1%
Retail[2]	0.8%	1.4%		2.2%
Residential[3,c]	**Home-Work**	**Home-Non-Work**	**Non Home-Based**	
AM Peak Hour	2.5%	0.7%	0.2%	3.4%
PM Peak Hour	2.1%	0.6%	0.4%	3.1%
Daily	1.5%	0.7%	0.4%	2.6%
Adjustments for Higher Walk, Bike & Other Non-Auto Travel Downtown				
Office[1]	1.5%	1.2%		2.8%
Retail[2]	0.1%	11.4%		11.6%
Residential[c]	**Home-Work**	**Home-Non-Work**	**Non Home-Based**	
AM Peak Hour	0.7%	5.4%	1.8%	7.9%
PM Peak Hour	0.6%	4.7%	3.4%	8.6%
Daily	0.4%	5.6%	3.6%	9.6%
Transit Trips				
	Work Trips	**Non-Work Trips**		
Office[1]	12.2%	0.3%		12.5%
Retail[2]	1.0%	1.7%		2.6%
Residential[c]	**Home-Work**	**Home-Non-Work**	**Non Home-Based**	
AM Peak Hour	3.1%	0.8%	0.3%	4.1%
PM Peak Hour	2.6%	0.7%	0.5%	3.7%
Daily	1.9%	0.8%	0.5%	3.2%

[1] Assumes 90 percent of office trips are work trips.

[2] Assumes 7 percent of retail trips are work trips. Non-work trips would only include walk trips to transit.

[3] Transit adjustments for residential uses only include walk trips to transit.

Source: *Pre-Census Travel Behavior Report: Analysis of the 2000 SACOG Household Travel Survey* , DKS, 2001.
Table references from the source are provided as follows:

[a] Table A26

[a] Table A27

[c] The amount of transit use for each trip purpose is based on the following data from Table A33:

Travel Hours	**Home-Work**	**Home-Non-Work**	**Non Home-Based**	**Total**
AM Peak Hour	73,190	78,124	25,868	177,182
PM Peak Hour	60,563	67,068	47,784	175,415
Daily	473,704	861,535	557,764	1,893,003

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
TRIPS AMONG <u>ALL</u> PROJECTS

Name of Development: Downtown Study

Time Period: AM Peak Hour

Trips among all projects	243	
Sum of internal trips for each project	103	
Non-internal trips among projects	140	140 ✓
Total project trips	2519	

Land Use B: Retail (Shopping Center)

ITE LU Code: ITE (820); Size: 1105.2 KSF

Exit to External: 403; Enter from External: 597

	Total	Internal	External
Enter	671	74	597
Exit	449	46	403
Total	1120	120	1000
%	100	11%	89%

Note: PM peak hour internal capture rates were used for the AM peak hour.

Between Land Use A and Land Use B:
- Demand 3% | 13
- Balanced 13
- Demand 31% | 535
- Demand 2% | 13
- Balanced 13
- Demand 23% | 55

Between Land Use B and Land Use C:
- Demand 9% | 60
- Balanced 60
- Demand 53% | 238
- Demand 12% | 54
- Balanced 32
- Demand 31% | 32

Land Use A: Office (General Office Building)

ITE LU Code: ITE (710); Size: 35.0 KSF

Exit to External: 222; Enter from External: 1714

	Total	Internal	External
Enter	1727	13	1714
Exit	237	16	222
Total	1964	29	1935
%	100	1%	99%

Between Land Use A and Land Use C:
- Demand 0% | 0; Balanced 0; Demand 0% | 0
- Demand 2% | 5; Balanced 2; Demand 2% | 2

Land Use C: High Rise Residential Condominium

ITE LU Code: ITE (232); Size: 330.0 Units

Enter from External: 70; Exit to External: 389

	Total	Internal	External
Enter	104	34	70
Exit	449	60	389
Total	553	95	458
%	100	17%	83%

Net External Trips for Multi-use Development

	LAND USE A	*LAND USE B*	*LAND USE C*	*TOTAL*	
Enter	1714	597	70	2380	
Exit	222	403	389	1013	
Total	1935	1000	458	3394	*INTERNAL CAPTURE*
Single-Use Trip	1964	1120	553	3637	7%

Time Period: PM Peak Hour

Trips among all projects	683	
Sum of internal trips for each project	335	
Non-internal trips among projects	348	348 ✓
Total project trips	3502	

Land Use B: Retail (Shopping Center)

ITE LU Code: ITE (820); Size: 1105.2 KSF

Exit to External: 2142; Enter from External: 1998

	Total	Internal	External
Enter	2154	156	1998
Exit	2320	178	2142
Total	4474	334	4140
%	100	7%	93%

Between Land Use A and Land Use B:
- Demand 3% | 70
- Balanced 70
- Demand 31% | 100
- Demand 2% | 43
- Balanced 43
- Demand 23% | 363

Between Land Use B and Land Use C:
- Demand 9% | 194
- Balanced 113
- Demand 53% | 113
- Demand 12% | 278
- Balanced 109
- Demand 31% | 109

Land Use A: Office (General Office Building)

ITE LU Code: ITE (710); Size: 35.0 KSF

Exit to External: 1528; Enter from External: 252

	Total	Internal	External
Enter	322	70	252
Exit	1578	50	1528
Total	1900	120	1780
%	100	6%	94%

Between Land Use A and Land Use C:
- Demand 0% | 0; Balanced 0; Demand 0% | 0
- Demand 2% | 32; Balanced 7; Demand 2% | 7

Land Use C: High Rise Residential Condominium

ITE LU Code: ITE (232); Size: 330.0 Units

Enter from External: 235; Exit to External: 100

	Total	Internal	External
Enter	351	116	235
Exit	213	113	100
Total	564	229	335
%	100	41%	59%

Net External Trips for Multi-use Development

	LAND USE A	*LAND USE B*	*LAND USE C*	*TOTAL*	
Enter	252	1998	235	2486	
Exit	1528	2142	100	3770	
Total	1780	4140	335	6255	*INTERNAL CAPTURE*
Single-Use Trip	1900	4474	564	6938	10%

MULTI-USE DEVELOPMENT
TRIP GENERATION
TRIPS AMONG ALL PROJECTS

Analyst: Dowling

Date: 6/8/2006

Name of Development: Downtown Study

Time Period: Daily

Trips among all projects	7984
Sum of internal trips for each project	3,628
Non-internal trips among projects	4356
Total project trips	32467

4,356 ✓

Land Use B: Retail (Shopping Center)

ITE LU Code	ITE (820)		
Size	1105.2 KSF		
	Total	Internal	External
Enter	22864	2143	20721
Exit	22864	1752	21112
Total	45728	3895	41833
%	100	9%	91%

Exit to External: 21112
Enter from External: 20721

Demand: 3% | 686
Balanced: 686
Demand: 15% | 1019

Demand: 4% | 915
Balanced: 915
Demand: 22% | 1494

Demand: 11% | 2515
Balanced: 1067
Demand: 33% | 1067

Demand: 9% | 2058
Balanced: 1228
Demand: 38% | 1228

Land Use A: Office (General Office Building)

ITE LU Code	ITE (710)		
Size	35.0 KSF		
	Total	Internal	External
Enter	6793	686	6107
Exit	6793	1012	5781
Total	13586	1697	11889
%	100	12%	88%

Exit to External: 5781
Enter from External: 6107

Demand: 0% | 0 — Balanced: 0 — Demand: 0% | 0

Demand: 2% | 136 — Balanced: 97 — Demand: 3% | 97

Land Use C: High Rise Residential Condominium

ITE LU Code	ITE (232)		
Size	330.0 Units		
	Total	Internal	External
Enter	3232	1164	2068
Exit	3232	1228	2004
Total	6464	2392	4072
%	100	37%	63%

Enter from External: 2068
Exit to External: 2004

Net External Trips for Multi-use Development

	LAND USE A	*LAND USE B*	*LAND USE C*	*TOTAL*
Enter	6107	20721	2068	28897
Exit	5781	21112	2004	28897
Total	11889	41833	4072	57794
Single-Use Trip	13586	45728	6464	65778

INTERNAL CAPTURE: 12%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
800 K Street

Name of Development: Downtown Study

Time Period: AM Peak Hour

Land Use B: Retail (Shopping Center)

ITE LU Code: ITE (820)
Size: 17.7 KSF

	Total	Internal	External
Enter	29	3	26
Exit	19	3	16
Total	48	6	42
%	100	13%	87%

Exit to External: 16
Enter from External: 26

Note: PM peak hour internal capture rates were used for the AM peak hour.

A–B: Demand 3% 1; Balanced 1; Demand 31% 106
B–A: Demand 2% 1; Balanced 1; Demand 23% 11
B–C: Demand 12% 2; Balanced 2; Demand 31% 6
C–B: Demand 9% 3; Balanced 3; Demand 53% 45

Land Use A: Office (General Office Building)

ITE LU Code: ITE (710)
Size: 300.0 KSF

	Total	Internal	External
Enter	343	1	342
Exit	46	1	45
Total	389	2	387
%	100	0%	100%

Exit to External: 45
Enter from External: 342

A–C: Demand 0% 0; Balanced 0; Demand 0% 0
C–A: Demand 2% 1; Balanced 0; Demand 2% 0

Land Use C: High Rise Residential Condominium

ITE LU Code: ITE (232)
Size: 300.0 Units

	Total	Internal	External
Enter	19	3	16
Exit	84	3	81
Total	103	5	98
%	100	5%	95%

Enter from External: 16
Exit to External: 81

Net External Trips for Multi-use Development

	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	342	26	16	385	
Exit	45	16	81	143	
Total	387	42	98	527	INTERNAL CAPTURE
Single-Use Trip	389	48	103	540	2%

Time Period: PM Peak Hour

Land Use B: Retail (Shopping Center)

ITE LU Code: ITE (820)
Size: 17.7 KSF

	Total	Internal	External
Enter	83	9	74
Exit	90	14	77
Total	173	23	150
%	100	13%	87%

Exit to External: 77
Enter from External: 74

A–B: Demand 3% 3; Balanced 3; Demand 31% 19
B–A: Demand 2% 2; Balanced 2; Demand 23% 68
B–C: Demand 12% 11; Balanced 11; Demand 31% 20
C–B: Demand 9% 7; Balanced 7; Demand 53% 20

Land Use A: Office (General Office Building)

ITE LU Code: ITE (710)
Size: 300.0 KSF

	Total	Internal	External
Enter	61	3	58
Exit	296	3	293
Total	357	6	351
%	100	2%	98%

Exit to External: 293
Enter from External: 58

A–C: Demand 0% 0; Balanced 0; Demand 0% 0
C–A: Demand 2% 6; Balanced 1; Demand 2% 1

Land Use C: High Rise Residential Condominium

ITE LU Code: ITE (232)
Size: 300.0 Units

	Total	Internal	External
Enter	65	12	53
Exit	38	7	31
Total	103	20	83
%	100	19%	81%

Enter from External: 53
Exit to External: 31

Net External Trips for Multi-use Development

	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	58	74	53	185	
Exit	293	77	31	400	
Total	351	150	83	585	INTERNAL CAPTURE
Single-Use Trip	357	173	103	633	8%

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
800 K Street

Analyst: Dowling

Date: 6/8/2006

Name of Development: Downtown Study

Time Period: Daily

Land Use B: Retail (Shopping Center)

ITE LU Code	ITE (820)		
Size	17.7 KSF		
	Total	Internal	External
Enter	951	124	827
Exit	951	133	818
Total	1902	257	1645
%	100	14%	87%

Exit to External: 818

Enter from External: 827

Land Use A: Office (General Office Building)

ITE LU Code	ITE (710)		
Size	300.0 KSF		
	Total	Internal	External
Enter	1339	29	1310
Exit	1339	56	1283
Total	2678	84	2594
%	100	3%	97%

Exit to External: 1283

Enter from External: 1310

Land Use C: High Rise Residential Condominium

ITE LU Code	ITE (232)		
Size	300.0 Units		
	Total	Internal	External
Enter	595	122	473
Exit	595	86	509
Total	1190	208	982
%	100	17%	83%

Enter from External: 473

Exit to External: 509

Between Land Use A and Land Use B:

Demand: 3% 29

Balanced: 29

Demand: 15% 201

Demand: 4% 38

Balanced: 38

Demand: 22% 295

Between Land Use B and Land Use C:

Demand: 9% 86

Balanced: 86

Demand: 38% 226

Demand: 11% 105

Balanced: 105

Demand: 33% 196

Between Land Use A and Land Use C:

Demand: 0% 0

Balanced: 0

Demand: 0% 0

Demand: 2% 27

Balanced: 18

Demand: 3% 18

Net External Trips for Multi-use Development

	LAND USE A	LAND USE B	LAND USE C	TOTAL	INTERNAL CAPTURE
Enter	1310	827	473	2610	
Exit	1283	818	509	2610	
Total	2594	1645	982	5221	
Single-Use Trip	2678	1902	1190	5770	10%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
831 L Street

Name of Development: Downtown Study

Time Period: AM Peak Hour

Land Use B: Retail (Shopping Center)

ITE LU Code: ITE (820)

Size: 10.0 KSF

Exit to External: 13

Enter from External: 20

	Total	Internal	External
Enter	20	0	20
Exit	13	0	13
Total	33	1	32
%	100	2%	98%

Note: PM peak hour internal capture rates were used for the AM peak hour.

Demand: 3% | 0

Balanced: 0

Demand: 31% | 58

Demand: 2% | 0

Balanced: 0

Demand: 23% | 6

Demand: 9% | 2

Balanced: 0

Demand: 53% | 0

Demand: 12% | 2

Balanced: 0

Demand: 31% | 0

Land Use A: Office (General Office Building)

ITE LU Code: ITE (710)

Size: 140.0 KSF

Exit to External: 26

Enter from External: 186

	Total	Internal	External
Enter	186	0	186
Exit	26	0	26
Total	212	1	211
%	100	0%	100%

Demand: 0% | 0

Balanced: 0

Demand: 0% | 0

Demand: 2% | 1

Balanced: 0

Demand: 2% | 0

Land Use C: 0

ITE LU Code: 0

Size: 0.0 | 0

Enter from External: 0

Exit to External: 0

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	100	#DIV/0!	#DIV/0!

Net External Trips for Multi-use Development

	LAND USE A	*LAND USE B*	*LAND USE C*	*TOTAL*	
Enter	186	20	0	205	
Exit	26	13	0	38	
Total	211	32	0	243	*INTERNAL CAPTURE*
Single-Use Trip	212	33	0	245	1%

Time Period: PM Peak Hour

Land Use B: Retail (Shopping Center)

ITE LU Code: ITE (820)

Size: 10.0 KSF

Exit to External: 59

Enter from External: 56

	Total	Internal	External
Enter	57	1	56
Exit	61	2	59
Total	118	3	115
%	100	3%	97%

Demand: 3% | 2

Balanced: 2

Demand: 31% | 11

Demand: 2% | 1

Balanced: 1

Demand: 23% | 39

Demand: 9% | 5

Balanced: 0

Demand: 53% | 0

Demand: 12% | 7

Balanced: 0

Demand: 31% | 0

Land Use A: Office (General Office Building)

ITE LU Code: ITE (710)

Size: 140.0 KSF

Exit to External: 167

Enter from External: 33

	Total	Internal	External
Enter	35	2	33
Exit	168	1	167
Total	203	3	200
%	100	1%	99%

Demand: 0% | 0

Balanced: 0

Demand: 0% | 0

Demand: 2% | 3

Balanced: 0

Demand: 2% | 0

Land Use C: 0

ITE LU Code: 0

Size: 0.0 | 0

Enter from External: 0

Exit to External: 0

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	100	#DIV/0!	#DIV/0!

Net External Trips for Multi-use Development

	LAND USE A	*LAND USE B*	*LAND USE C*	*TOTAL*	
Enter	33	56	0	89	
Exit	167	59	0	226	
Total	200	115	0	315	*INTERNAL CAPTURE*
Single-Use Trip	203	118	0	321	2%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
831 L Street

Name of Development: Downtown Study

Time Period: Daily

Land Use B: Retail (Shopping Center)

		ITE LU Code	ITE (820)	
Exit to External		Size	10.0 KSF	
636		Total	Internal	External
	Enter	656	26	630
	Exit	656	20	636
630	Total	1312	46	1266
Enter from External	%	100	4%	97%

Demand 3% 20
Balanced 20
Demand 15% 112
Demand 4% 26
Balanced 26
Demand 22% 164

Demand 9% 59
Balanced 0
Demand 38% 0
Demand 11% 72
Balanced 0
Demand 33% 0

Land Use A: Office (General Office Building)

	ITE LU Code	ITE (710)		
Exit to External		Size	140.0 KSF	
719		Total	Internal	External
	Enter	745	20	725
	Exit	745	26	719
725	Total	1490	46	1444
Enter from External	%	100	3%	97%

Demand 0% 0
Balanced 0
Demand 0% 0

Demand 2% 15
Balanced 0
Demand 3% 0

Land Use C: 0

	ITE LU Code	0		
	Size	0.0	0	Enter from External
	Total	Internal	External	0
Enter	0	0	0	
Exit	0	0	0	
Total	0	0	0	0
%	100	#DIV/0!	#DIV/0!	Exit to External

Net External Trips for Multi-use Development

	LAND USE A	LAND USE B	LAND USE C	TOTAL
Enter	725	630	0	1355
Exit	719	636	0	1355
Total	1444	1266	0	2710
Single-Use Trip	1490	1312	0	2802

INTERNAL CAPTURE: 3%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
Westfield Shoppingtown Downtown Plaza

Name of Development: Downtown Study

Time Period: AM Peak Hour

Land Use B: Retail/Theater

ITE LU Code	ITE (820), ITE (815) & ITE (445)		
Size	992.7 KSF		
	Total	Internal	External
Enter	370	7	363
Exit	223	7	216
Total	593	14	579
%	100	2%	98%

Exit to External: 216

Enter from External: 363

Note: PM peak hour internal capture rates were used for the AM peak hour.

Demand 3% 7
Balanced 7
Demand 31% 83
Demand 2% 7
Balanced 7
Demand 23% 8

Demand 12% 27
Balanced 0
Demand 31% 0

Demand 9% 33
Balanced 0
Demand 53% 0

Land Use A: Office (General Office Building)

ITE LU Code	ITE (710)		
Size	220.6 KSF		
	Total	Internal	External
Enter	268	7	261
Exit	36	7	29
Total	304	14	290
%	100	5%	95%

Exit to External: 29

Enter from External: 261

Demand 0% 0
Balanced 0
Demand 0% 0

Demand 2% 1
Balanced 0
Demand 2% 0

Land Use C:

ITE LU Code			
Size			
	Total	Internal	External
Enter			
Exit			
Total			
%	100	#DIV/0!	#DIV/0!

Enter from External: 0

Exit to External: 0

Net External Trips for Multi-use Development

	LAND USE A	*LAND USE B*	*LAND USE C*	*TOTAL*
Enter	261	363	0	624
Exit	29	216	0	245
Total	290	579	0	869
Single-Use Trip	304	593	0	897

INTERNAL CAPTURE: 3%

Time Period: PM Peak Hour

Land Use B: Retail (Shopping Center)

ITE LU Code	ITE (820), ITE (815) & ITE (445)		
Size	842.7 KSF		
	Total	Internal	External
Enter	1479	30	1449
Exit	1641	15	1626
Total	3120	44	3076
%	100	1%	99%

Exit to External: 1626

Enter from External: 1449

Demand 3% 49
Balanced 15
Demand 31% 15
Demand 2% 30
Balanced 30
Demand 23% 54

Demand 12% 197
Balanced 0
Demand 31% 0

Demand 9% 133
Balanced 0
Demand 53% 0

Land Use A: Office (General Office Building)

ITE LU Code	ITE (710)		
Size	220.6 KSF		
	Total	Internal	External
Enter	47	15	32
Exit	234	30	204
Total	281	44	237
%	100	16%	84%

Exit to External: 204

Enter from External: 32

Demand 0% 0
Balanced 0
Demand 0% 0

Demand 2% 5
Balanced 0
Demand 2% 0

Land Use C:

ITE LU Code			
Size			
	Total	Internal	External
Enter			
Exit			
Total			
%	100	#DIV/0!	#DIV/0!

Enter from External: 0

Exit to External: 0

Net External Trips for Multi-use Development

	LAND USE A	*LAND USE B*	*LAND USE C*	*TOTAL*
Enter	32	1449	0	1482
Exit	204	1626	0	1831
Total	237	3076	0	3313
Single-Use Trip	281	3120	0	3401

INTERNAL CAPTURE: 3%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
Westfield Shoppingtown Downtown Plaza

Name of Development: Downtown Study

Time Period: Daily

Land Use B: Retail (Shopping Center)

ITE LU Code: ITE (820), ITE (815) & ITE (445)

Size: 842.7 KSF

Exit to External: 15161

Enter from External: 15087

	Total	Internal	External
Enter	15319	232	15087
Exit	15319	158	15161
Total	30638	391	30247
%	100	1%	99%

Between Land Use A and Land Use B

Demand: 3% 460

Balanced: 158

Demand: 15% 158

Demand: 4% 613

Balanced: 232

Demand: 22% 232

Between Land Use B and Land Use C

Demand: 9% 1379

Balanced: 0

Demand: 38% 0

Demand: 11% 1685

Balanced: 0

Demand: 33% 0

Land Use A: Office (General Office Building)

ITE LU Code: ITE (710)

Size: 220.6 KSF

Exit to External: 824

Enter from External: 898

	Total	Internal	External
Enter	1056	158	898
Exit	1056	232	824
Total	2112	391	1721
%	100	19%	82%

Between Land Use A and Land Use C

Demand: 0% 0 Balanced: 0 Demand: 0% 0

Demand: 2% 21 Balanced: 0 Demand: 3% 0

Land Use C:

ITE LU Code:

Size:

Enter from External: 0

Exit to External: 0

	Total	Internal	External
Enter			
Exit			
Total			
%	100	#DIV/0!	#DIV/0!

Net External Trips for Multi-use Development

	LAND USE A	LAND USE B	LAND USE C	TOTAL
Enter	898	15087	0	15984
Exit	824	15161	0	15984
Total	1721	30247	0	31969
Single-Use Trip	2112	30638	0	32750

INTERNAL CAPTURE: 2%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
500 Capitol Mall

Name of Development: Downtown Study

Time Period: AM Peak Hour

Land Use B: Retail/Restaurant

ITE LU Code ITE (820), & ITE (932)

Size 15.2 KSF

	Total	Internal	External
Enter	131	3	128
Exit	114	3	111
Total	245	6	239
%	100	2%	98%

Exit to External: 111

Enter from External: 128

Note: PM peak hour internal capture rates were used for the AM peak hour.

A–B link: Demand 3% 3; Balanced 3; Demand 31% 160; Demand 2% 3; Balanced 3; Demand 23% 16

B–C link: Demand 9% 12; Balanced 0; Demand 53% 0; Demand 12% 14; Balanced 0; Demand 31% 0

Land Use A: Office (General Office Building)

ITE LU Code ITE (710)

Size 503.0 KSF

	Total	Internal	External
Enter	517	3	514
Exit	71	3	68
Total	588	6	582
%	100	1%	99%

Exit to External: 68

Enter from External: 514

A–C link: Demand 0% 0; Balanced 0; Demand 0% 0; Demand 2% 1; Balanced 0; Demand 2% 0

Land Use C:

ITE LU Code 0

Size

	Total	Internal	External
Enter			
Exit			
Total			
%	100	#DIV/0!	#DIV/0!

Enter from External: 0

Exit to External: 0

Net External Trips for Multi-use Development

	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	514	128	0	642	
Exit	68	111	0	179	
Total	582	239	0	821	INTERNAL CAPTURE
Single-Use Trip	588	245	0	833	1%

Time Period: PM Peak Hour

Land Use B: Retail/Restaurant

ITE LU Code ITE (820), & ITE (932)

Size 15.2 KSF

	Total	Internal	External
Enter	191	4	187
Exit	155	5	150
Total	346	8	338
%	100	2%	98%

Exit to External: 150

Enter from External: 187

A–B link: Demand 3% 5; Balanced 5; Demand 31% 29; Demand 2% 4; Balanced 4; Demand 23% 106

B–C link: Demand 9% 17; Balanced 0; Demand 53% 0; Demand 12% 19; Balanced 0; Demand 31% 0

Land Use A: Office (General Office Building)

ITE LU Code ITE (710)

Size 503.0 KSF

	Total	Internal	External
Enter	94	5	89
Exit	459	4	455
Total	553	8	545
%	100	2%	98%

Exit to External: 455

Enter from External: 89

A–C link: Demand 0% 0; Balanced 0; Demand 0% 0; Demand 2% 9; Balanced 0; Demand 2% 0

Land Use C: 0

ITE LU Code 0

Size 0.0 0

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	100	#DIV/0!	#DIV/0!

Enter from External: 0

Exit to External: 0

Net External Trips for Multi-use Development

	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	89	187	0	277	
Exit	455	150	0	606	
Total	545	338	0	882	INTERNAL CAPTURE
Single-Use Trip	553	346	0	899	2%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
500 Capitol Mall

Name of Development: Downtown Study

Time Period: Daily

Land Use B: Retail/Restaurant

ITE LU Code: ITE (820), & ITE (932)

Size: 15.2 KSF

Exit to External: 1909

Enter from External: 1889

	Total	Internal	External
Enter	1968	79	1889
Exit	1968	59	1909
Total	3936	138	3798
%	100	4%	97%

Demand: 3% | 59

Balanced: 59

Demand: 15% | 299

Demand: 4% | 79

Balanced: 79

Demand: 22% | 438

Demand: 11% | 216

Balanced: 0

Demand: 33% | 0

Demand: 9% | 177

Balanced: 0

Demand: 38% | 0

Land Use A: Office (General Office Building)

ITE LU Code: ITE (710)

Size: 503.0 KSF

Exit to External: 1913

Enter from External: 1933

	Total	Internal	External
Enter	1992	59	1933
Exit	1992	79	1913
Total	3984	138	3846
%	100	3%	97%

Demand: 0% | 0

Balanced: 0

Demand: 0% | 0

Demand: 2% | 40

Balanced: 0

Demand: 3% | 0

Land Use C: 0

ITE LU Code: 0

Size: 0.0

Enter from External: 0

Exit to External: 0

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	100	#DIV/0!	#DIV/0!

Net External Trips for Multi-use Development

	LAND USE A	*LAND USE B*	*LAND USE C*	*TOTAL*
Enter	1933	1889	0	3822
Exit	1913	1909	0	3822
Total	3846	3798	0	7644
Single-Use Trip	3984	3936	0	7920

INTERNAL CAPTURE: 3%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT TRIP GENERATION AND INTERNAL CAPTURE SUMMARY
The Metropolitan (10th & J)

Name of Development: Downtown Study

Time Period: AM Peak Hour

Note: PM peak hour internal capture rates were used for the AM peak hour.

Land Use B: Retail (Shopping Center)

ITE LU Code: ITE (820)
Size: 13.0 KSF

Exit to External		Total	Internal	External
14	Enter	24	2	22
	Exit	16	2	14
22	Total	40	4	36
Enter from External	%	100	10%	90%

Demand: 3% 0
Balanced: 0
Demand: 31% 0
Demand: 2% 0
Balanced: 0
Demand: 23% 0
Demand: 9% 2
Balanced: 2
Demand: 53% 49
Demand: 12% 2
Balanced: 2
Demand: 31% 7

Land Use A: 0

ITE LU Code: 0
Size: 0.0 0.0

Exit to External		Total	Internal	External
0	Enter	0	0	0
	Exit	0	0	0
0	Total	0	0	0
Enter from External	%	100	#DIV/0!	#DIV/0!

Demand: 0% 0 | Balanced: 0 | Demand: 0% 0
Demand: 2% 0 | Balanced: 0 | Demand: 2% 0

Land Use C: High Rise Residential Condominium

ITE LU Code: ITE (232)
Size: 340.0 Units

	Total	Internal	External	Enter from External
				19
Enter	21	2	19	
Exit	92	2	90	
Total	113	4	109	90
%	100	4%	96%	Exit to External

Net External Trips for Multi-use Development

	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	0	22	19	41	
Exit	0	14	90	104	
Total	0	36	109	145	INTERNAL CAPTURE
Single-Use Trip	0	40	113	153	5%

Time Period: PM Peak Hour

Land Use B: Retail (Shopping Center)

ITE LU Code: ITE (820)
Size: 13.0 KSF

Exit to External		Total	Internal	External
64	Enter	67	6	61
	Exit	73	9	64
61	Total	140	15	125
Enter from External	%	100	11%	89%

Demand: 3% 2
Balanced: 0
Demand: 31% 0
Demand: 2% 1
Balanced: 0
Demand: 23% 0
Demand: 9% 6
Balanced: 6
Demand: 53% 23
Demand: 12% 9
Balanced: 9
Demand: 31% 22

Land Use A: 0

ITE LU Code: 0
Size: 0.0 0.0

Exit to External		Total	Internal	External
0	Enter	0	0	0
	Exit	0	0	0
0	Total	0	0	0
Enter from External	%	100	#DIV/0!	#DIV/0!

Demand: 0% 0 | Balanced: 0 | Demand: 0% 0
Demand: 2% 0 | Balanced: 0 | Demand: 2% 1

Land Use C: High Rise Residential Condominium

ITE LU Code: ITE (232)
Size: 340.0 Units

	Total	Internal	External	Enter from External
				63
Enter	72	9	63	
Exit	44	6	38	
Total	116	15	101	38
%	100	13%	87%	Exit to External

Net External Trips for Multi-use Development

	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	0	61	63	124	
Exit	0	64	38	102	
Total	0	125	101	226	INTERNAL CAPTURE
Single-Use Trip	0	140	116	256	12%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
The Metropolitan (10th & J)

Name of Development: Downtown Study

Time Period: Daily

Land Use B: Retail (Shopping Center)

ITE LU Code	ITE (820)		
Size	13.0 KSF		
	Total	Internal	External
Enter	777	70	707
Exit	777	85	692
Total	1554	155	1399
%	100	10%	90%

Exit to External: 692

Enter from External: 707

Land Use A: 0

ITE LU Code	0		
Size	0.0	0.0	
	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	100	#DIV/0!	#DIV/0!

Exit to External: 0

Enter from External: 0

Land Use C: High Rise Residential Condominium

ITE LU Code	ITE (232)		
Size	340.0 Units		
	Total	Internal	External
Enter	661	85	576
Exit	661	70	591
Total	1322	155	1167
%	100	12%	88%

Enter from External: 576

Exit to External: 591

Between Land Use A and Land Use B:

Demand: 3% | 23

Balanced: 0

Demand: 15% | 0

Demand: 4% | 31

Balanced: 0

Demand: 22% | 0

Between Land Use B and Land Use C:

Demand: 9% | 70

Balanced: 70

Demand: 38% | 251

Demand: 11% | 85

Balanced: 85

Demand: 33% | 218

Between Land Use A and Land Use C:

Demand: 0% | 0

Balanced: 0

Demand: 0% | 0

Demand: 2% | 0

Balanced: 0

Demand: 3% | 20

Net External Trips for Multi-use Development	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	0	707	576	1283	
Exit	0	692	591	1283	
Total	0	1399	1167	2565	*INTERNAL CAPTURE*
Single-Use Trip	0	1554	1322	2876	11%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
Cathedral Square (11th & J)

Name of Development: Downtown Study

Time Period: AM Peak Hour

Note: PM peak hour internal capture rates were used for the AM peak hour.

Land Use B: Retail (Shopping Center)

	ITE LU Code	ITE (820)	
	Size	7.3 KSF	
	Total	Internal	External
Enter	17	2	15
Exit	11	1	10
Total	28	3	25
%	100	10%	90%

Exit to External: 10
Enter from External: 15

Demand 3% 0; Balanced 0; Demand 31% 0
Demand 2% 0; Balanced 0; Demand 23% 0
Demand 12% 1; Balanced 1; Demand 31% 5
Demand 9% 2; Balanced 2; Demand 53% 38

Land Use A: 0

	ITE LU Code	0	
	Size	0.0	0.0
	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	100	#DIV/0!	#DIV/0!

Exit to External: 0
Enter from External: 0

Demand 0% 0; Balanced 0; Demand 0% 0
Demand 2% 0; Balanced 0; Demand 2% 0

Land Use C: High Rise Residential Condominium

	ITE LU Code	ITE (232)	
	Size	242.0 Units	
	Total	Internal	External
Enter	16	1	15
Exit	72	2	70
Total	88	3	85
%	100	3%	97%

Enter from External: 15
Exit to External: 70

Net External Trips for Multi-use Development

	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	0	15	15	30	
Exit	0	10	70	80	
Total	0	25	85	110	INTERNAL CAPTURE
Single-Use Trip	0	28	88	116	5%

Time Period: PM Peak Hour

Land Use B: Retail (Shopping Center)

	ITE LU Code	ITE (820)	
	Size	7.3 KSF	
	Total	Internal	External
Enter	46	4	42
Exit	50	6	44
Total	96	10	86
%	100	11%	89%

Exit to External: 44
Enter from External: 42

Demand 3% 2; Balanced 0; Demand 31% 0
Demand 2% 1; Balanced 0; Demand 23% 0
Demand 12% 6; Balanced 6; Demand 31% 17
Demand 9% 4; Balanced 4; Demand 53% 17

Land Use A: 0

	ITE LU Code	0	
	Size	0.0	0.0
	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	100	#DIV/0!	#DIV/0!

Exit to External: 0
Enter from External: 0

Demand 0% 0; Balanced 0; Demand 0% 0
Demand 2% 0; Balanced 0; Demand 2% 1

Land Use C: High Rise Residential Condominium

	ITE LU Code	ITE (232)	
	Size	242.0 Units	
	Total	Internal	External
Enter	54	6	48
Exit	33	4	29
Total	87	10	77
%	100	12%	88%

Enter from External: 48
Exit to External: 29

Net External Trips for Multi-use Development

	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	0	42	48	90	
Exit	0	44	29	73	
Total	0	86	77	163	INTERNAL CAPTURE
Single-Use Trip	0	96	87	183	11%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
Cathedral Square (11th & J)

Name of Development: Downtown Study

Time Period: Daily

Land Use B: Retail (Shopping Center)

ITE LU Code	ITE (820)		
Size	7.3 KSF		
	Total	Internal	External
Enter	534	48	486
Exit	534	59	475
Total	1068	107	961
%	100	10%	90%

Exit to External: 475

Enter from External: 486

Demand: 3% 16

Balanced: 0

Demand: 15% 0

Demand: 4% 21

Balanced: 0

Demand: 22% 0

Demand: 11% 59

Balanced: 59

Demand: 33% 165

Demand: 9% 48

Balanced: 48

Demand: 38% 190

Land Use A: 0

ITE LU Code	0		
Size	0.0	0.0	
	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	100	#DIV/0!	#DIV/0!

Exit to External: 0

Enter from External: 0

Demand: 0% 0

Balanced: 0

Demand: 0% 0

Demand: 2% 0

Balanced: 0

Demand: 3% 15

Land Use C: High Rise Residential Condominium

ITE LU Code	ITE (232)		
Size	242.0 Units		
	Total	Internal	External
Enter	499	59	440
Exit	499	48	451
Total	998	107	891
%	100	11%	89%

Enter from External: 440

Exit to External: 451

Net External Trips for Multi-use Development

	LAND USE A	*LAND USE B*	*LAND USE C*	*TOTAL*
Enter	0	486	440	926
Exit	0	475	451	926
Total	0	961	891	1852
Single-Use Trip	0	1068	998	2066

INTERNAL CAPTURE: 10%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
Epic Tower

Name of Development: Downtown Study

Time Period: AM Peak Hour

Land Use B: Retail (Shopping Center)

ITE LU Code: ITE (820)
Size: 26.9 KSF

	Total	Internal	External
Enter	37	4	33
Exit	24	4	20
Total	61	8	53
%	100	13%	87%

Exit to External: 20
Enter from External: 33

Note: PM peak hour internal capture rates were used for the AM peak hour.

Demand: 3% 1
Balanced: 1
Demand: 31% 20
Demand: 2% 1
Balanced: 1
Demand: 23% 2

Demand: 9% 3
Balanced: 3
Demand: 53% 51
Demand: 12% 3
Balanced: 3
Demand: 31% 7

Land Use A: Office (General Office Building)

ITE LU Code: ITE (710)
Size: 39.0 KSF

	Total	Internal	External
Enter	66	1	65
Exit	10	1	9
Total	76	2	74
%	100	2%	98%

Exit to External: 9
Enter from External: 65

Demand: 0% 0
Balanced: 0
Demand: 0% 0
Demand: 2% 0
Balanced: 0
Demand: 2% 0

Land Use C: High Rise Residential Condominium

ITE LU Code: ITE (232)
Size: 354.0 Units

	Total	Internal	External
Enter	22	3	19
Exit	96	3	93
Total	118	6	112
%	100	5%	95%

Enter from External: 19
Exit to External: 93

Net External Trips for Multi-use Development

	LAND USE A	*LAND USE B*	*LAND USE C*	*TOTAL*	
Enter	65	33	19	117	
Exit	9	20	93	122	
Total	74	53	112	239	*INTERNAL CAPTURE*
Single-Use Trip	76	61	118	255	6%

Time Period: PM Peak Hour

Land Use B: Retail (Shopping Center)

ITE LU Code: ITE (820)
Size: 26.9 KSF

	Total	Internal	External
Enter	108	12	96
Exit	118	18	100
Total	226	30	196
%	100	13%	87%

Exit to External: 100
Enter from External: 96

Demand: 3% 4
Balanced: 4
Demand: 31% 6
Demand: 2% 2
Balanced: 2
Demand: 23% 20

Demand: 9% 10
Balanced: 10
Demand: 53% 24
Demand: 12% 14
Balanced: 14
Demand: 31% 23

Land Use A: Office (General Office Building)

ITE LU Code: ITE (710)
Size: 39.0 KSF

	Total	Internal	External
Enter	18	4	14
Exit	87	4	83
Total	105	7	98
%	100	7%	93%

Exit to External: 83
Enter from External: 14

Demand: 0% 0
Balanced: 0
Demand: 0% 0
Demand: 2% 2
Balanced: 2
Demand: 2% 2

Land Use C: High Rise Residential Condominium

ITE LU Code: ITE (232)
Size: 354.0 Units

	Total	Internal	External
Enter	75	16	59
Exit	45	10	35
Total	120	25	95
%	100	21%	79%

Enter from External: 59
Exit to External: 35

Net External Trips for Multi-use Development

	LAND USE A	*LAND USE B*	*LAND USE C*	*TOTAL*	
Enter	14	96	59	170	
Exit	83	100	35	219	
Total	98	196	95	389	*INTERNAL CAPTURE*
Single-Use Trip	105	226	120	451	14%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
Epic Tower

Name of Development: Downtown Study

Time Period: Daily

Land Use B: Retail (Shopping Center)

Exit to External	ITE LU Code	ITE (820)		
	Size	26.9 KSF		
1071		Total	Internal	External
	Enter	1245	162	1083
	Exit	1245	174	1071
1083	Total	2490	336	2154
Enter from External	%	100	14%	87%

Between Land Use A and Land Use B

Demand: 3% 37
Balanced: 37
Demand: 15% 42
Demand: 4% 50
Balanced: 50
Demand: 22% 61

Between Land Use B and Land Use C

Demand: 9% 112
Balanced: 112
Demand: 38% 260
Demand: 11% 137
Balanced: 137
Demand: 33% 226

Land Use A: Office (General Office Building)

Exit to External	ITE LU Code	ITE (710)		
	Size	39.0 KSF		
223		Total	Internal	External
	Enter	278	37	241
	Exit	278	55	223
241	Total	556	93	463
Enter from External	%	100	17%	83%

Between Land Use A and Land Use C

Demand: 0% 0
Balanced: 0
Demand: 0% 0
Demand: 2% 6
Balanced: 6
Demand: 3% 21

Land Use C: High Rise Residential Condominium

ITE LU Code	ITE (232)			
Size	354.0 Units			Enter from External
	Total	Internal	External	541
Enter	684	143	541	
Exit	684	112	572	
Total	1368	255	1113	572
%	100	19%	81%	Exit to External

Net External Trips for Multi-use Development

	LAND USE A	*LAND USE B*	*LAND USE C*	*TOTAL*	
Enter	241	1083	541	1865	
Exit	223	1071	572	1865	
Total	463	2154	1113	3731	*INTERNAL CAPTURE*
Single-Use Trip	556	2490	1368	4414	15%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
701 L Street

Name of Development: Downtown Study

Time Period: AM Peak Hour

Land Use B: Retail (Shopping Center)

ITE LU Code	ITE (820)		
Size	10.5 KSF		
	Total	Internal	External
Enter	20	2	18
Exit	14	2	12
Total	34	4	30
%	100	12%	88%

Exit to External: 12

Enter from External: 18

Note: PM peak hour internal capture rates were used for the AM peak hour.

Demand 3% 0

Balanced 0

Demand 31% 89

Demand 2% 0

Balanced 0

Demand 23% 9

Demand 9% 2

Balanced 2

Demand 53% 8

Demand 12% 2

Balanced 2

Demand 31% 2

Land Use A: Office (General Office Building)

ITE LU Code	ITE (710)		
Size	240.0 KSF		
	Total	Internal	External
Enter	286	0	286
Exit	39	1	39
Total	325	1	324
%	100	0%	100%

Exit to External: 39

Enter from External: 286

Demand 0% 0 | Balanced 0 | Demand 0% 0

Demand 2% 1 | Balanced 0 | Demand 2% 0

Land Use C: High Rise Apartment

ITE LU Code	ITE (222)		
Size	80.0 Units		
	Total	Internal	External
Enter	5	2	3
Exit	15	2	13
Total	20	3	17
%	100	17%	83%

Enter from External: 3

Exit to External: 13

Net External Trips for Multi-use Development

	LAND USE A	LAND USE B	LAND USE C	TOTAL	INTERNAL CAPTURE
Enter	286	18	3	307	
Exit	39	12	13	64	
Total	324	30	17	370	
Single-Use Trip	325	34	20	379	2%

Time Period: PM Peak Hour

Land Use B: Retail (Shopping Center)

ITE LU Code	ITE (820)		
Size	10.5 KSF		
	Total	Internal	External
Enter	59	6	53
Exit	63	7	56
Total	122	13	109
%	100	11%	89%

Exit to External: 56

Enter from External: 53

Demand 3% 2

Balanced 2

Demand 31% 16

Demand 2% 1

Balanced 1

Demand 23% 57

Demand 9% 5

Balanced 5

Demand 53% 5

Demand 12% 8

Balanced 5

Demand 31% 5

Land Use A: Office (General Office Building)

ITE LU Code	ITE (710)		
Size	240.0 KSF		
	Total	Internal	External
Enter	50	2	48
Exit	249	1	248
Total	299	3	296
%	100	1%	99%

Exit to External: 248

Enter from External: 48

Demand 0% 0 | Balanced 0 | Demand 0% 0

Demand 2% 5 | Balanced 0 | Demand 2% 0

Land Use C: High Rise Apartment

ITE LU Code	ITE (222)		
Size	80.0 Units		
	Total	Internal	External
Enter	15	5	10
Exit	10	5	5
Total	25	10	15
%	100	41%	59%

Enter from External: 10

Exit to External: 5

Net External Trips for Multi-use Development

	LAND USE A	LAND USE B	LAND USE C	TOTAL	INTERNAL CAPTURE
Enter	48	53	10	111	
Exit	248	56	5	309	
Total	296	109	15	419	
Single-Use Trip	299	122	25	446	6%

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
701 L Street

Analyst: Dowling

Date: 6/8/2006

Name of Development: Downtown Study

Time Period: Daily

Land Use B: Retail (Shopping Center)

	ITE LU Code	ITE (820)	
	Size	10.5 KSF	
	Total	Internal	External
Enter	676	83	593
Exit	676	69	607
Total	1352	152	1200
%	100	11%	89%

Exit to External: 607
Enter from External: 593

Land Use A: Office (General Office Building)

	ITE LU Code	ITE (710)	
	Size	240.0 KSF	
	Total	Internal	External
Enter	1127	20	1107
Exit	1127	31	1096
Total	2254	52	2202
%	100	2%	98%

Exit to External: 1096
Enter from External: 1107

Land Use C: High Rise Apartment

	ITE LU Code	ITE (222)	
	Size	80.0 Units	
	Total	Internal	External
Enter	148	53	95
Exit	148	56	92
Total	296	110	186
%	100	37%	63%

Enter from External: 95
Exit to External: 92

Demand: 3% 20
Balanced: 20
Demand: 15% 169

Demand: 4% 27
Balanced: 27
Demand: 22% 248

Demand: 11% 74
Balanced: 49
Demand: 33% 49

Demand: 9% 61
Balanced: 56
Demand: 38% 56

Demand: 0% 0
Balanced: 0
Demand: 0% 0

Demand: 2% 23
Balanced: 4
Demand: 3% 4

Net External Trips for Multi-use Development

	LAND USE A	*LAND USE B*	*LAND USE C*	*TOTAL*
Enter	1107	593	95	1794
Exit	1096	607	92	1794
Total	2202	1200	186	3588
Single-Use Trip	2254	1352	296	3902

INTERNAL CAPTURE: 8%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
The Library Lofts (8th & I)

Name of Development: Downtown Study

Time Period: AM Peak Hour

Note: PM peak hour internal capture rates were used for the AM peak hour.

Land Use B: Retail (Shopping Center)

ITE LU Code	ITE (820)		
Size	12.0 KSF		
	Total	Internal	External
Enter	23	3	20
Exit	15	2	13
Total	38	5	33
%	100	13%	87%

Exit to External: 13
Enter from External: 20

Land Use A: Office (General Office Building)

ITE LU Code	ITE (710)		
Size	35.0 KSF		
	Total	Internal	External
Enter	61	0	61
Exit	9	1	8
Total	70	1	69
%	100	2%	98%

Exit to External: 8
Enter from External: 61

Land Use C: High Rise Residential Condominium

ITE LU Code	ITE (232)		
Size	330.0 Units		
	Total	Internal	External
Enter	21	2	19
Exit	90	2	88
Total	111	4	107
%	100	4%	96%

Enter from External: 19
Exit to External: 88

Internal trips between land uses:

Pair	Demand	Balanced	Demand
B to A	3% / 0	0	31% / 19
A to B	23% / 2	0	2% / 0
B to C	12% / 2	2	31% / 7
C to B	9% / 2	2	53% / 48
C to A	0% / 0	0	0% / 0
A to C	2% / 0	0	2% / 0

Net External Trips for Multi-use Development	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	61	20	19	100	
Exit	8	13	88	109	
Total	69	33	107	209	*INTERNAL CAPTURE*
Single-Use Trip	70	38	111	219	5%

Time Period: PM Peak Hour

Land Use B: Retail (Shopping Center)

ITE LU Code	ITE (820)		
Size	12.0 KSF		
	Total	Internal	External
Enter	64	7	57
Exit	69	10	59
Total	133	17	116
%	100	13%	87%

Exit to External: 59
Enter from External: 57

Land Use A: Office (General Office Building)

ITE LU Code	ITE (710)		
Size	35.0 KSF		
	Total	Internal	External
Enter	17	2	15
Exit	85	3	82
Total	102	5	97
%	100	5%	95%

Exit to External: 82
Enter from External: 15

Land Use C: High Rise Residential Condominium

ITE LU Code	ITE (232)		
Size	330.0 Units		
	Total	Internal	External
Enter	70	10	60
Exit	43	6	37
Total	113	15	98
%	100	14%	86%

Enter from External: 60
Exit to External: 37

Internal trips between land uses:

Pair	Demand	Balanced	Demand
B to A	3% / 2	2	31% / 5
A to B	23% / 20	1	2% / 1
B to C	12% / 8	8	31% / 22
C to B	9% / 6	6	53% / 23
C to A	0% / 0	0	0% / 0
A to C	2% / 2	1	2% / 1

Net External Trips for Multi-use Development	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	15	57	60	132	
Exit	82	59	37	178	
Total	97	116	98	310	*INTERNAL CAPTURE*
Single-Use Trip	102	133	113	348	11%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
The Library Lofts (8th & I)

Name of Development: Downtown Study

Time Period: Daily

Land Use B: Retail (Shopping Center)

ITE LU Code: ITE (820)

Size: 12.0 KSF

Exit to External: 635

Enter from External: 642

	Total	Internal	External
Enter	738	96	642
Exit	738	103	635
Total	1476	199	1277
%	100	14%	87%

Demand: 3% 22

Balanced: 22

Demand: 15% 38

Demand: 4% 30

Balanced: 30

Demand: 22% 56

Demand: 11% 81

Balanced: 81

Demand: 33% 213

Demand: 9% 66

Balanced: 66

Demand: 38% 245

Land Use A: Office (General Office Building)

ITE LU Code: ITE (710)

Size: 35.0 KSF

Exit to External: 221

Enter from External: 234

	Total	Internal	External
Enter	256	22	234
Exit	256	35	221
Total	512	57	455
%	100	11%	89%

Demand: 0% 0

Balanced: 0

Demand: 0% 0

Demand: 2% 5

Balanced: 5

Demand: 3% 19

Land Use C: High Rise Residential Condominium

ITE LU Code: ITE (232)

Size: 330.0 Units

Enter from External: 559

Exit to External: 579

	Total	Internal	External
Enter	645	86	559
Exit	645	66	579
Total	1290	153	1137
%	100	12%	88%

Net External Trips for Multi-use Development

	LAND USE A	*LAND USE B*	*LAND USE C*	*TOTAL*
Enter	234	642	559	1435
Exit	221	635	579	1435
Total	455	1277	1137	2869
Single-Use Trip	512	1476	1290	3278

INTERNAL CAPTURE: 12%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
800 K Street

Name of Development: Downtown Study

Time Period: AM Peak Hour

Note: PM peak hour internal capture rates were used for the AM peak hour.

Land Use B: Retail (Shopping Center)

ITE LU Code	ITE (820)		
Size	17.6 KSF		
	Total	Internal	External
Enter	29	3	26
Exit	19	1	18
Total	48	4	44
%	100	8%	92%

Exit to External: 18
Enter from External: 26

Demand 3% 1
Balanced 0
Demand 31% 0
Demand 2% 1
Balanced 0
Demand 23% 0
Demand 12% 2
Balanced 1
Demand 31% 1
Demand 9% 3
Balanced 3
Demand 53% 4

Land Use A: 0

ITE LU Code	0		
Size	0.0	0.0	
	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	100	#DIV/0!	#DIV/0!

Exit to External: 0
Enter from External: 0

Demand 0% 0
Balanced 0
Demand 0% 0
Demand 2% 0
Balanced 0
Demand 2% 0

Land Use C: Mid Rise Apartment

ITE LU Code	ITE (220)		
Size	26.0 Units		
	Total	Internal	External
Enter	4	1	3
Exit	8	3	5
Total	12	4	8
%	100	32%	68%

Enter from External: 3
Exit to External: 5

Net External Trips for Multi-use Development

	LAND USE A	*LAND USE B*	*LAND USE C*	*TOTAL*
Enter	0	26	3	29
Exit	0	18	5	23
Total	0	44	8	52
Single-Use Trip	0	48	12	60

INTERNAL CAPTURE: 13%

Time Period: PM Peak Hour

Land Use B: Retail (Shopping Center)

ITE LU Code	ITE (820)		
Size	17.6 KSF		
	Total	Internal	External
Enter	83	4	79
Exit	89	2	87
Total	172	6	166
%	100	4%	96%

Exit to External: 87
Enter from External: 79

Demand 3% 3
Balanced 0
Demand 31% 0
Demand 2% 2
Balanced 0
Demand 23% 0
Demand 12% 11
Balanced 2
Demand 31% 2
Demand 9% 7
Balanced 4
Demand 53% 4

Land Use A: 0

ITE LU Code	0		
Size	0.0	0.0	
	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	100	#DIV/0!	#DIV/0!

Exit to External: 0
Enter from External: 0

Demand 0% 0
Balanced 0
Demand 0% 0
Demand 2% 0
Balanced 0
Demand 2% 0

Land Use C: Mid Rise Apartment

ITE LU Code	ITE (220)		
Size	26.0 Units		
	Total	Internal	External
Enter	8	2	6
Exit	7	4	3
Total	15	6	9
%	100	41%	59%

Enter from External: 6
Exit to External: 3

Net External Trips for Multi-use Development

	LAND USE A	*LAND USE B*	*LAND USE C*	*TOTAL*
Enter	0	79	6	85
Exit	0	87	3	90
Total	0	166	9	175
Single-Use Trip	0	172	15	187

INTERNAL CAPTURE: 7%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
800 K Street

Name of Development: Downtown Study

Time Period: Daily

Land Use B: Retail (Shopping Center)

	ITE LU Code	ITE (820)	
	Size	17.6 KSF	
	Total	Internal	External
Enter	946	29	917
Exit	946	25	921
Total	1892	55	1837
%	100	3%	97%

Exit to External: 921

Enter from External: 917

Land Use A: 0

	ITE LU Code	0	
	Size	0.0	0.0
	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	100	#DIV/0!	#DIV/0!

Exit to External: 0

Enter from External: 0

Land Use C: Mid Rise Apartment

	ITE LU Code	ITE (220)	
	Size	26.0 Units	
	Total	Internal	External
Enter	77	25	52
Exit	77	29	48
Total	154	55	99
%	100	36%	65%

Enter from External: 52

Exit to External: 48

Between Land Use B and Land Use A:

Demand: 3% 28

Balanced: 0

Demand: 15% 0

Demand: 4% 38

Balanced: 0

Demand: 22% 0

Between Land Use B and Land Use C:

Demand: 9% 85

Balanced: 29

Demand: 38% 29

Demand: 11% 104

Balanced: 25

Demand: 33% 25

Between Land Use A and Land Use C:

Demand: 0% 0

Balanced: 0

Demand: 0% 0

Demand: 2% 0

Balanced: 0

Demand: 3% 2

Net External Trips for Multi-use Development

	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	0	917	52	968	
Exit	0	921	48	968	
Total	0	1837	99	1937	*INTERNAL CAPTURE*
Single-Use Trip	0	1892	154	2046	5%

Analyst: Dowling

Date: 6/8/2006

MULTI-USE DEVELOPMENT TRIP GENERATION AND INTERNAL CAPTURE SUMMARY
Westfield Shoppingtown Downtown Plaza

Name of Development: Downtown Study

Time Period: AM Peak Hour

Land Use B: Retail/Theater

ITE LU Code ITE (820), & ITE (445)

Size 873.2 KSF

		Total	Internal	External
Exit to External: 187	Enter	301	6	295
	Exit	193	6	187
295	Total	494	12	482
Enter from External	%	100	2%	98%

Note: PM peak hour internal capture rates were used for the AM peak hour.

Demand 3% 6; Balanced 6; Demand 31% 101; Demand 2% 6; Balanced 6; Demand 23% 10

Demand 9% 27; Balanced 0; Demand 12% 23; Balanced 0; Demand 53% 0; Demand 31% 0

Land Use A: Office (General Office Building)

ITE LU Code ITE (710)

Size 281.4 KSF

		Total	Internal	External
Exit to External: 38	Enter	325	6	319
	Exit	44	6	38
319	Total	369	12	357
Enter from External	%	100	3%	97%

Demand 0% 0; Balanced 0; Demand 0% 0

Demand 2% 1; Balanced 0; Demand 2% 0

Land Use C:

ITE LU Code 0

Size

	Total	Internal	External	
Enter				Enter from External: 0
Exit				
Total				0
%	100	#DIV/0!	#DIV/0!	Exit to External

Net External Trips for Multi-use Development	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	319	295	0	614	
Exit	38	187	0	225	
Total	357	482	0	839	*INTERNAL CAPTURE*
Single-Use Trip	369	494	0	863	3%

Time Period: PM Peak Hour

Land Use B: Retail (Shopping Center)

ITE LU Code ITE (820), & ITE (445)

Size 873.2 KSF

		Total	Internal	External
Exit to External: 1257	Enter	1141	23	1118
	Exit	1275	18	1257
1118	Total	2416	41	2375
Enter from External	%	100	2%	98%

Demand 3% 38; Balanced 18; Demand 31% 18; Demand 2% 23; Balanced 23; Demand 23% 65

Demand 9% 103; Balanced 0; Demand 12% 153; Balanced 0; Demand 53% 0; Demand 31% 0

Land Use A: Office (General Office Building)

ITE LU Code ITE (710)

Size 281.4 KSF

		Total	Internal	External
Exit to External: 258	Enter	58	18	40
	Exit	281	23	258
40	Total	339	41	298
Enter from External	%	100	12%	88%

Demand 0% 0; Balanced 0; Demand 0% 0

Demand 2% 6; Balanced 0; Demand 2% 0

Land Use C: 0

ITE LU Code 0

Size 0.0 0

	Total	Internal	External	
Enter	0	0	0	Enter from External: 0
Exit	0	0	0	
Total	0	0	0	0
%	100	#DIV/0!	#DIV/0!	Exit to External

Net External Trips for Multi-use Development	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	40	1118	0	1158	
Exit	258	1257	0	1515	
Total	298	2375	0	2673	*INTERNAL CAPTURE*
Single-Use Trip	339	2416	0	2755	3%

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
Westfield Shoppingtown Downtown Plaza

Analyst: Dowling

Date: 6/8/2006

Name of Development: Downtown Study

Time Period: Daily

Land Use B: Retail (Shopping Center)

ITE LU Code: ITE (820), & ITE (445)

Size: 873.2 KSF

Exit to External: 11780

Enter from External: 11691

	Total	Internal	External
Enter	11971	280	11691
Exit	11971	191	11780
Total	23942	471	23471
%	100	2%	98%

Between Land Use B and Land Use A:

Demand: 3% | 359

Balanced: 191

Demand: 15% | 191

Demand: 4% | 479

Balanced: 280

Demand: 22% | 280

Between Land Use B and Land Use C:

Demand: 9% | 1077

Balanced: 0

Demand: 38% | 0

Demand: 11% | 1317

Balanced: 0

Demand: 33% | 0

Land Use A: Office (General Office Building)

ITE LU Code: ITE (710)

Size: 281.4 KSF

Exit to External: 994

Enter from External: 1083

	Total	Internal	External
Enter	1274	191	1083
Exit	1274	280	994
Total	2548	471	2077
%	100	19%	82%

Between Land Use A and Land Use C:

Demand: 0% | 0

Balanced: 0

Demand: 0% | 0

Demand: 2% | 25

Balanced: 0

Demand: 3% | 0

Land Use C: 0

ITE LU Code: 0

Size: 0.0

Enter from External: 0

Exit to External: 0

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	100	#DIV/0!	#DIV/0!

Net External Trips for Multi-use Development

	LAND USE A	*LAND USE B*	*LAND USE C*	*TOTAL*	*INTERNAL CAPTURE*
Enter	1083	11691	0	12774	
Exit	994	11780	0	12774	
Total	2077	23471	0	25547	
Single-Use Trip	2548	23942	0	26490	4%

Appendix C Traffic Volumes

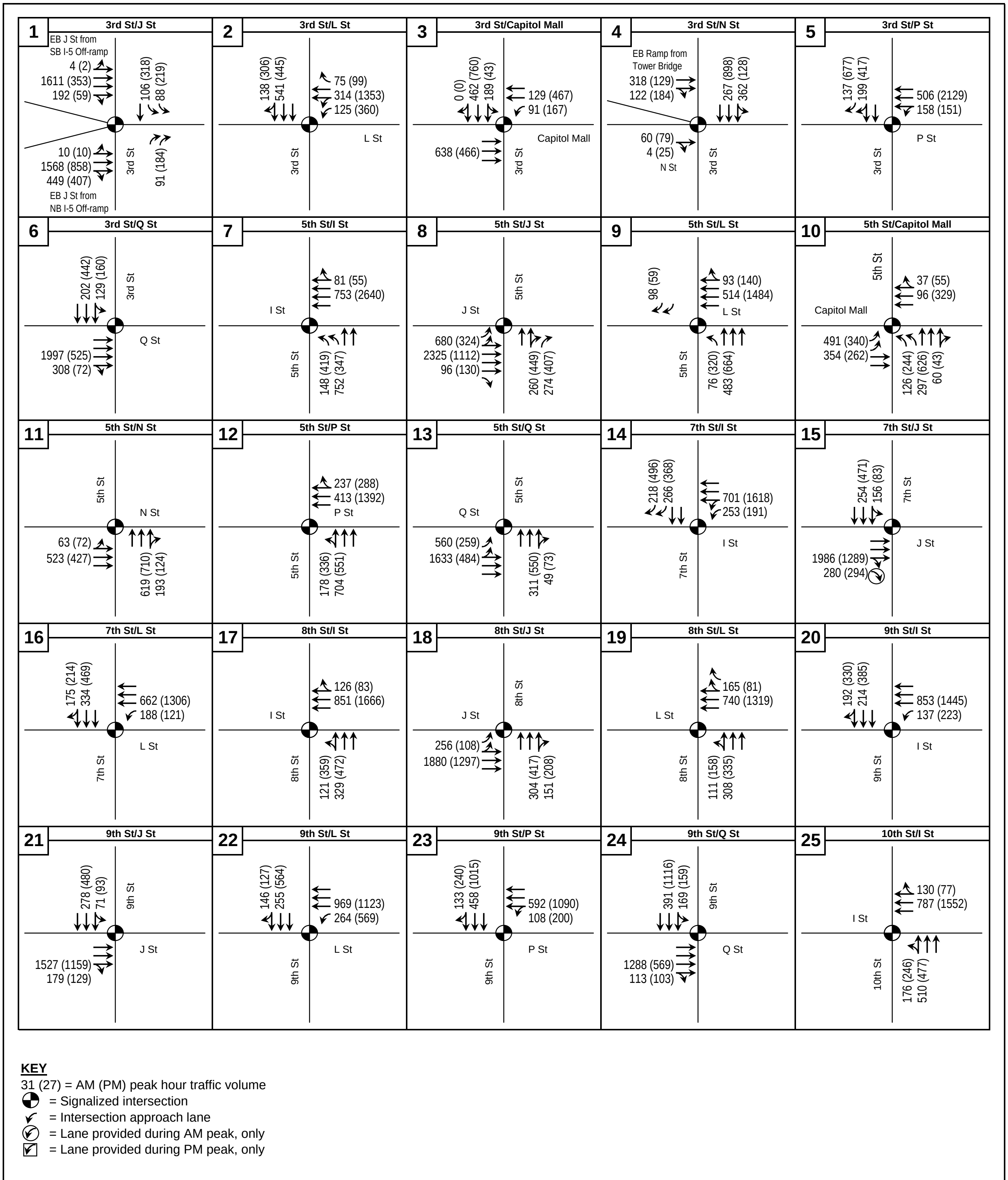

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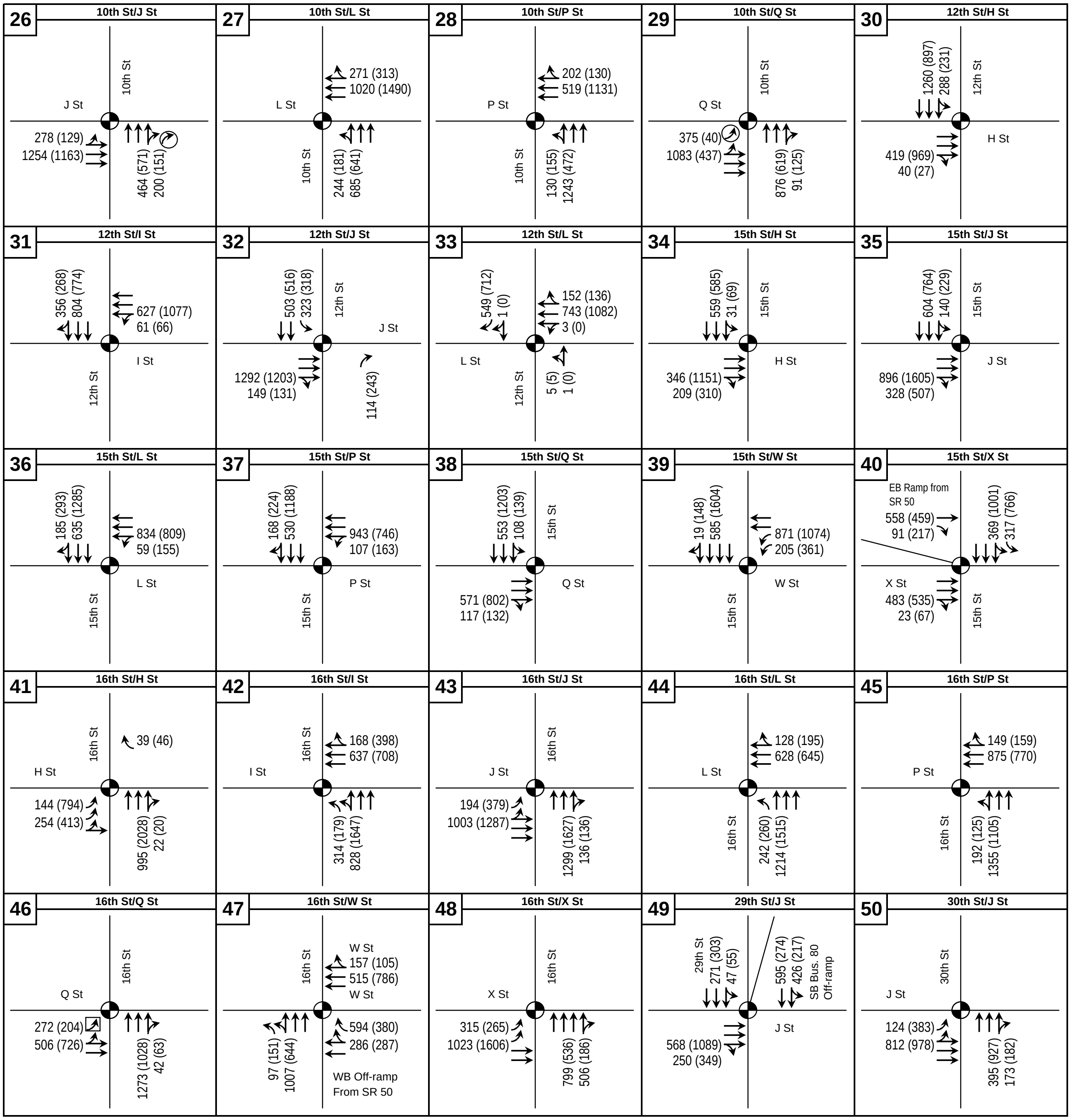
Figure A.1
EXISTING TRAFFIC VOLUMES, LANES, AND TRAFFIC CONTROLS



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

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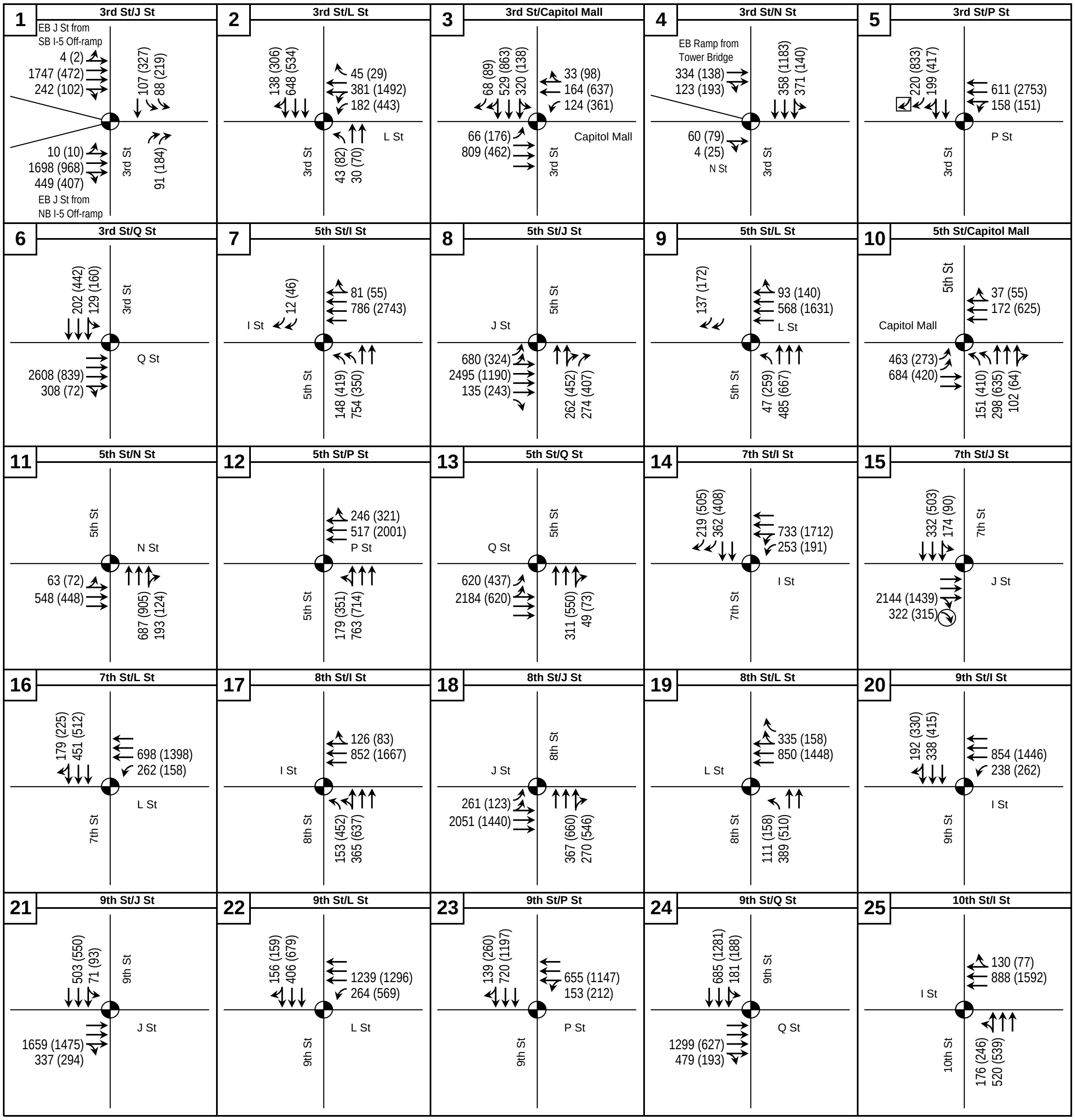
Figure A.1
EXISTING TRAFFIC VOLUMES, LANES, AND TRAFFIC CONTROLS



KEY
31 (27) = AM (PM) peak hour traffic volume
= Signalized intersection
= Intersection approach lane
= Lane provided during AM peak, only
= Lane provided during PM peak, only

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Figure A.2
BASELINE TRAFFIC VOLUMES, LANES, AND TRAFFIC CONTROLS

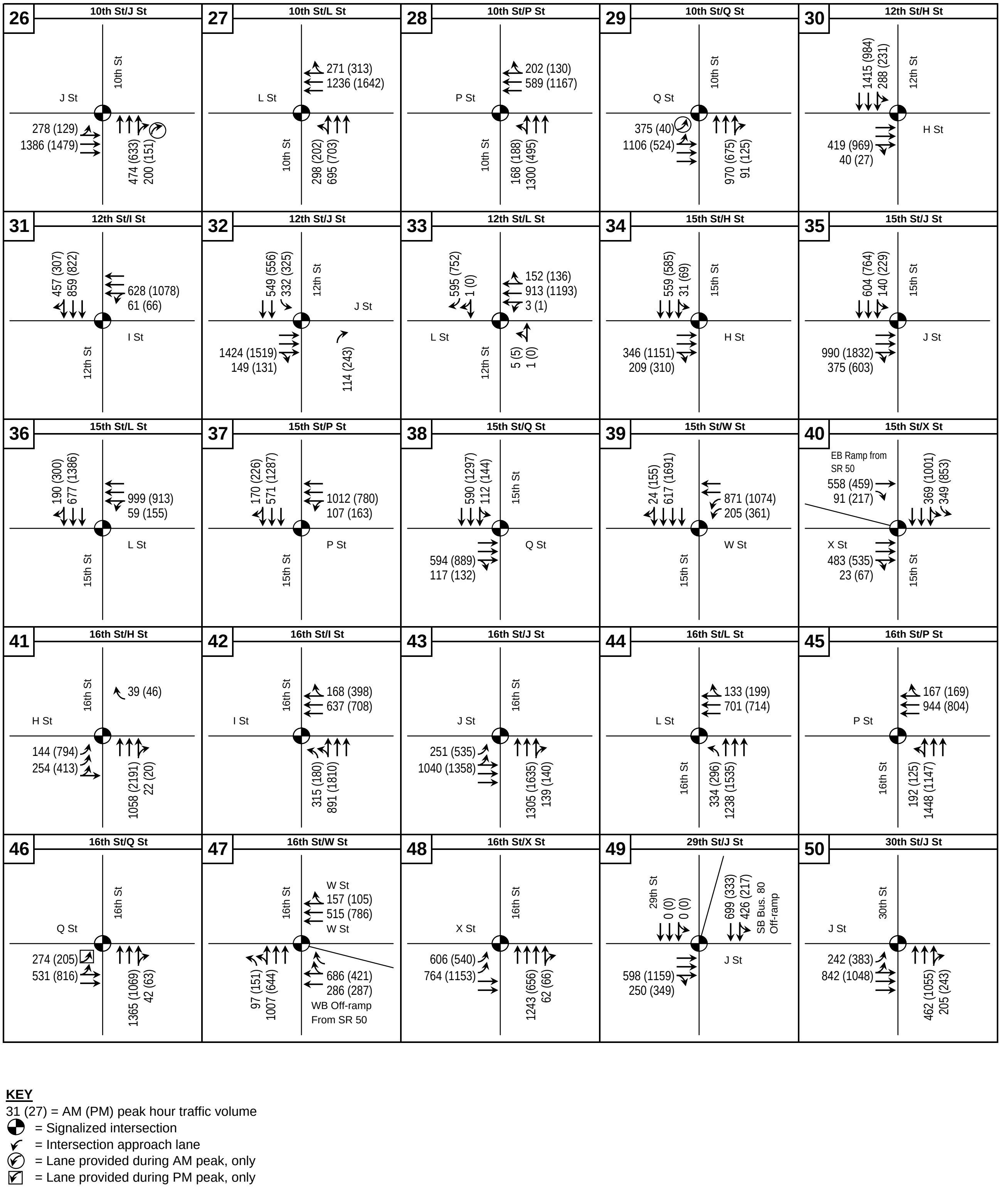

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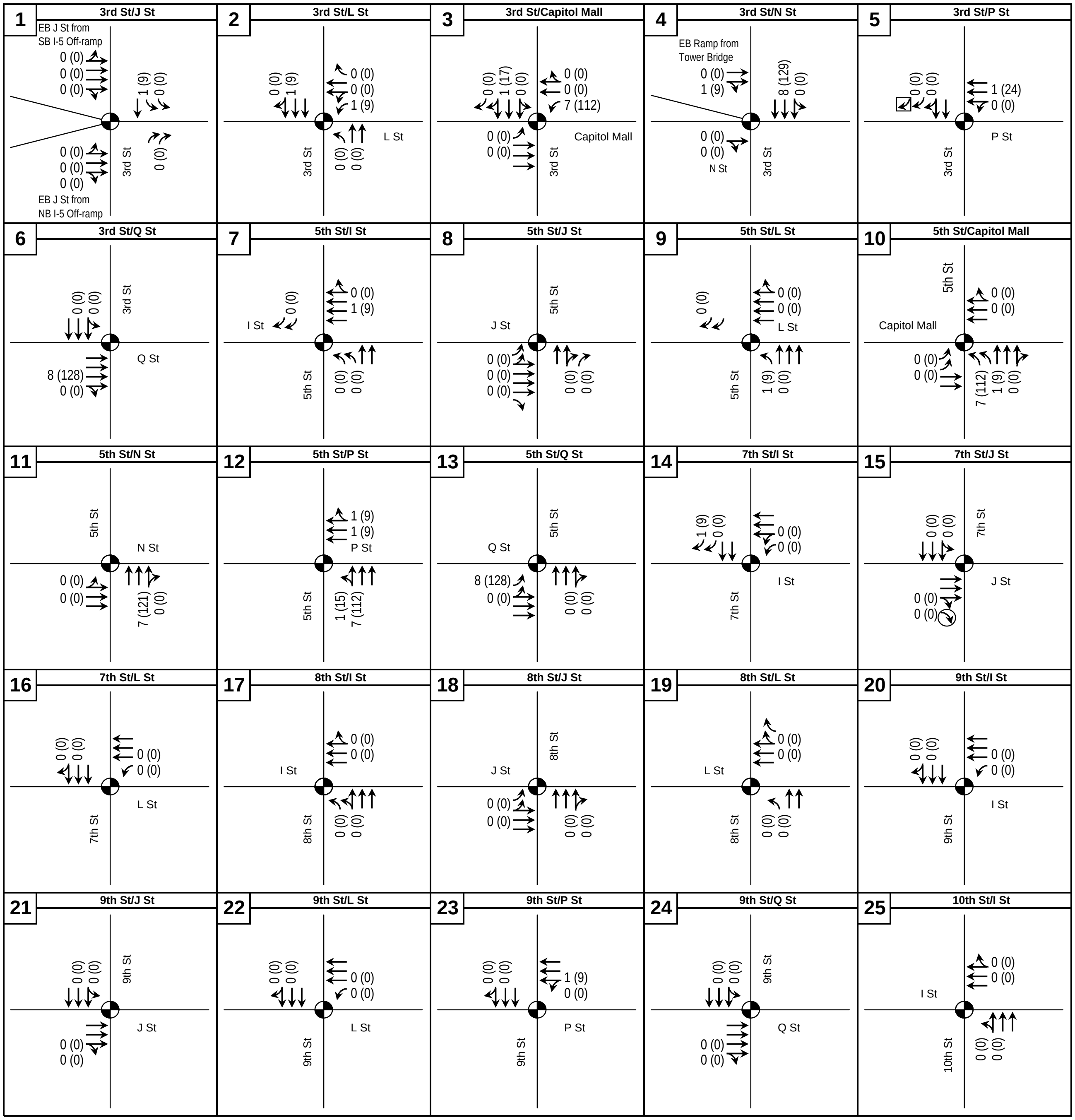
Figure A.2
BASELINE TRAFFIC VOLUMES, LANES, AND TRAFFIC CONTROLS



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

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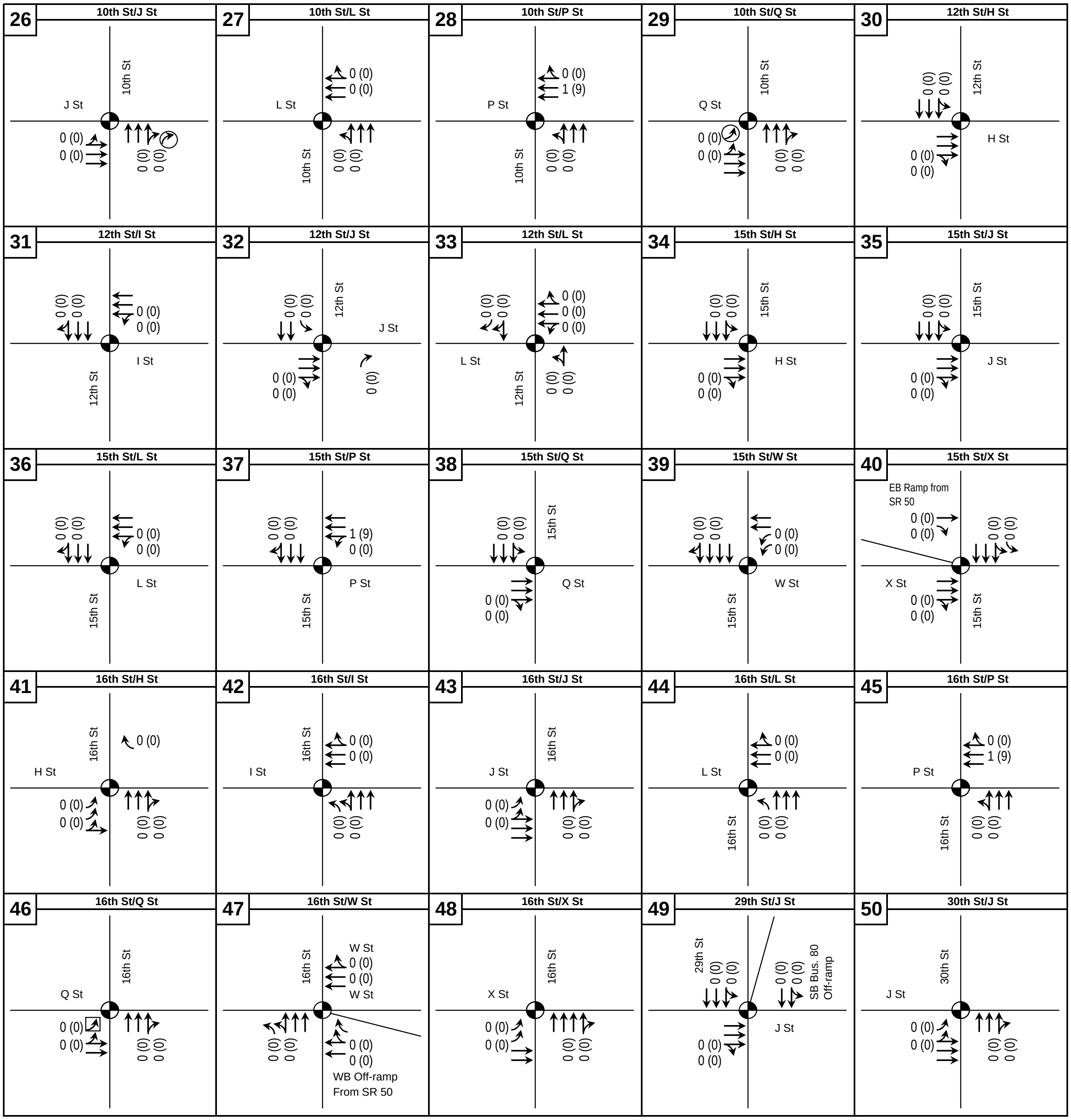
Figure A.3
BASELINE TRAFFIC VOLUMES
CROCKER PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

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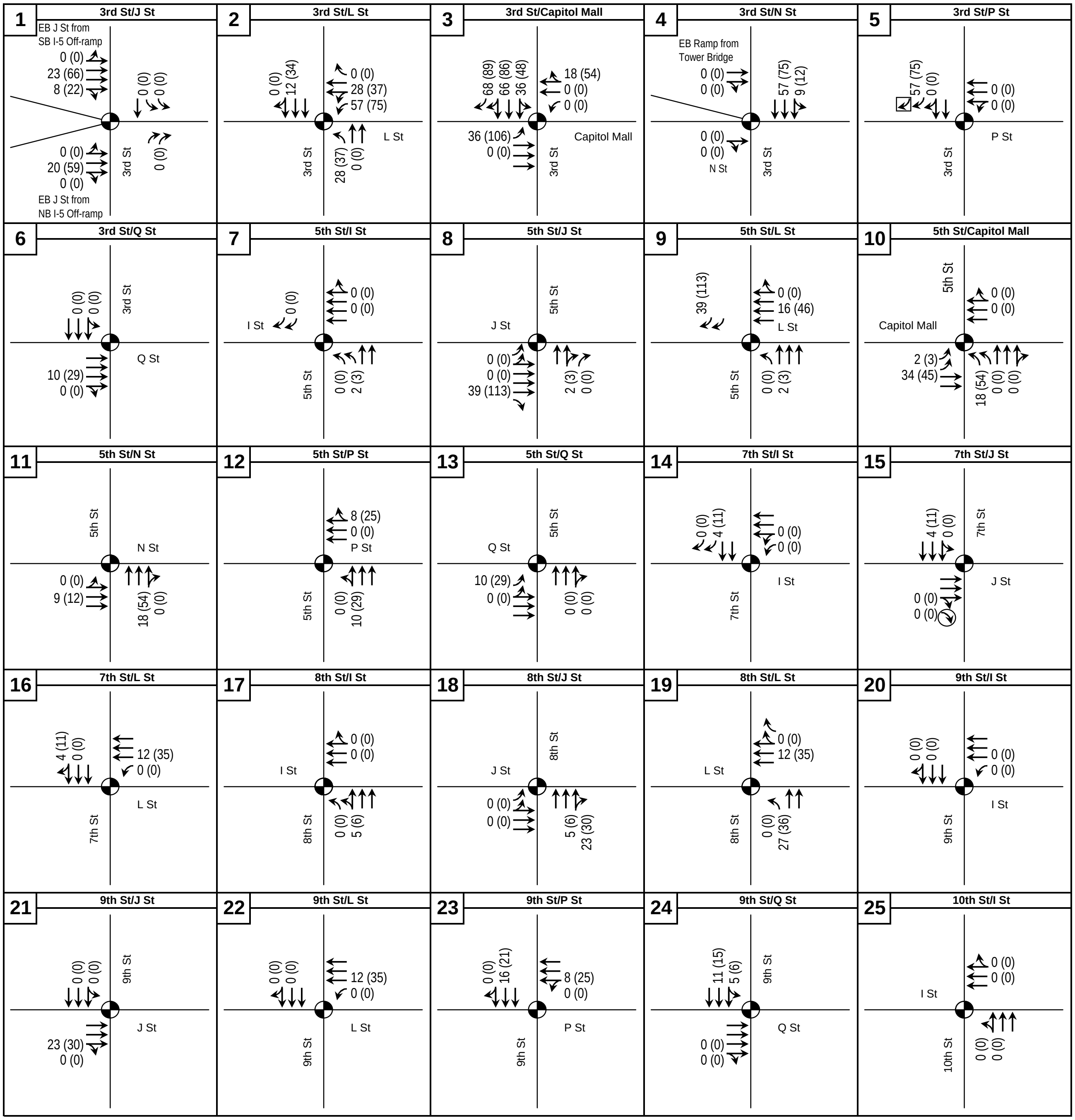
Figure A.3
BASELINE TRAFFIC VOLUMES
CROCKER PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

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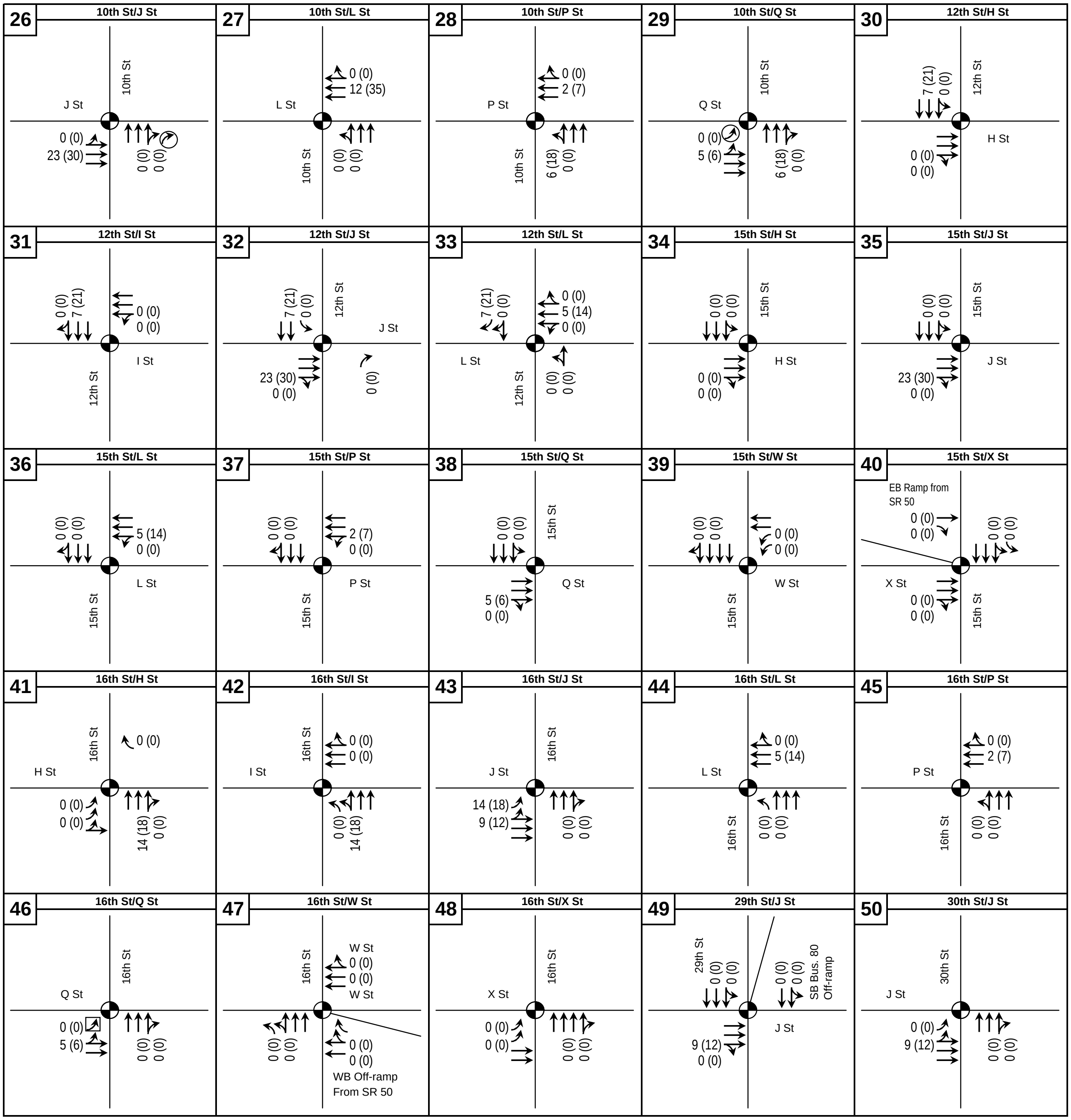
Figure A.4
BASELINE TRAFFIC VOLUMES
301 CAPITOL MALL PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

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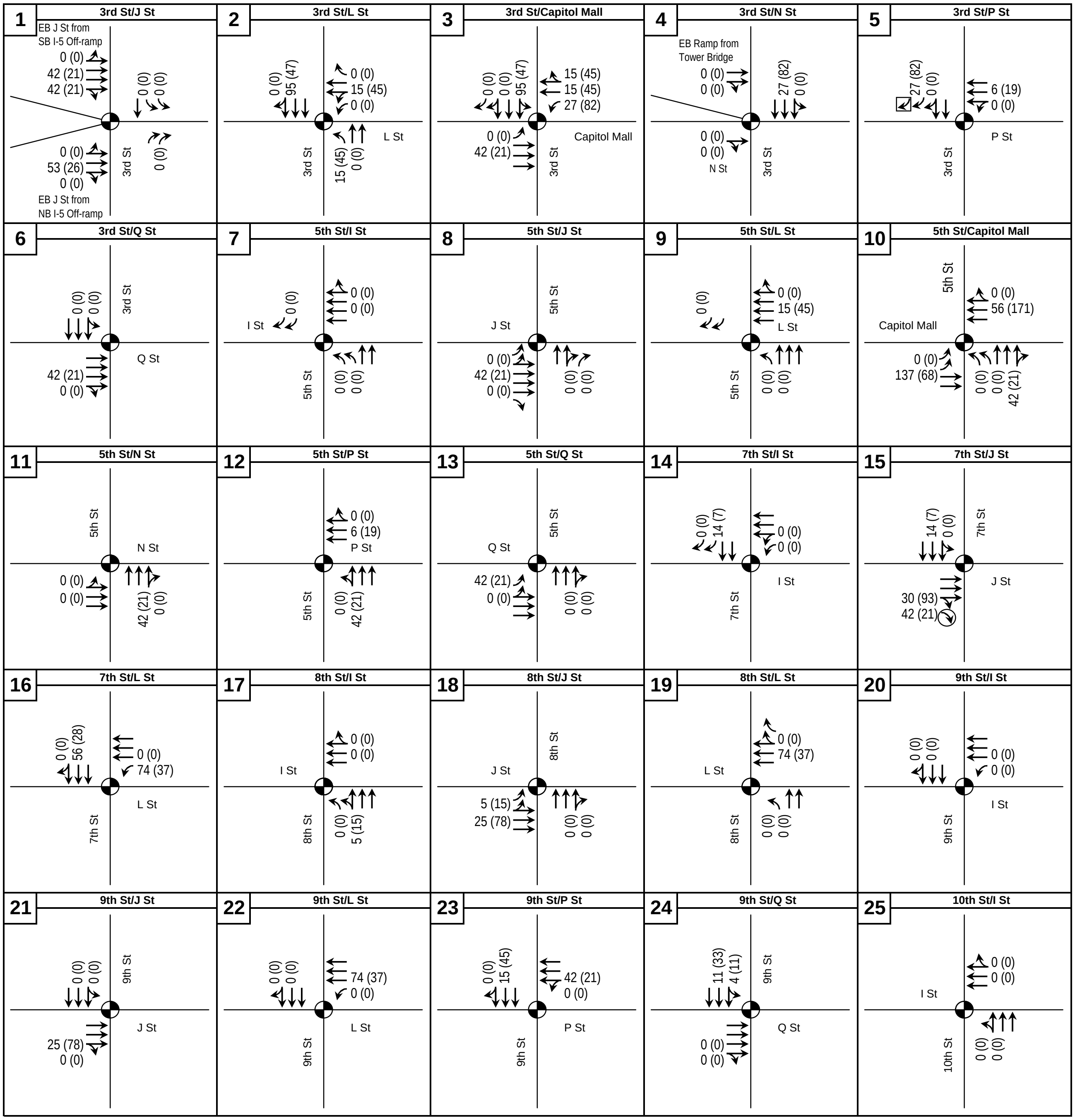
N W E S

Figure A.4
BASELINE TRAFFIC VOLUMES
301 CAPITOL MALL PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume
= Signalized intersection
= Intersection approach lane
= Lane provided during AM peak, only
= Lane provided during PM peak, only

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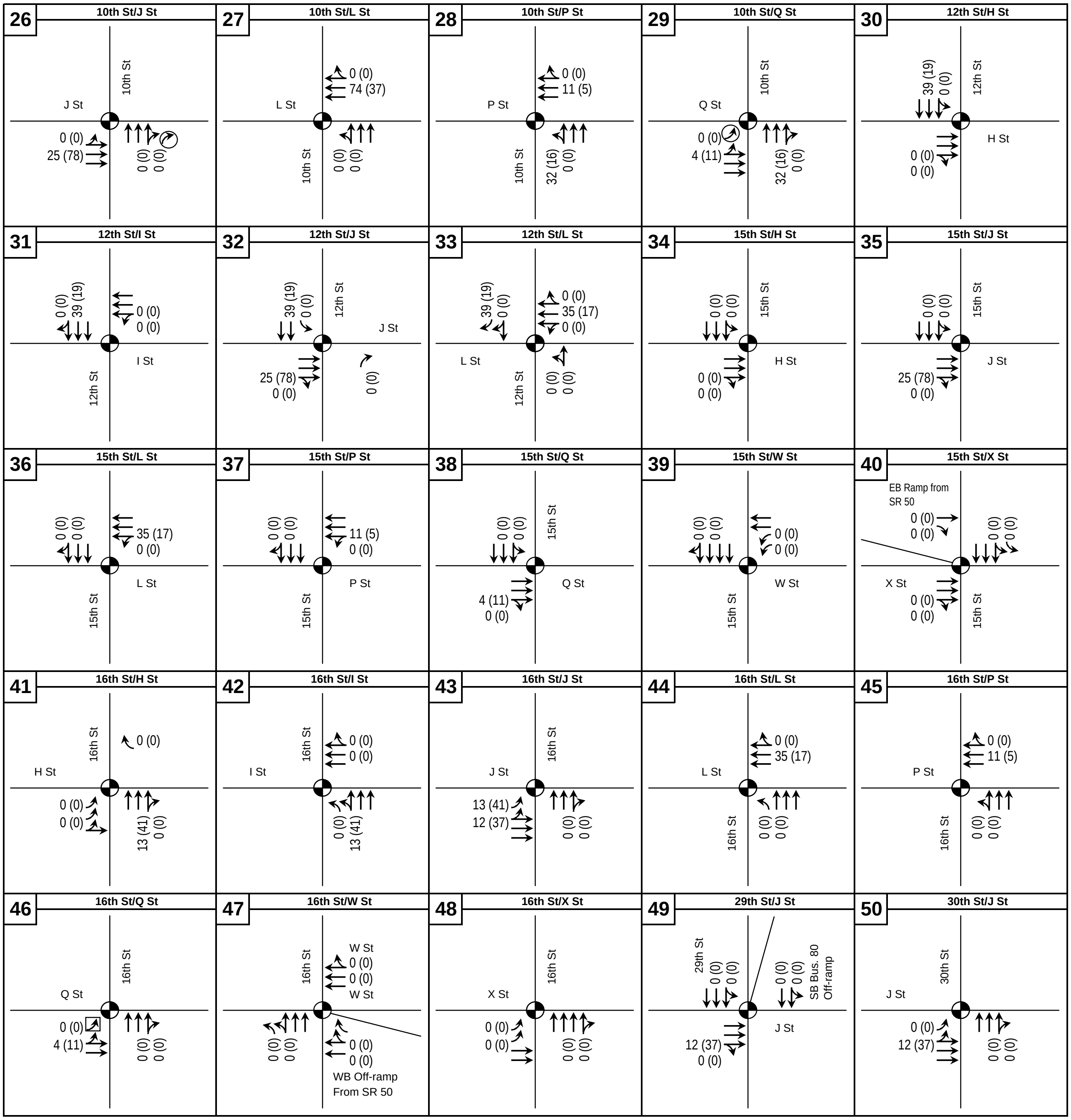
Sacramento Downtown Traffic Study

Figure A.5
BASELINE TRAFFIC VOLUMES
601 CAPITOL MALL PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

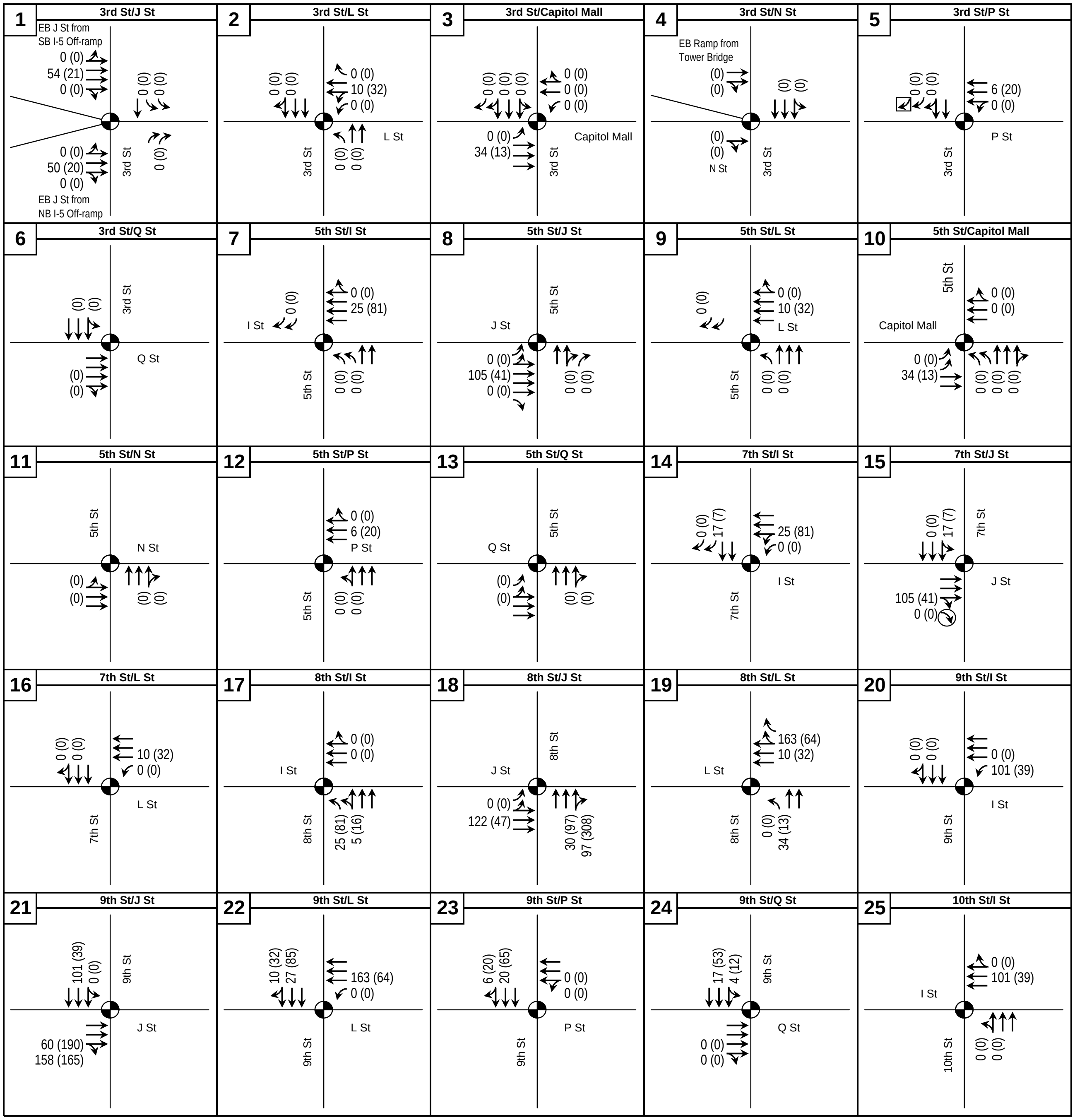
= Lane provided during PM peak, only

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

N W E S

Figure A.5
BASELINE TRAFFIC VOLUMES
601 CAPITOL MALL PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

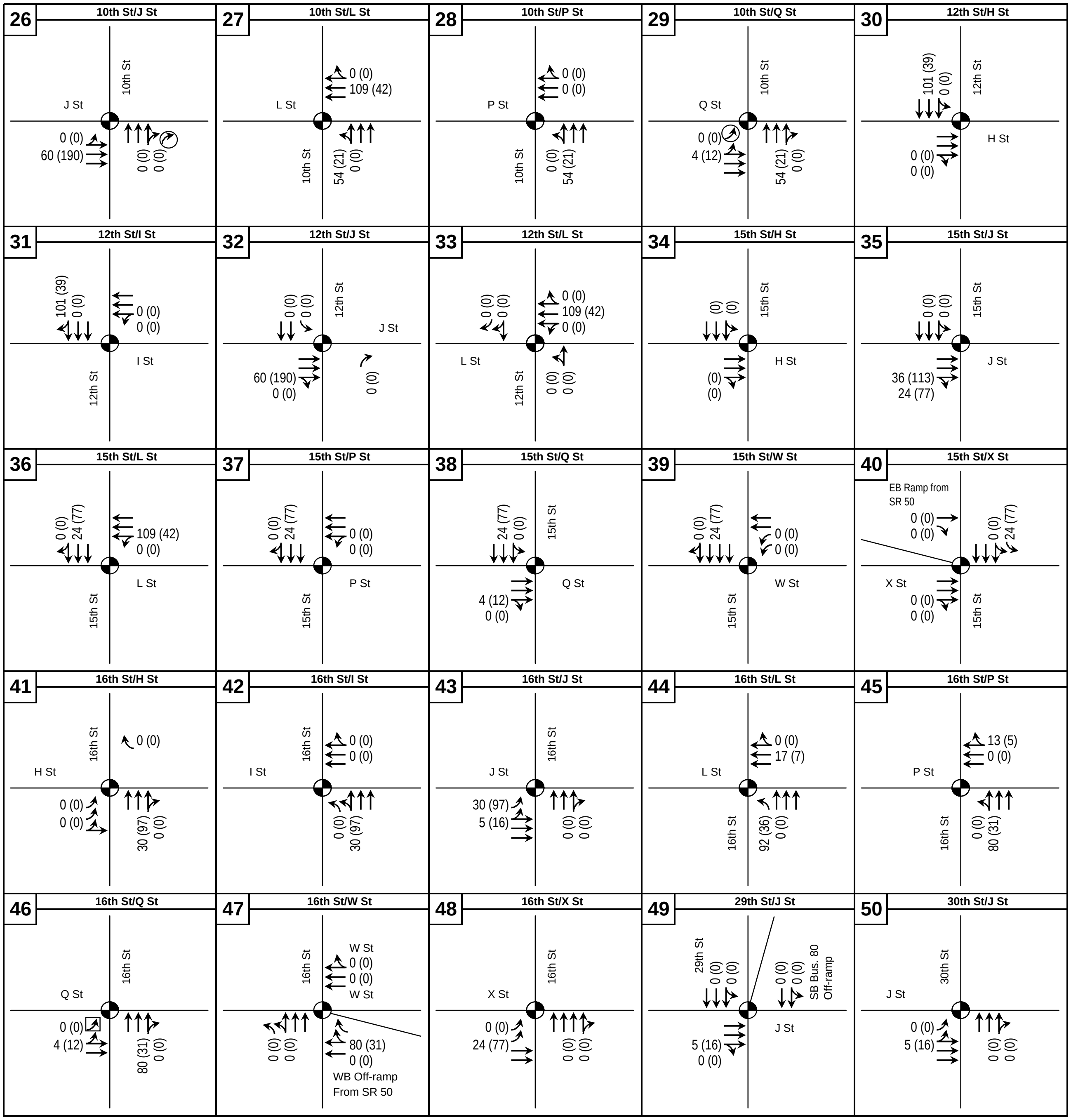
= Lane provided during AM peak, only

= Lane provided during PM peak, only

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

Figure A.6
BASELINE TRAFFIC VOLUMES
METRO PLACE PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

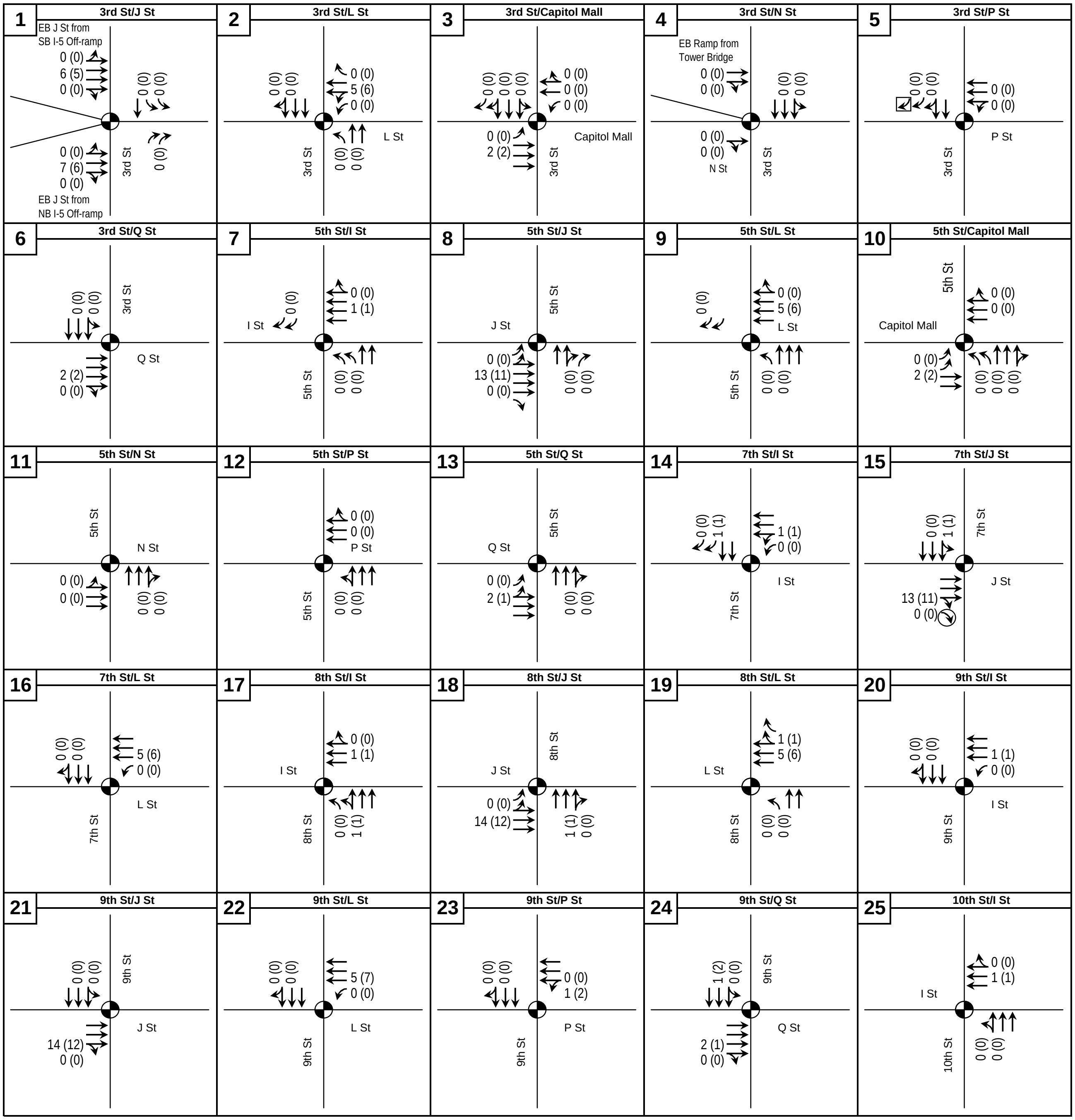
= Lane provided during AM peak, only

= Lane provided during PM peak, only

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

Figure A.6
BASELINE TRAFFIC VOLUMES
METRO PLACE PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

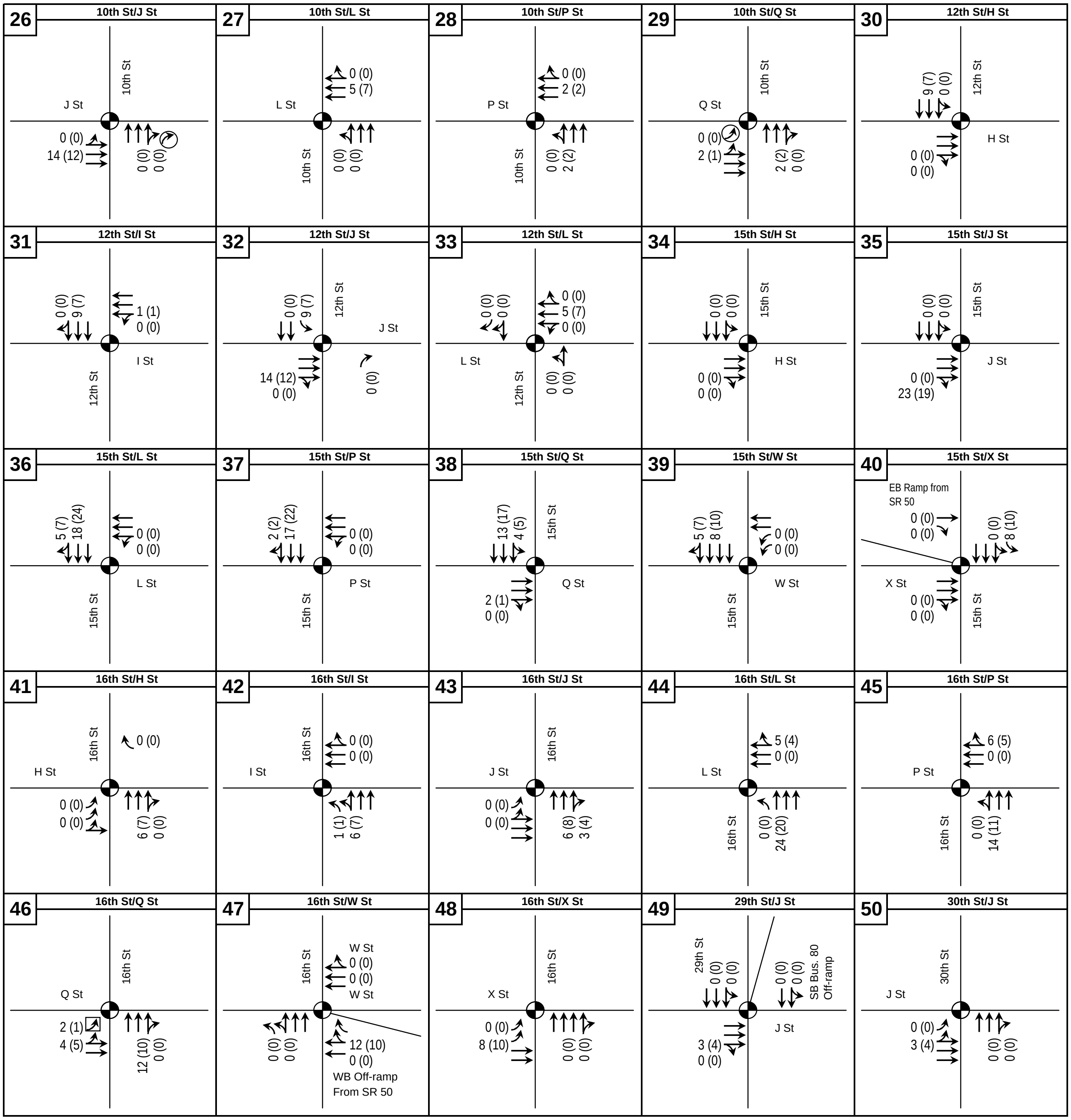
= Lane provided during PM peak, only

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

N W E S

Figure A.7
BASELINE TRAFFIC VOLUMES
15TH & L HOTEL PROJECT



KEY
31 (27) = AM (PM) peak hour traffic volume
= Signalized intersection
= Intersection approach lane
= Lane provided during AM peak, only
= Lane provided during PM peak, only

Dowling Associates, Inc.

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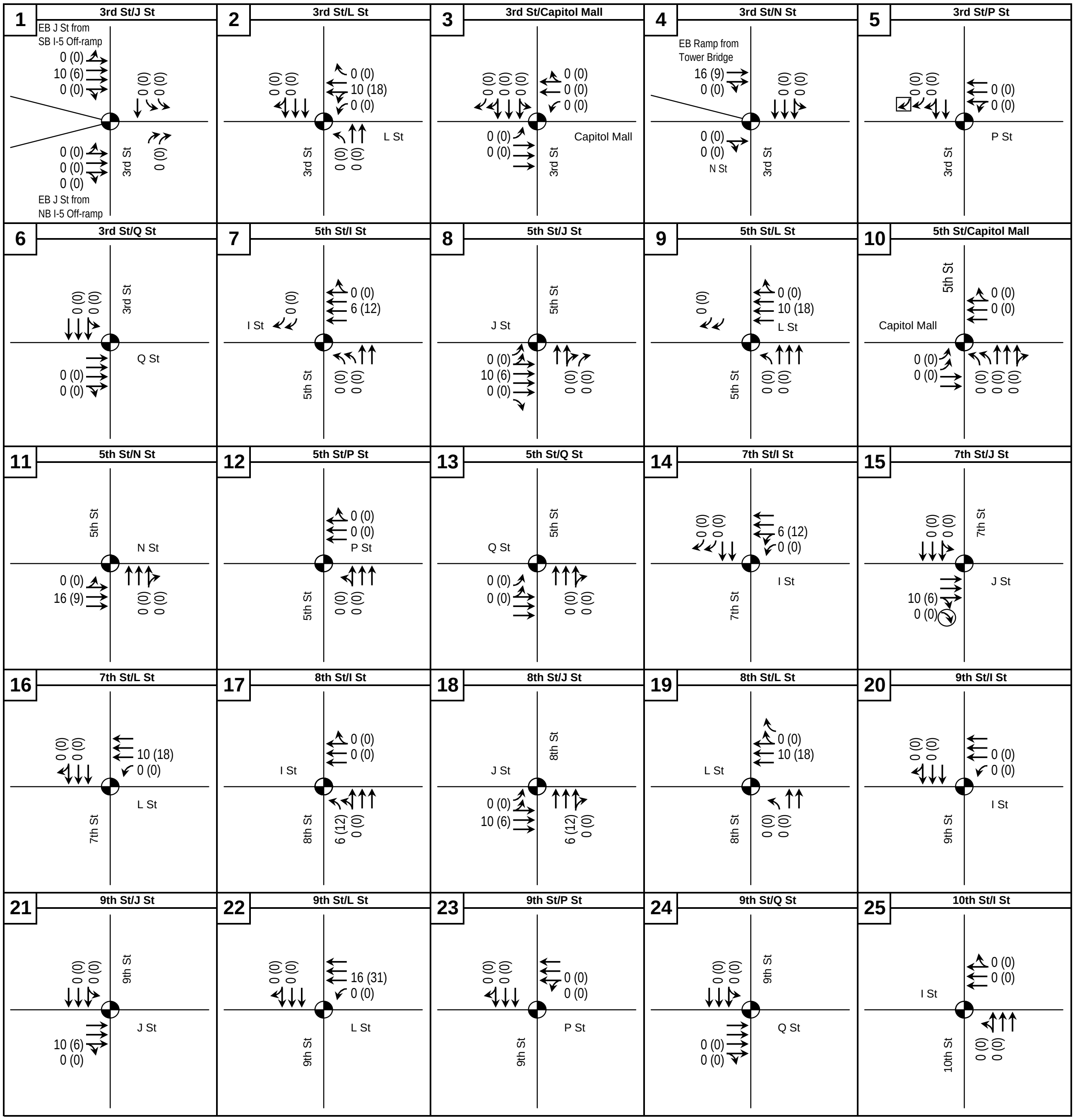
N W E S

Figure A.7
BASELINE TRAFFIC VOLUMES
15TH & L HOTEL PROJECT



KEY
31 (27) = AM (PM) peak hour traffic volume
= Signalized intersection
= Intersection approach lane
= Lane provided during AM peak, only
= Lane provided during PM peak, only

Dowling Associates, Inc.

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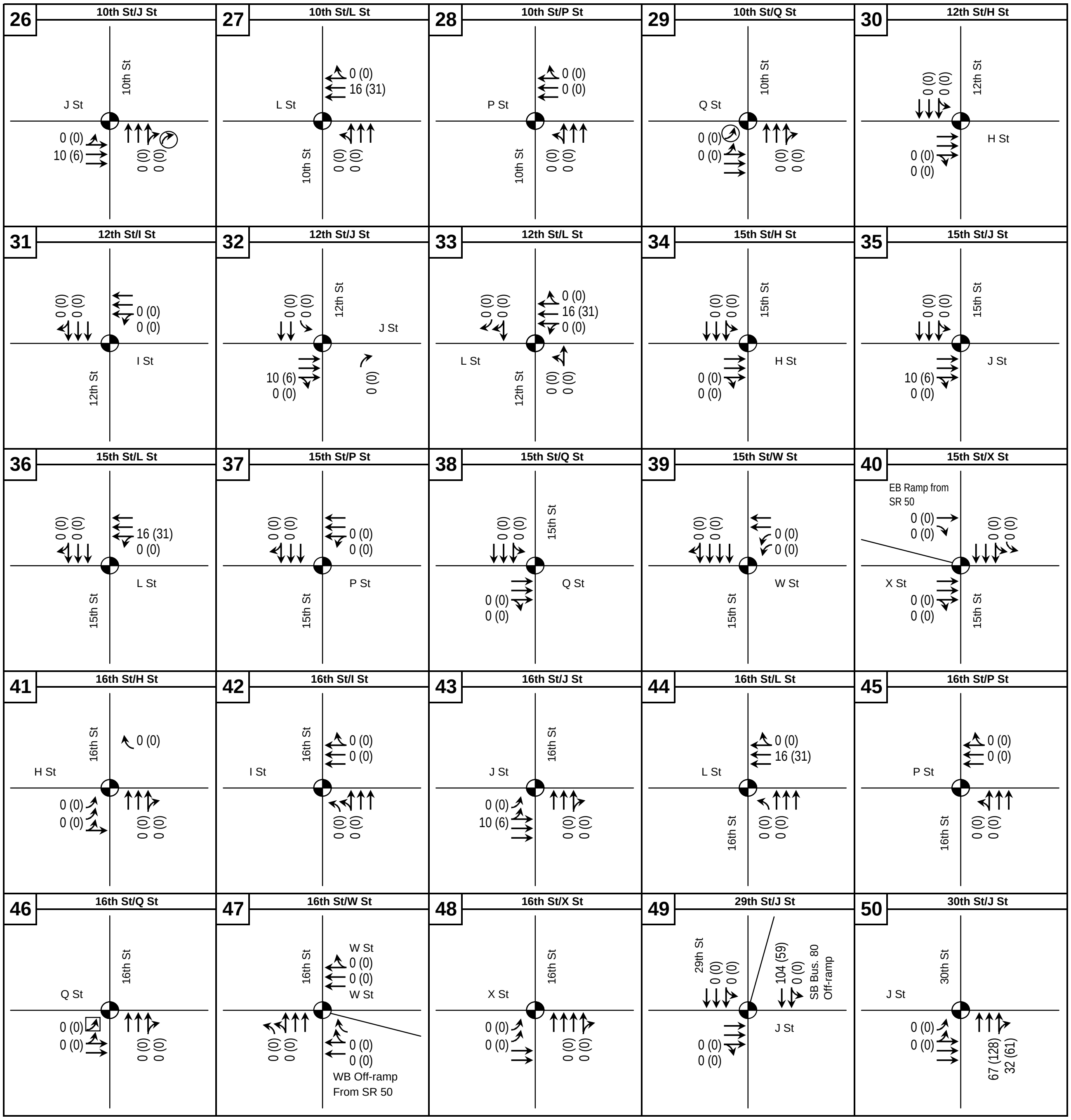
Figure A.8
BASELINE TRAFFIC VOLUMES
SUTTER MEDICAL CENTER PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

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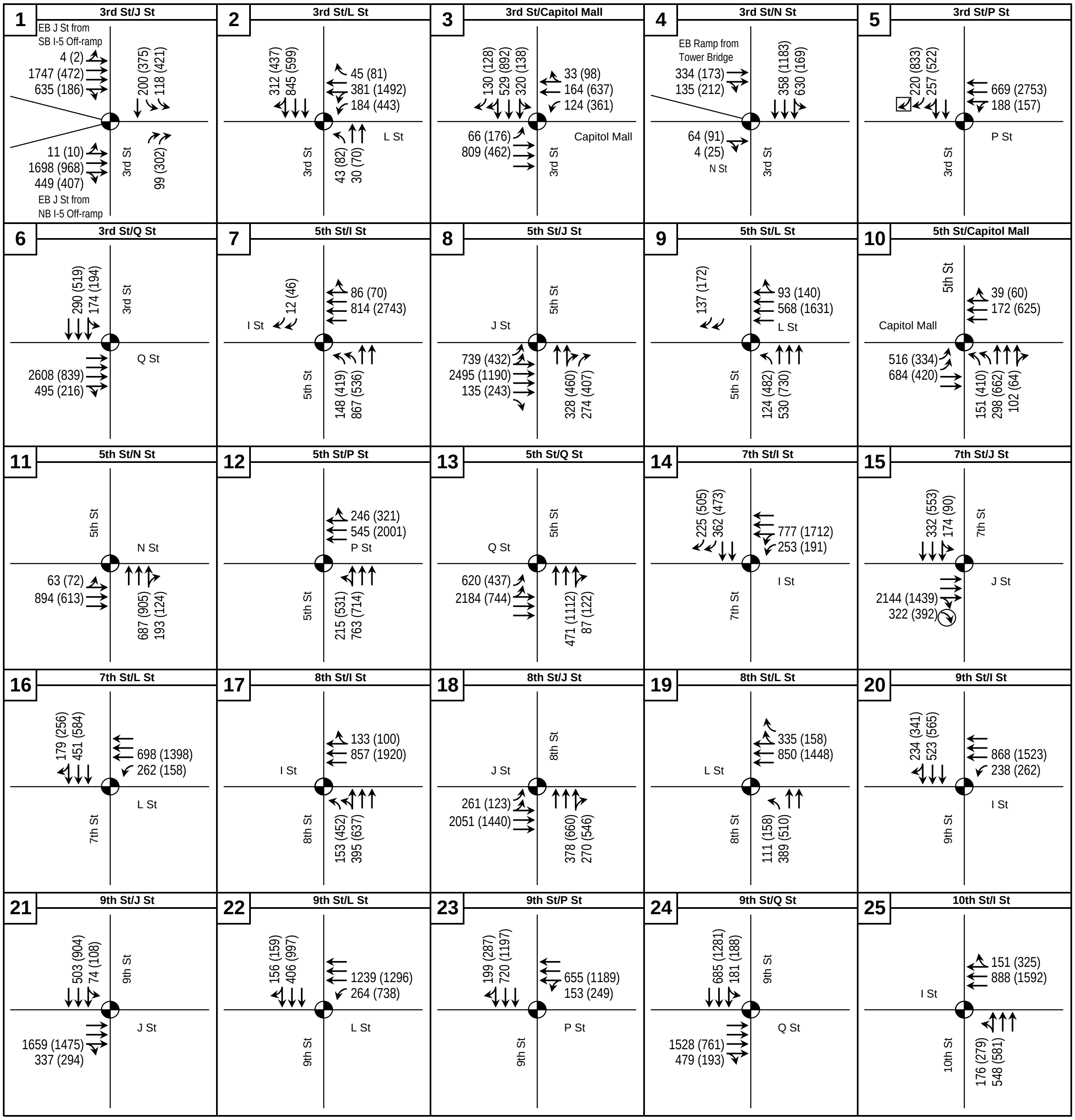
Figure A.8
BASELINE TRAFFIC VOLUMES
SUTTER MEDICAL CENTER PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

Dowling Associates, Inc.

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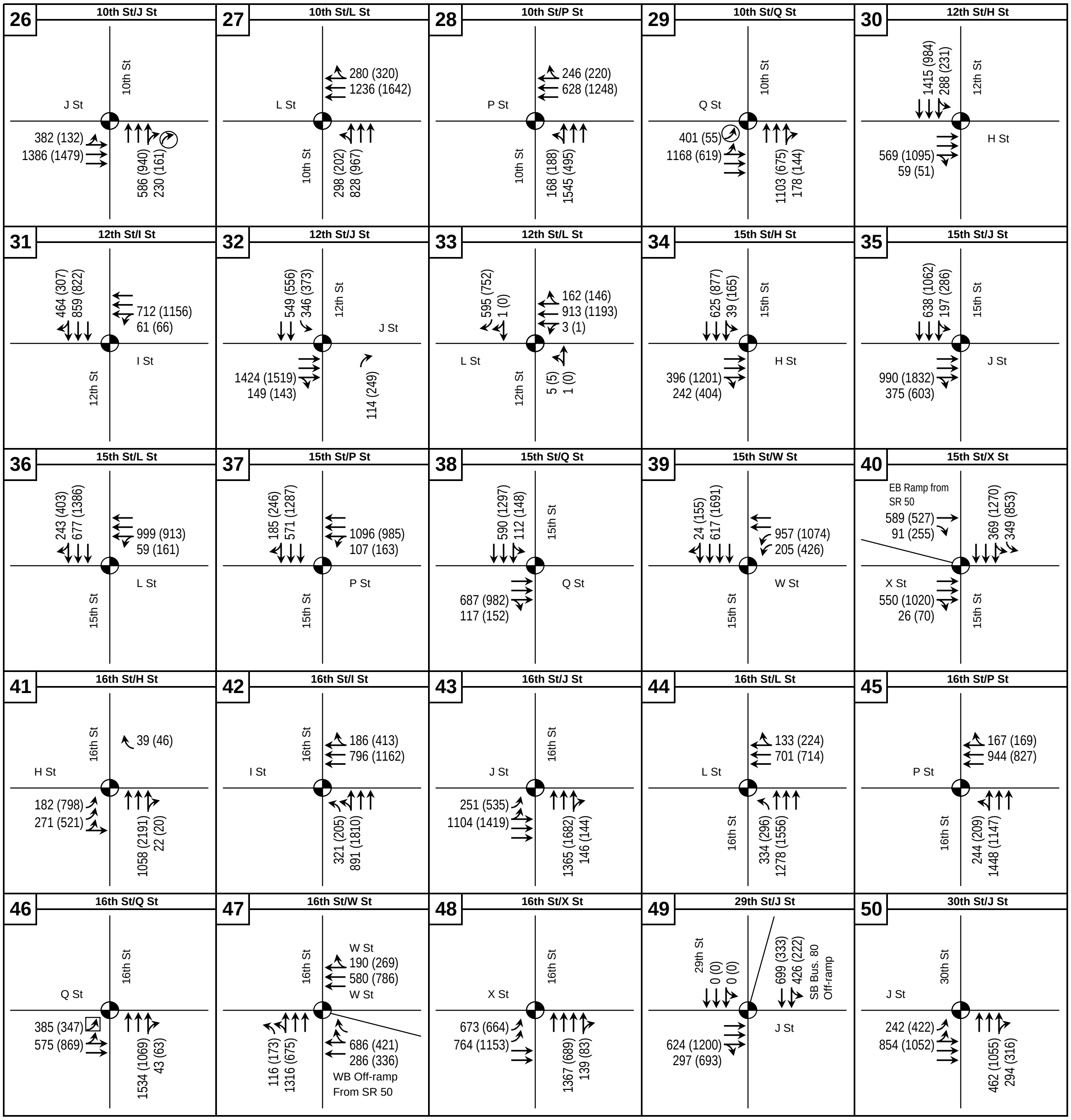
Figure A.9
2013 CUMULATIVE TRAFFIC VOLUMES WITHOUT PROJECTS



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

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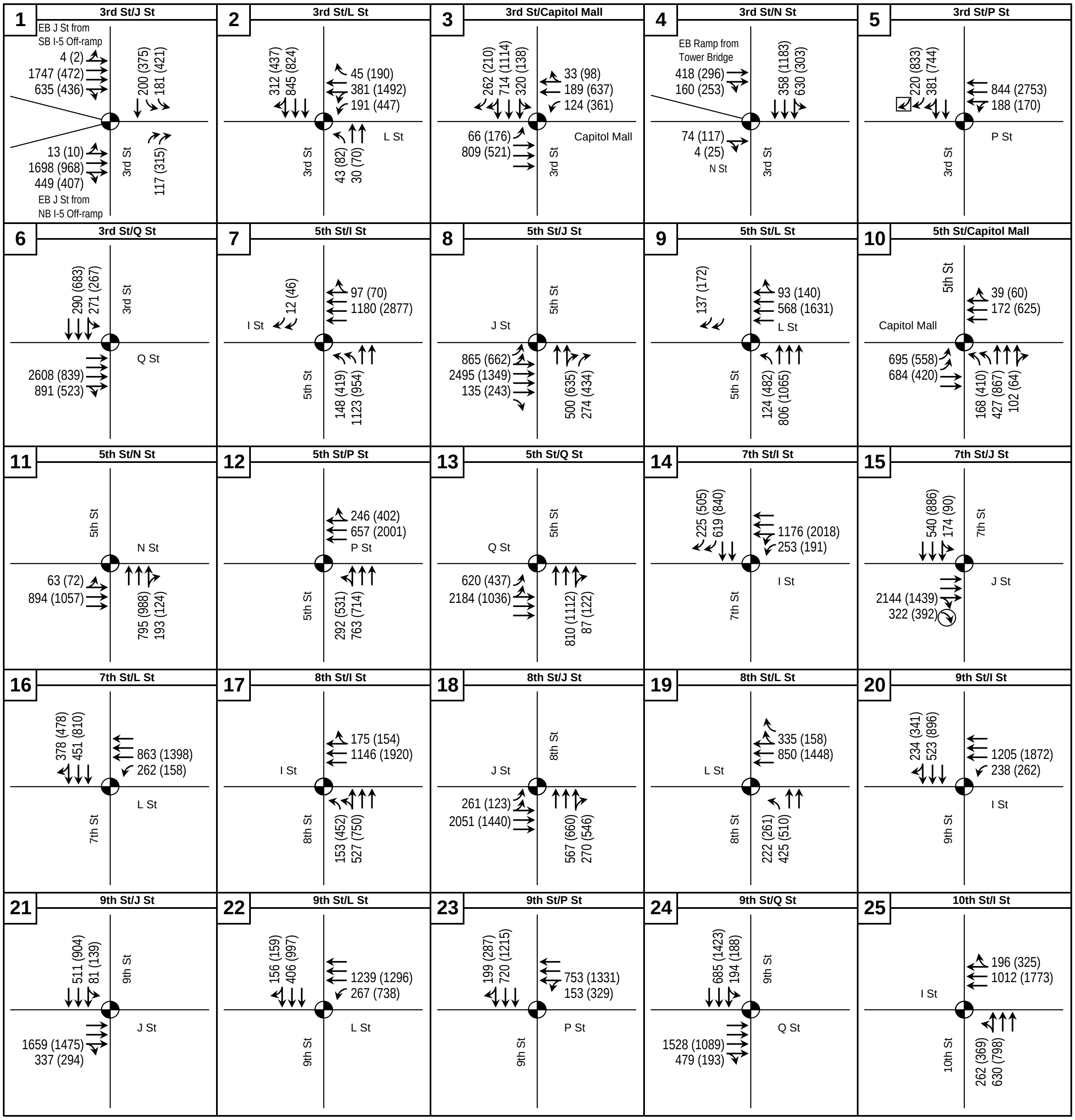
Figure A.9
2013 CUMULATIVE TRAFFIC VOLUMES WITHOUT PROJECTS



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

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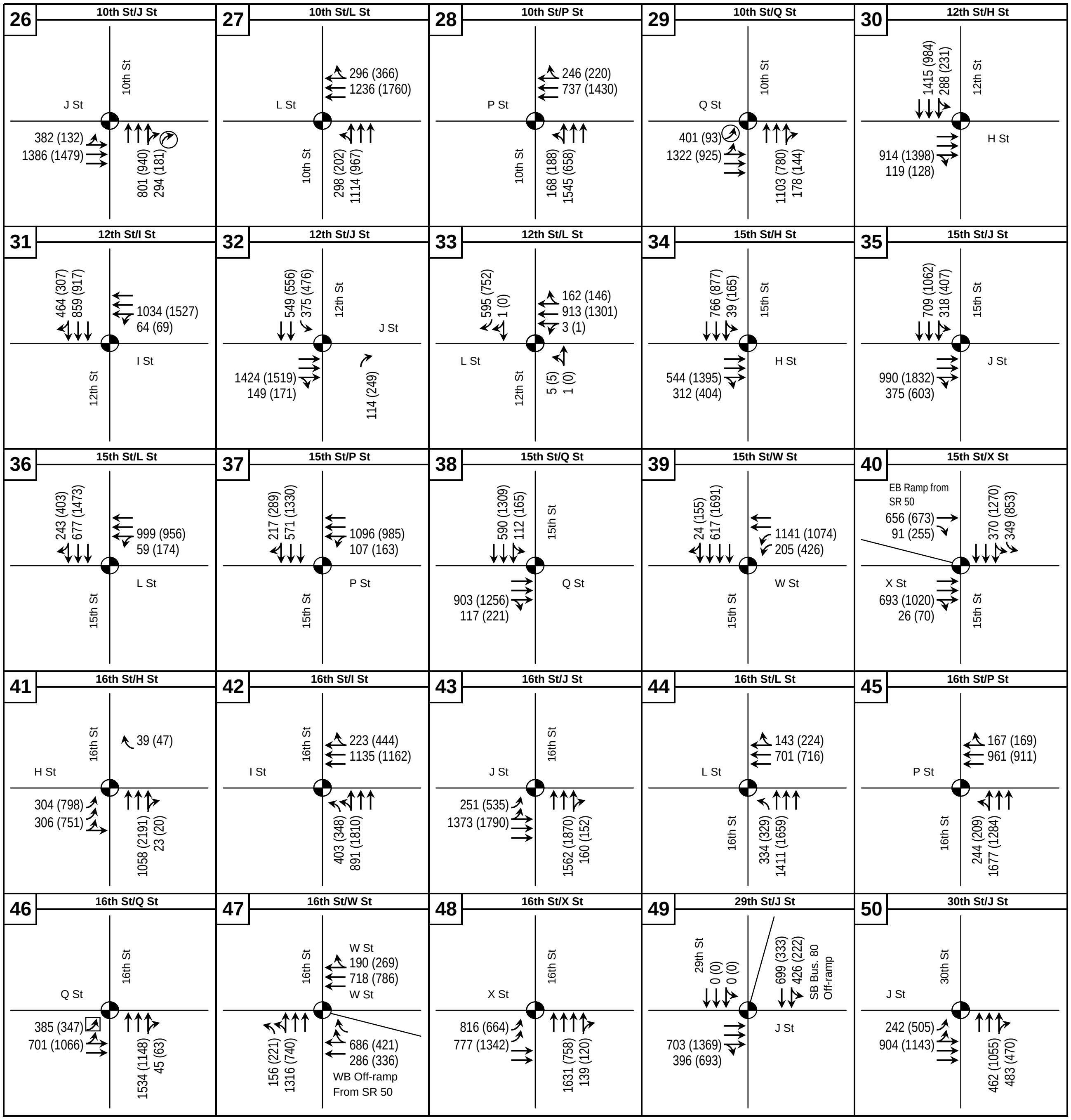
Figure A.10
2030 CUMULATIVE TRAFFIC VOLUMES WITHOUT PROJECTS



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

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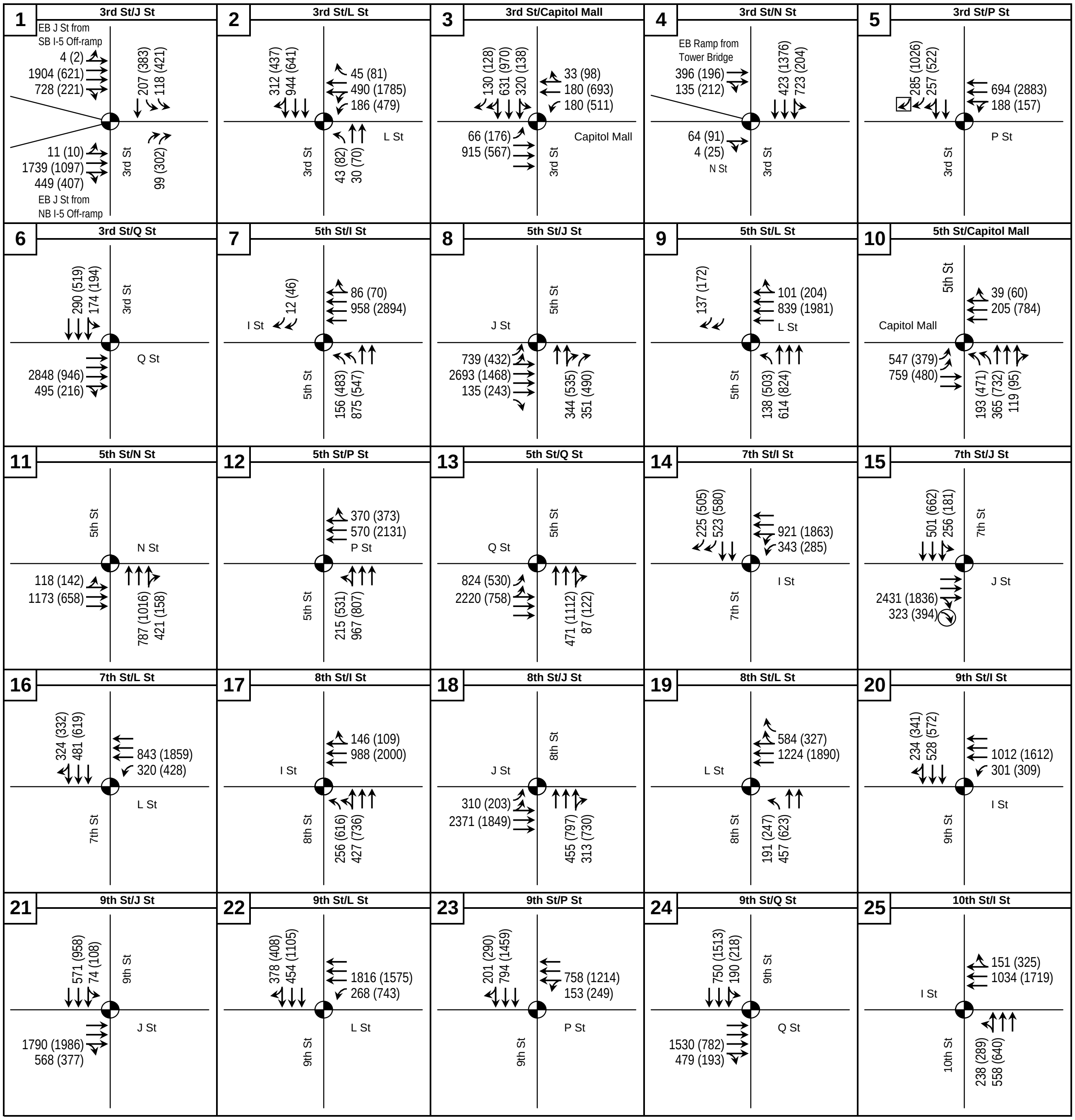
Figure A.10
2030 CUMULATIVE TRAFFIC VOLUMES WITHOUT PROJECTS



KEY

31 (27) = AM (PM) peak hour traffic volume
= Signalized intersection
= Intersection approach lane
= Lane provided during AM peak, only
= Lane provided during PM peak, only

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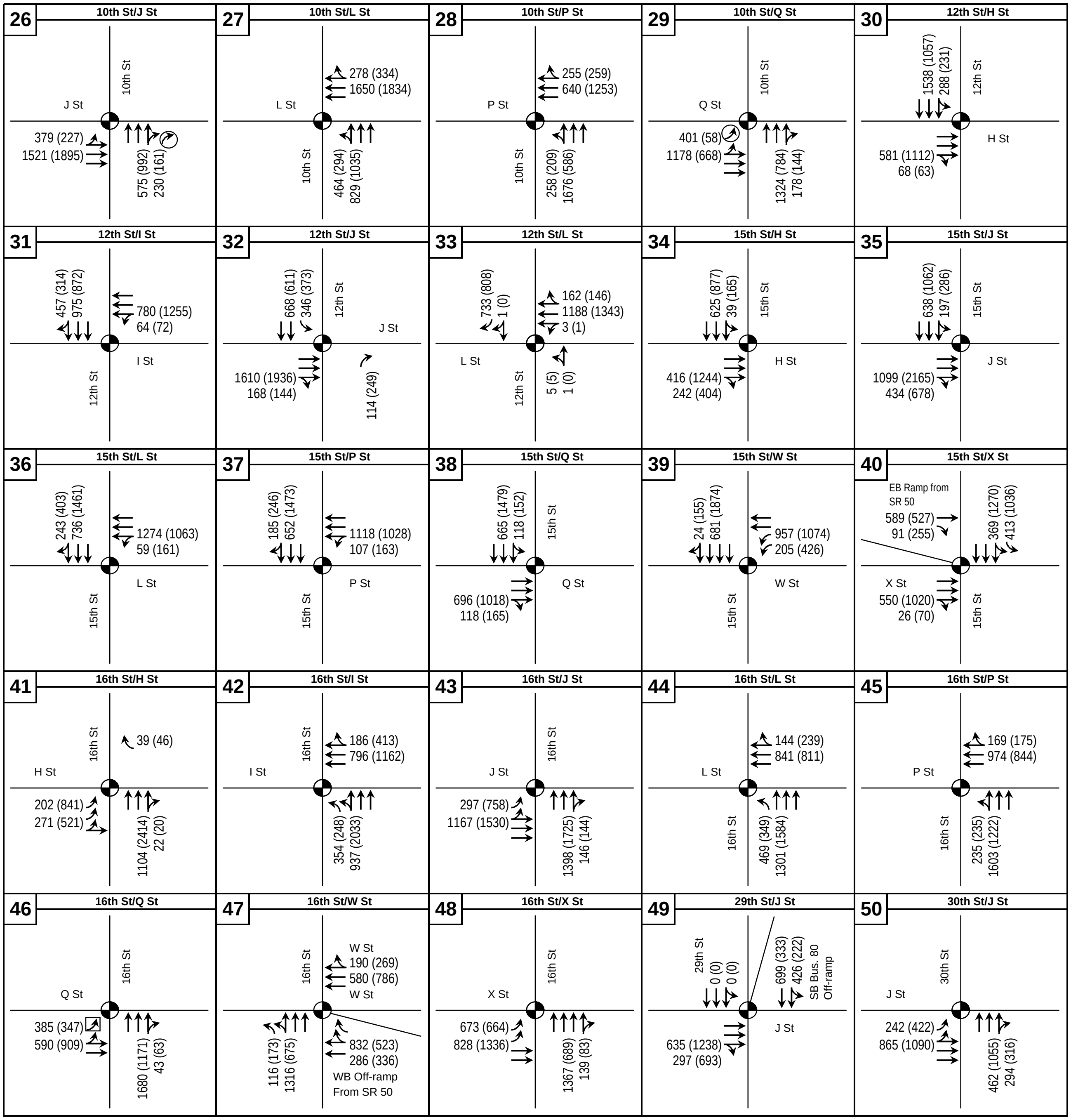
Figure A.11
2013 CUMULATIVE TRAFFIC VOLUMES WITH ALL PROPOSED PROJECTS



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

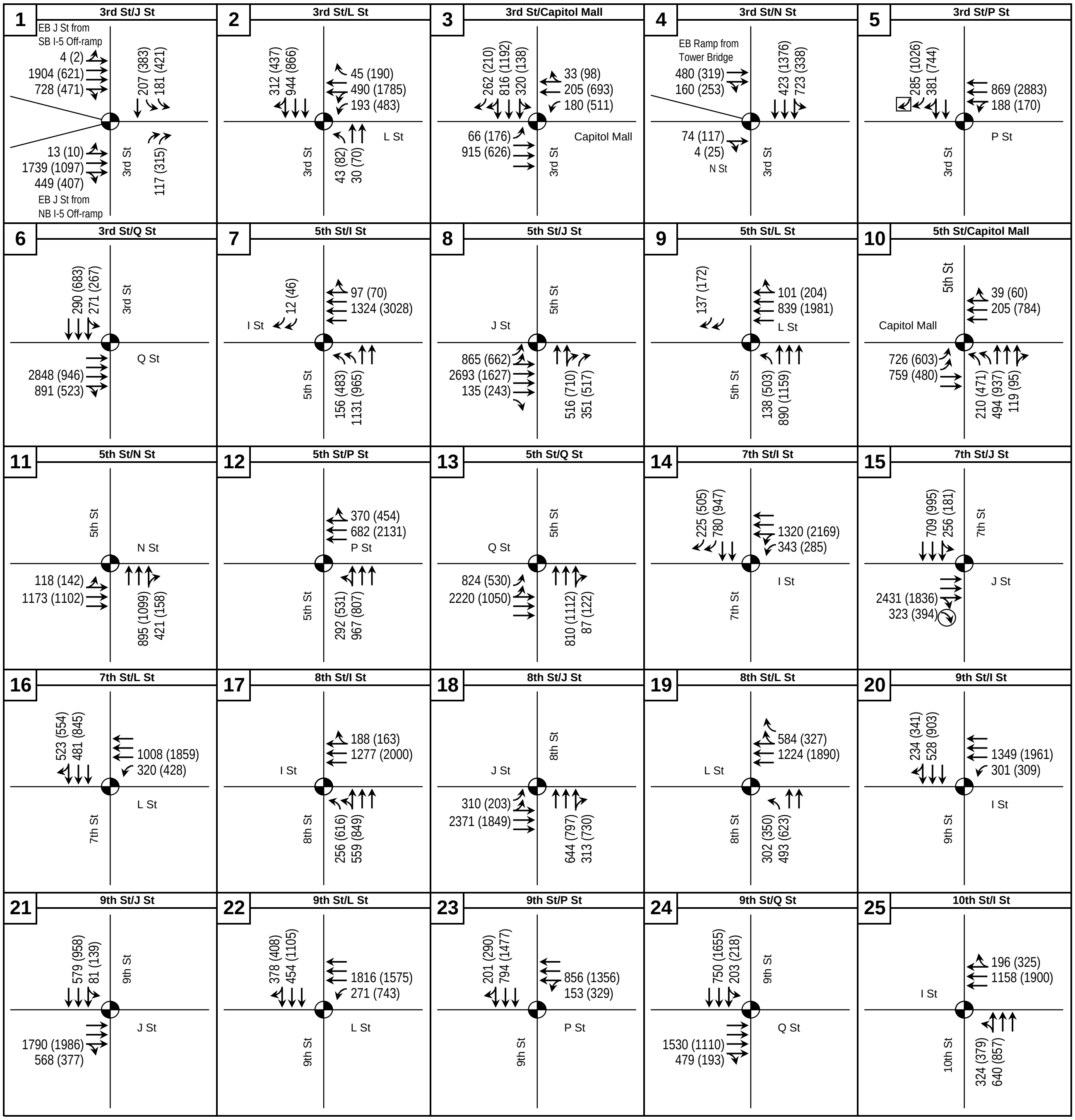
= Lane provided during AM peak, only

= Lane provided during PM peak, only

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

Figure A.11
2013 CUMULATIVE TRAFFIC VOLUMES WITH ALL PROPOSED PROJECTS



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

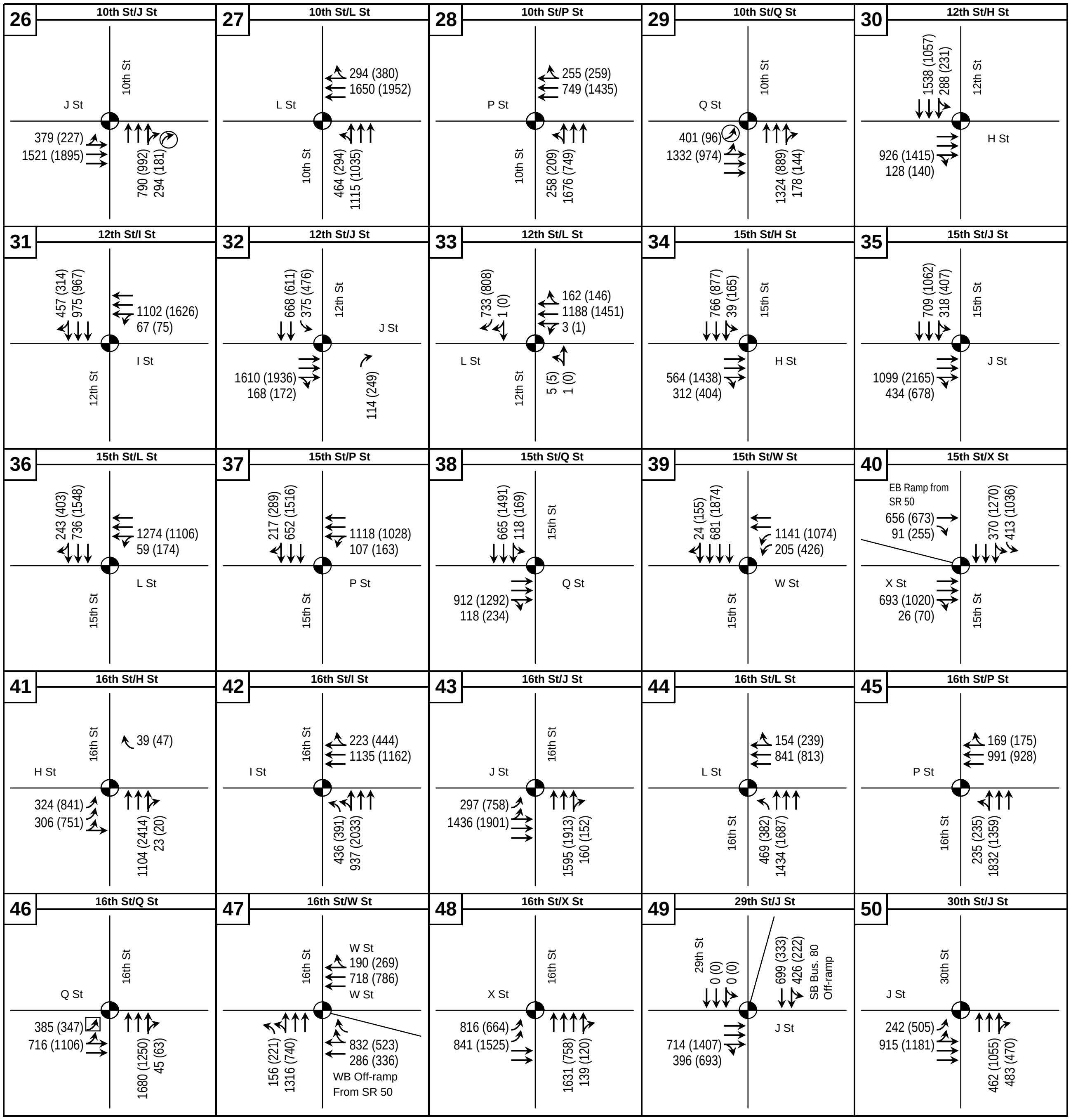
= Lane provided during AM peak, only

= Lane provided during PM peak, only

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

Figure A.12
2030 CUMULATIVE TRAFFIC VOLUMES WITH ALL PROPOSED PROJECTS



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

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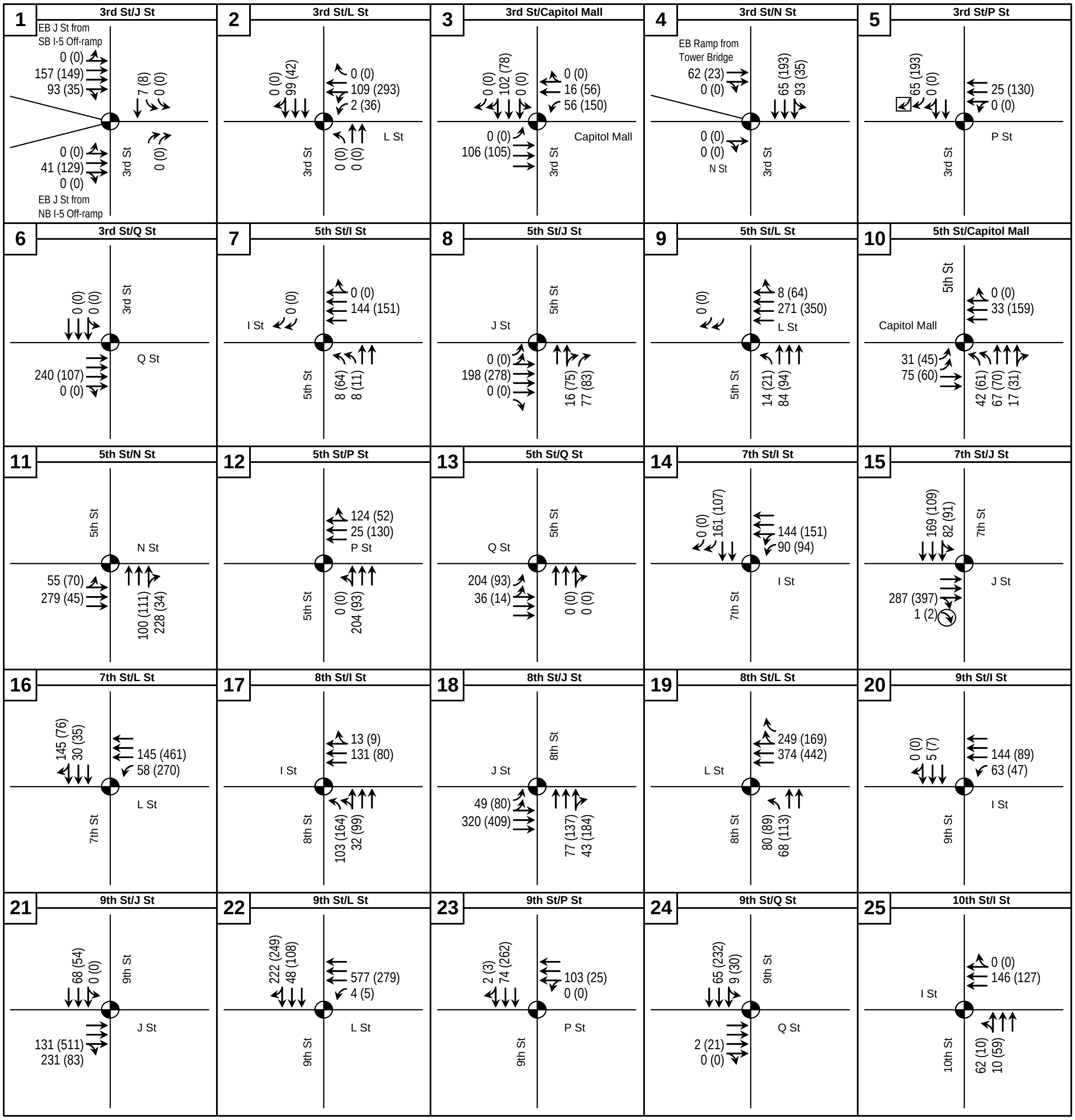
Sacramento Downtown Traffic Study

N W E S

Figure A.12
2030 CUMULATIVE TRAFFIC VOLUMES WITH ALL PROPOSED PROJECTS



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

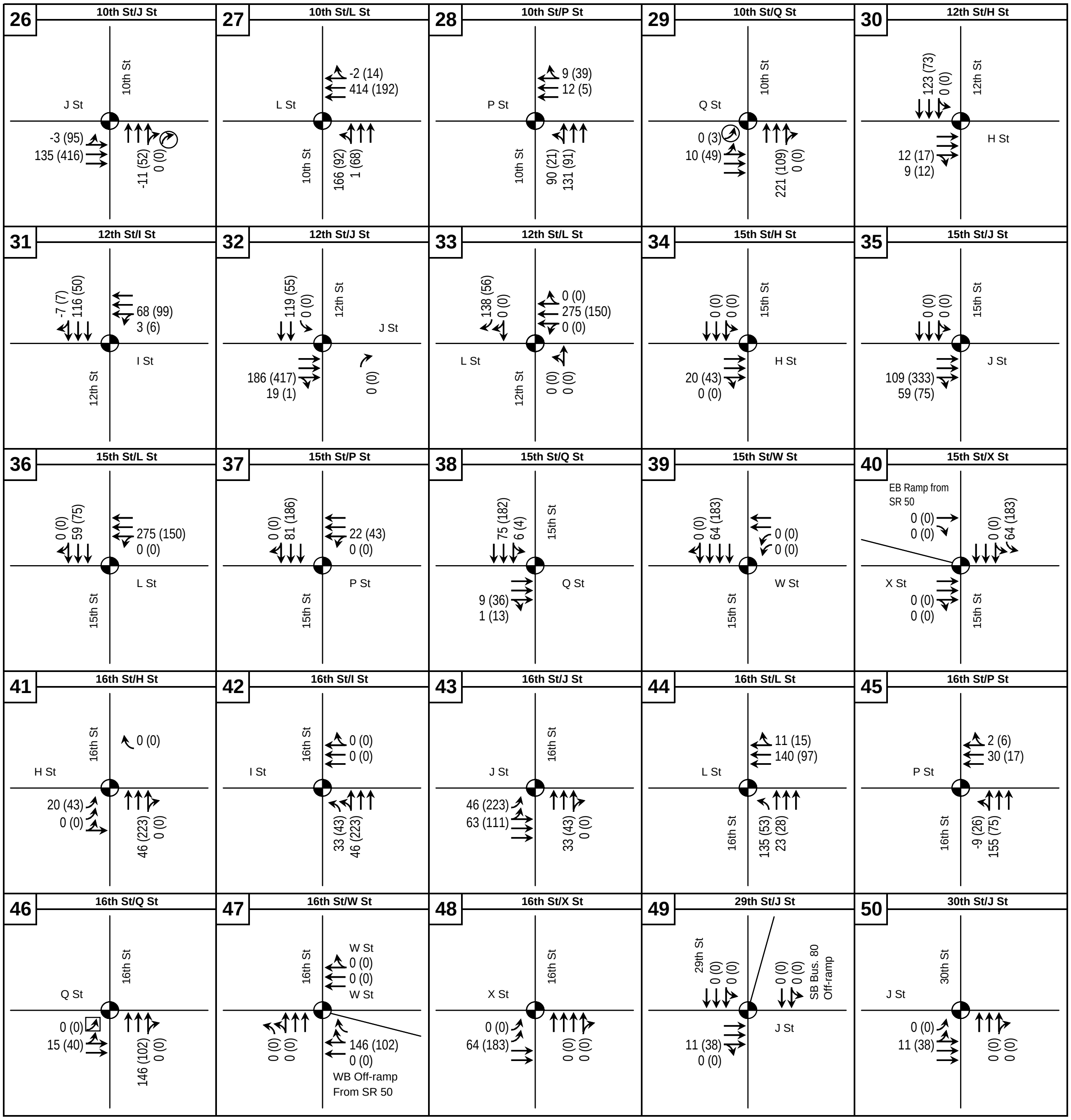
Note:
Project traffic does not include removal of traffic from exising land use on site

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

N W E S

Figure A.13
TRAFFIC VOLUMES
FOR ALL PROPOSED PROJECTS



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

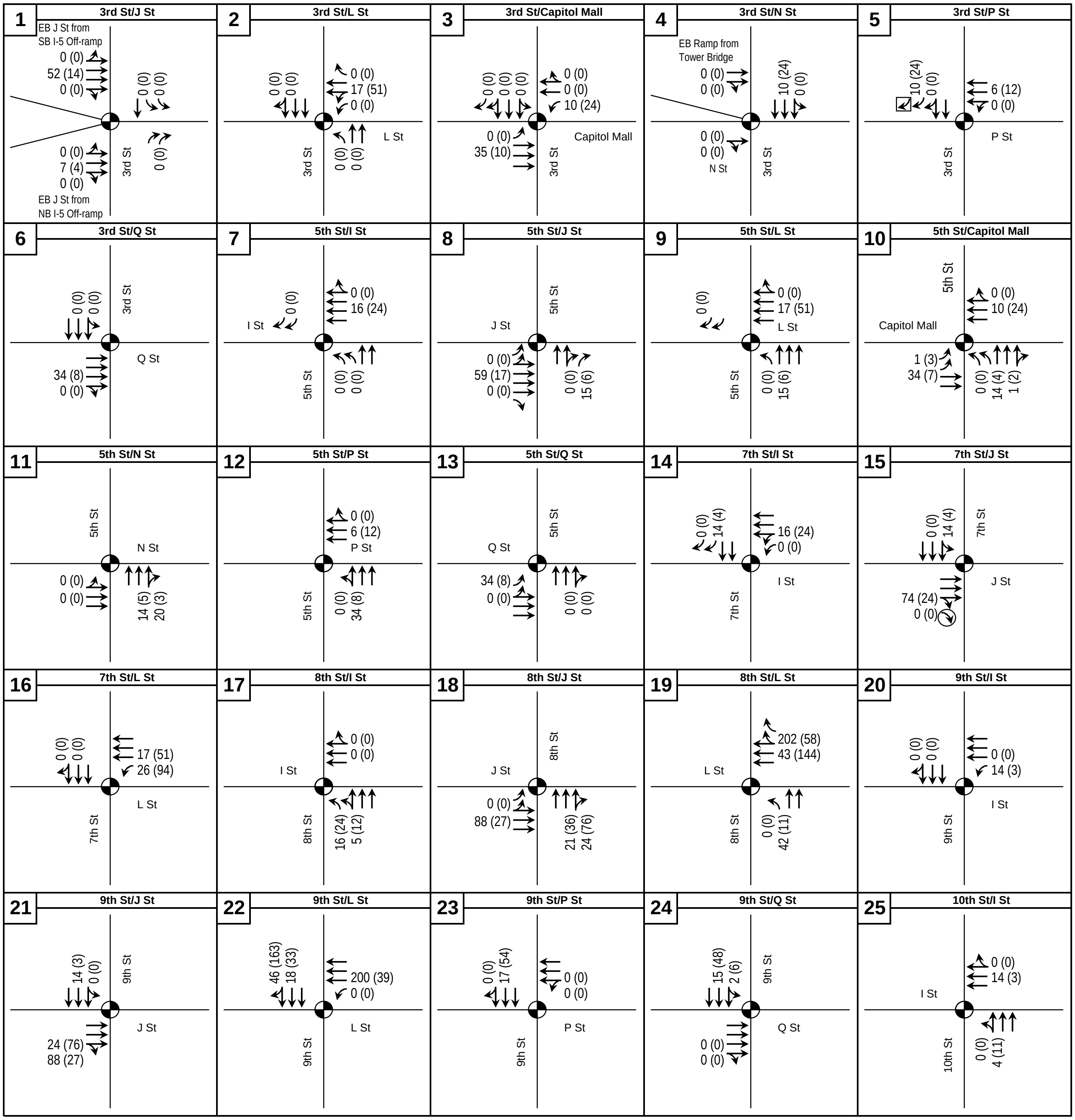
Note:
Project traffic does not include removal of traffic from exising land use on site

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

N W E S

Figure A.13
TRAFFIC VOLUMES
FOR ALL PROPOSED PROJECTS



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

Note:
Project traffic does not include removal of traffic from exising land use on site

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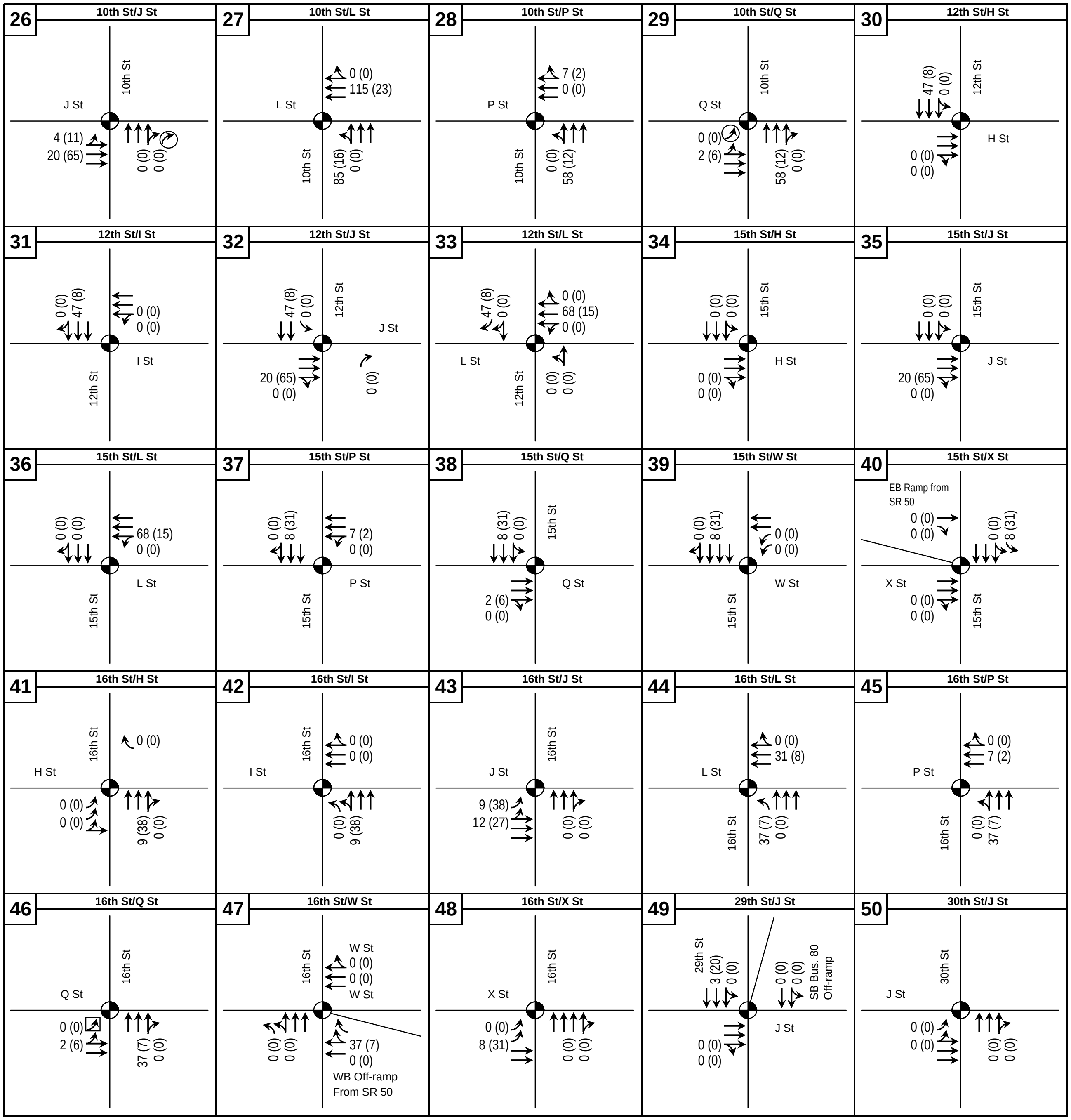
Sacramento Downtown Traffic Study

Figure A.14
TRAFFIC VOLUMES FOR 800 K STREET PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

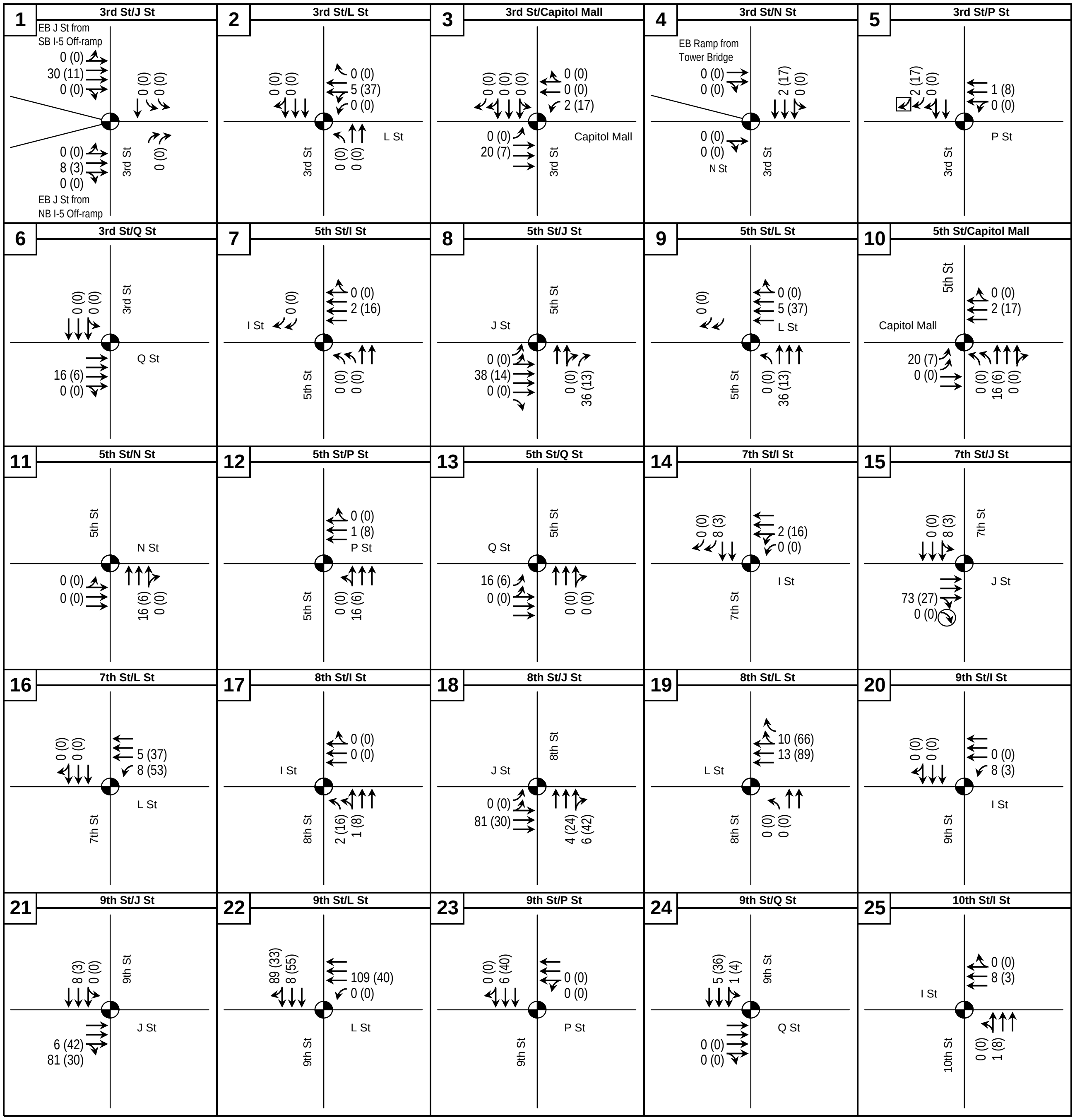
Note:
Project traffic does not include removal of traffic from exising land use on site

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

N W E S

Figure A.14
TRAFFIC VOLUMES FOR 800 K STREET PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume
= Signalized intersection
= Intersection approach lane
= Lane provided during AM peak, only
= Lane provided during PM peak, only

Note:
Project traffic does not include removal of traffic from exising land use on site

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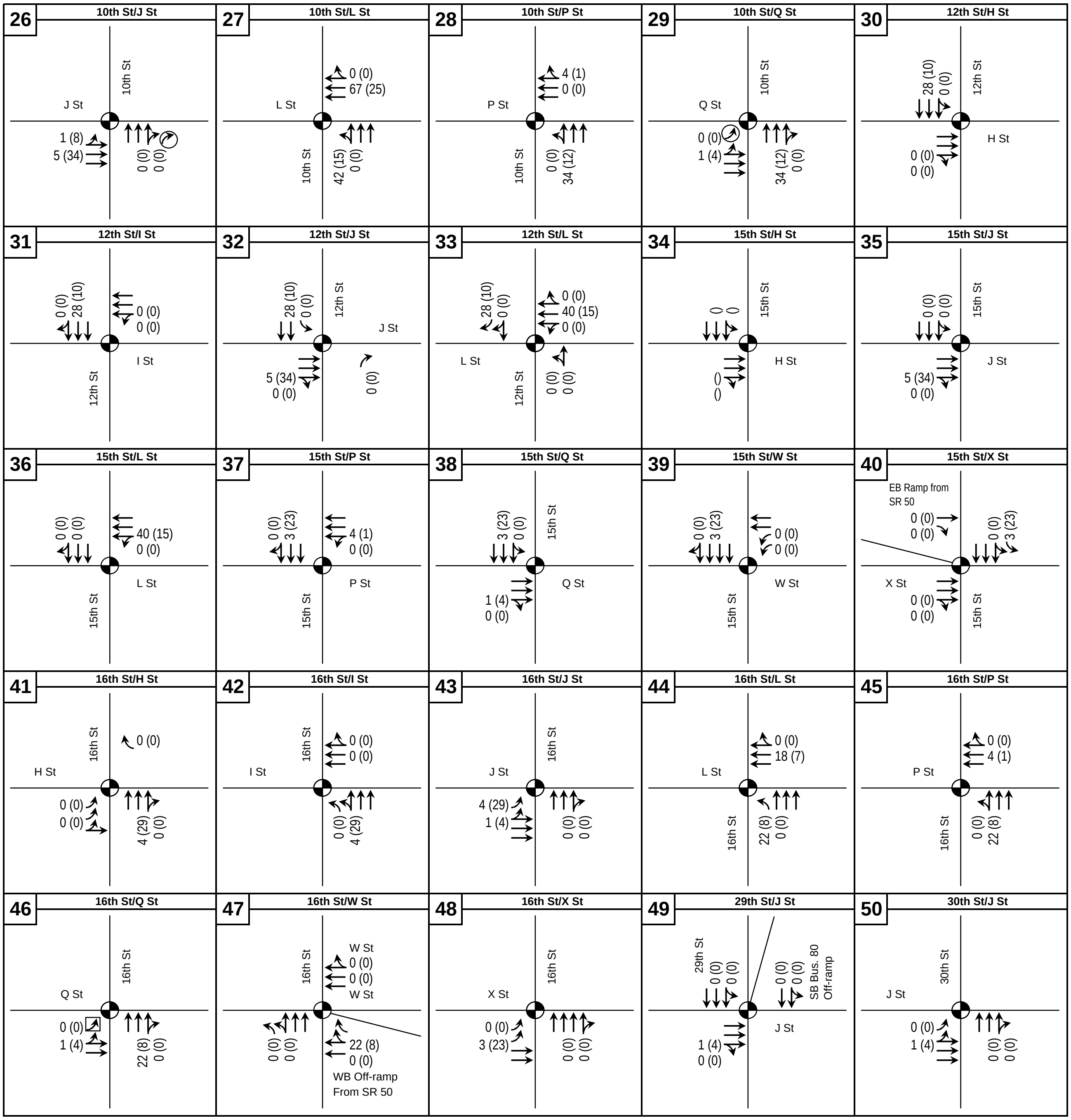
Sacramento Downtown Traffic Study

Figure A.15
TRAFFIC VOLUMES FOR 831 L STREET PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

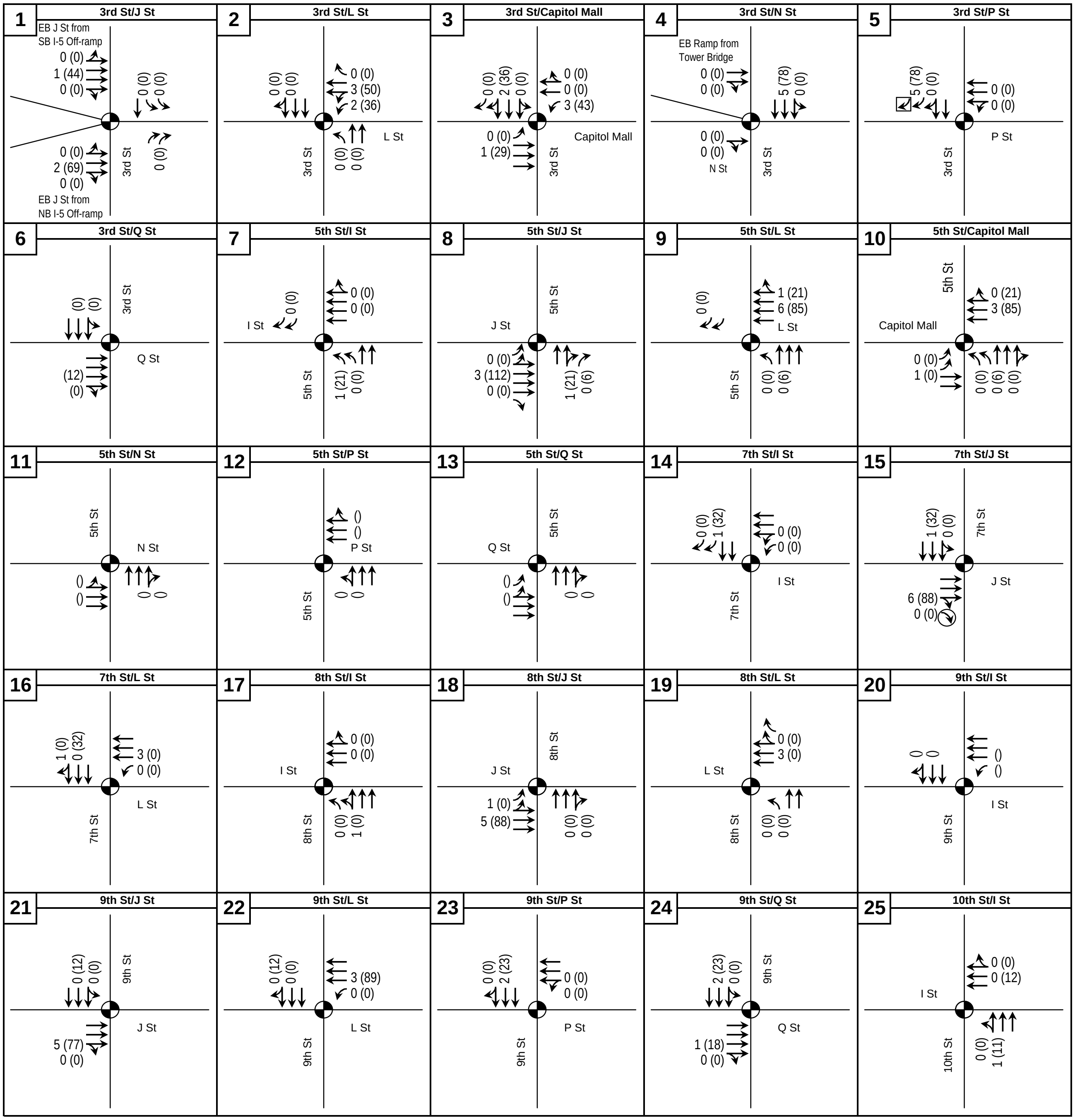
Note:
Project traffic does not include removal of traffic from exising land use on site

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

N W E S

Figure A.15
TRAFFIC VOLUMES FOR 831 L STREET PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

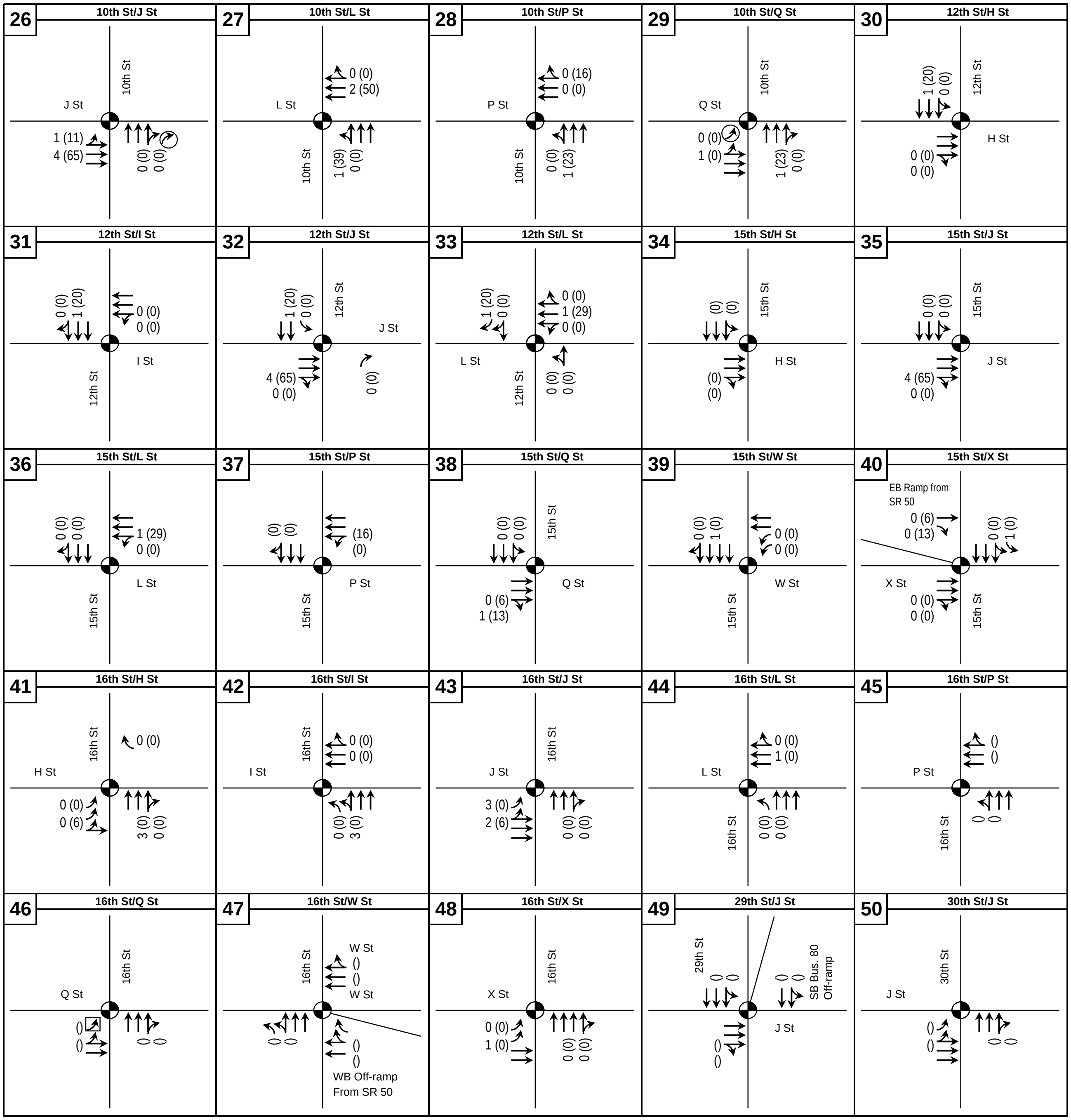
= Lane provided during PM peak, only

Note:
Project traffic does not include removal of traffic from exising land use on site

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

Figure A.16
TRAFFIC VOLUMES FOR WESTFIELD MALL PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

Note:
Project traffic does not include removal of traffic from exising land use on site

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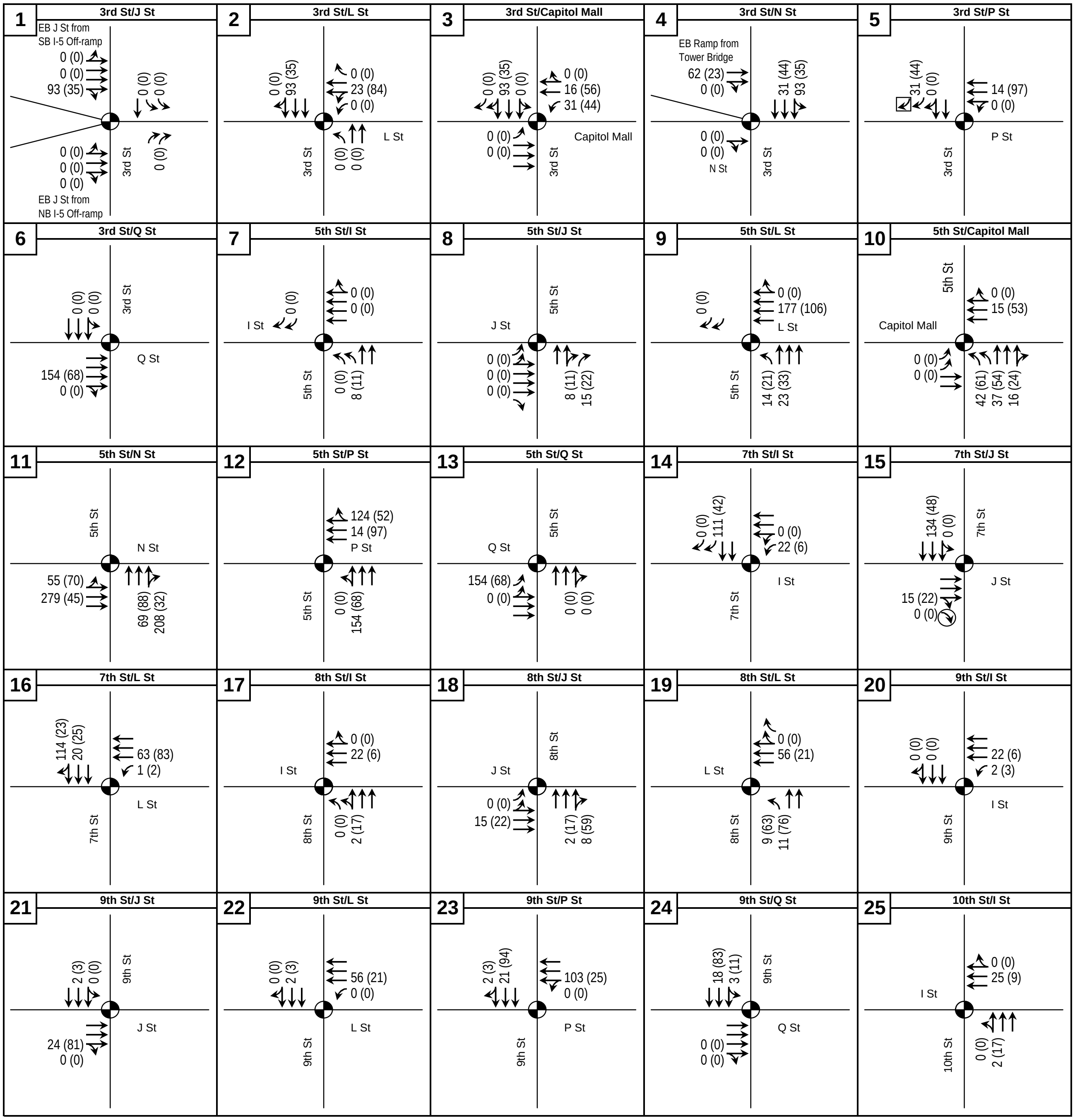
Sacramento Downtown Traffic Study

Figure A.16
TRAFFIC VOLUMES FOR WESTFIELD MALL PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

Note:
Project traffic does not include removal of traffic from exising land use on site

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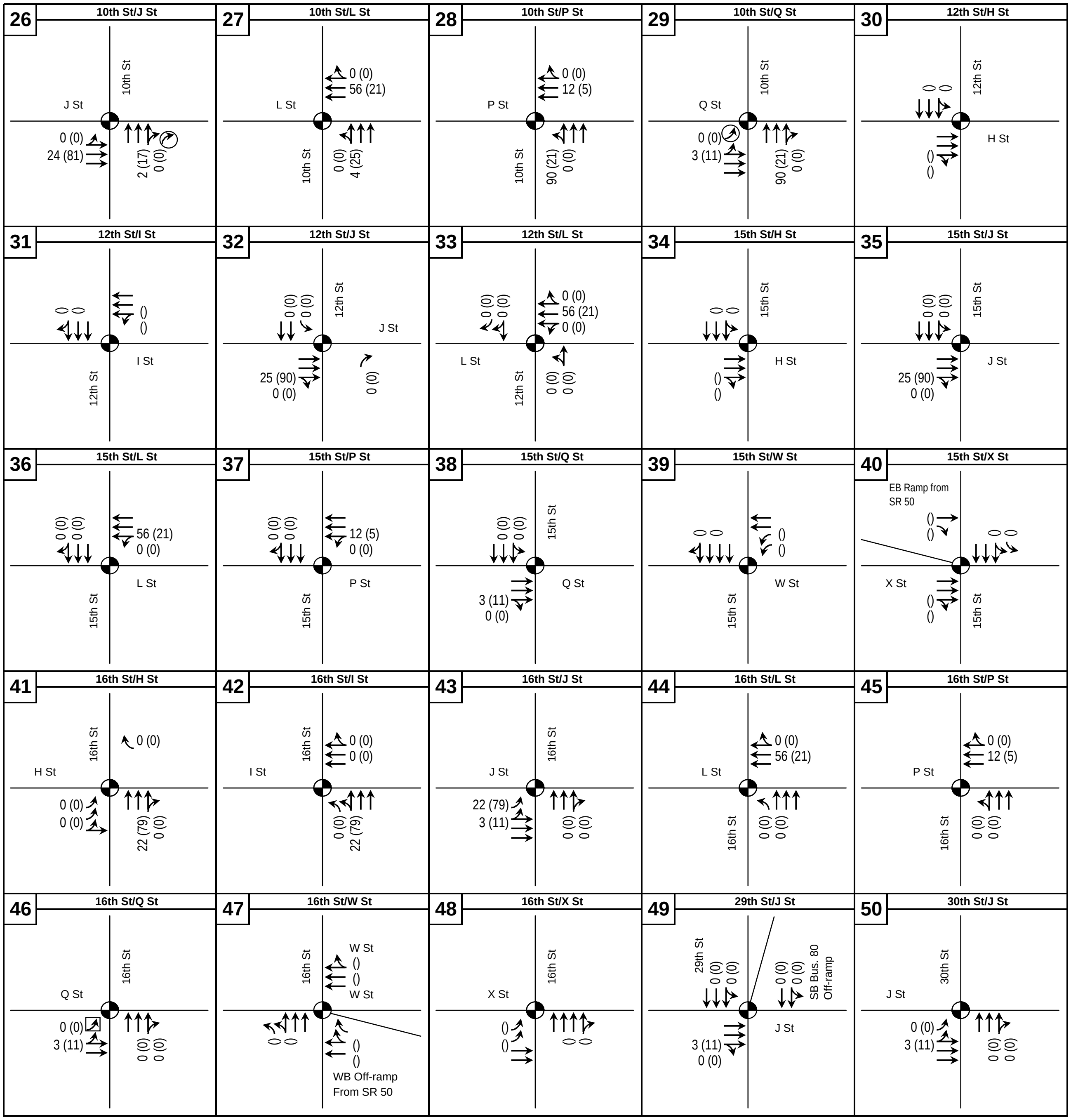
Figure A.17
TRAFFIC VOLUMES FOR
500 CAPITOL MALL PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

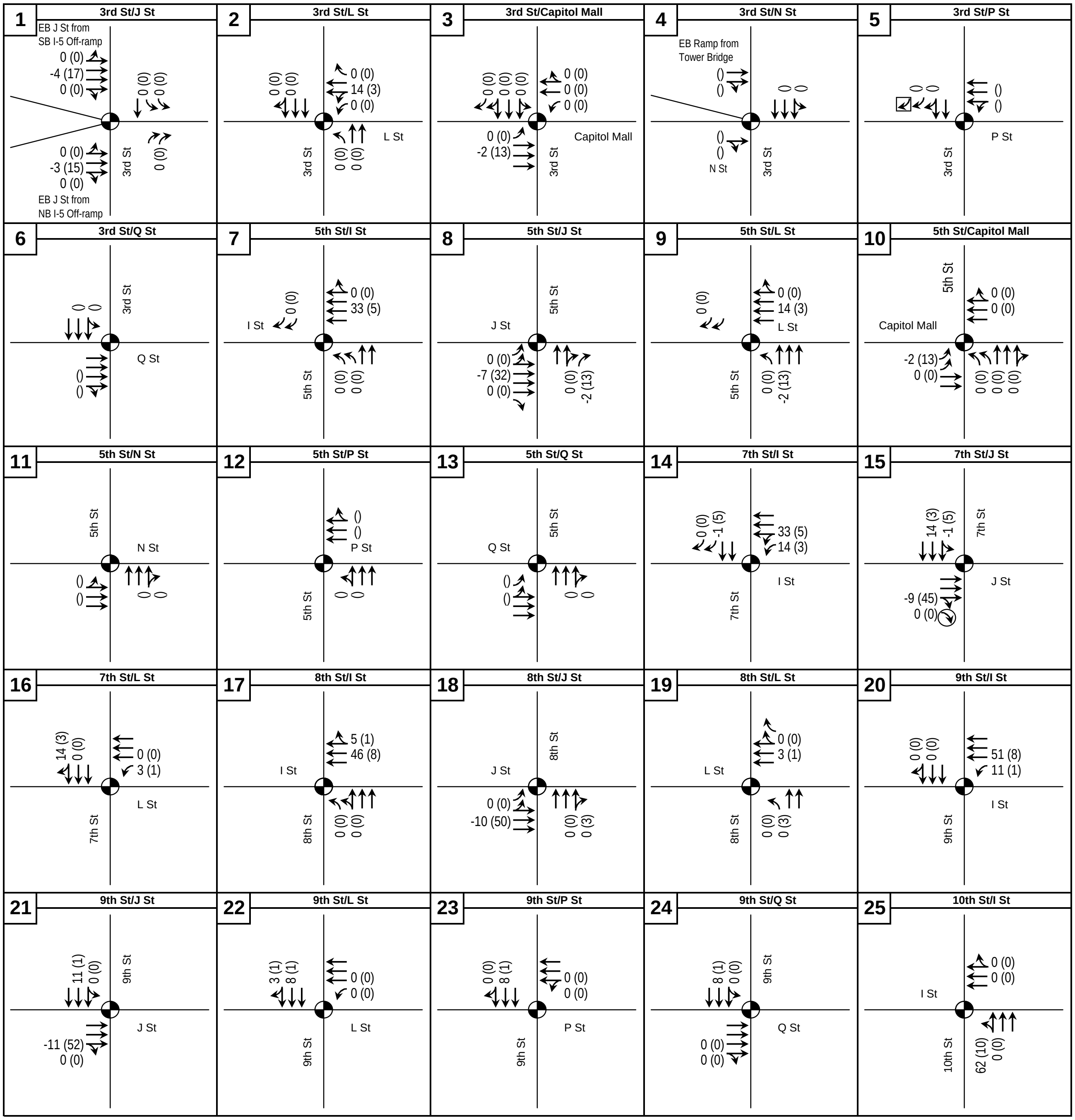
Note:
Project traffic does not include removal of traffic from exising land use on site

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

N W E S

Figure A.17
TRAFFIC VOLUMES FOR
500 CAPITOL MALL PROJECT



KEY
31 (27) = AM (PM) peak hour traffic volume
= Signalized intersection
= Intersection approach lane
= Lane provided during AM peak, only
= Lane provided during PM peak, only

Note:
Project traffic does not include removal of traffic from exising land use on site

Dowling Associates, Inc.

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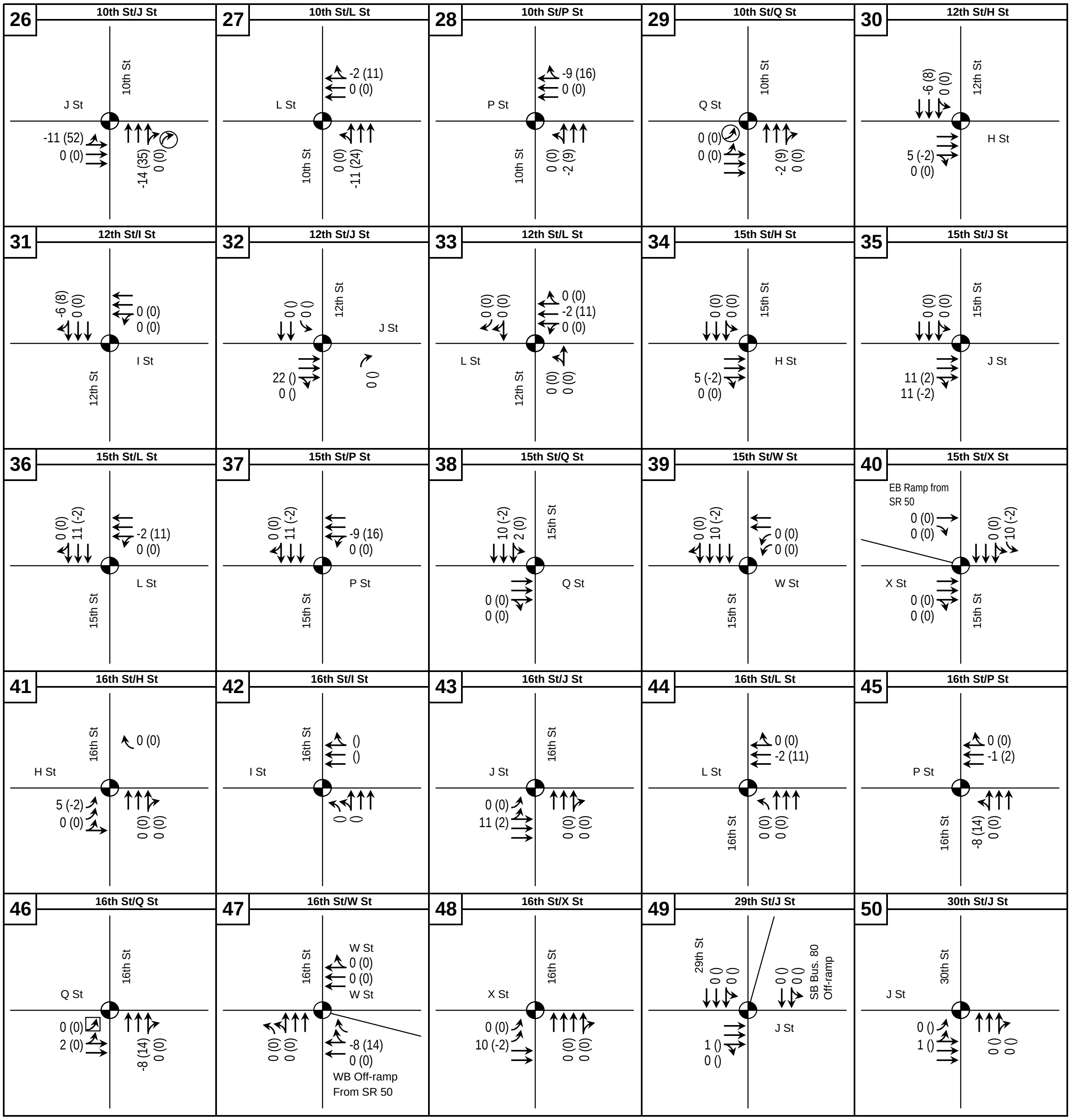
Figure A.18
TRAFFIC VOLUMES FOR 10TH & J STREET PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

Note:
Project traffic does not include removal of traffic from exising land use on site

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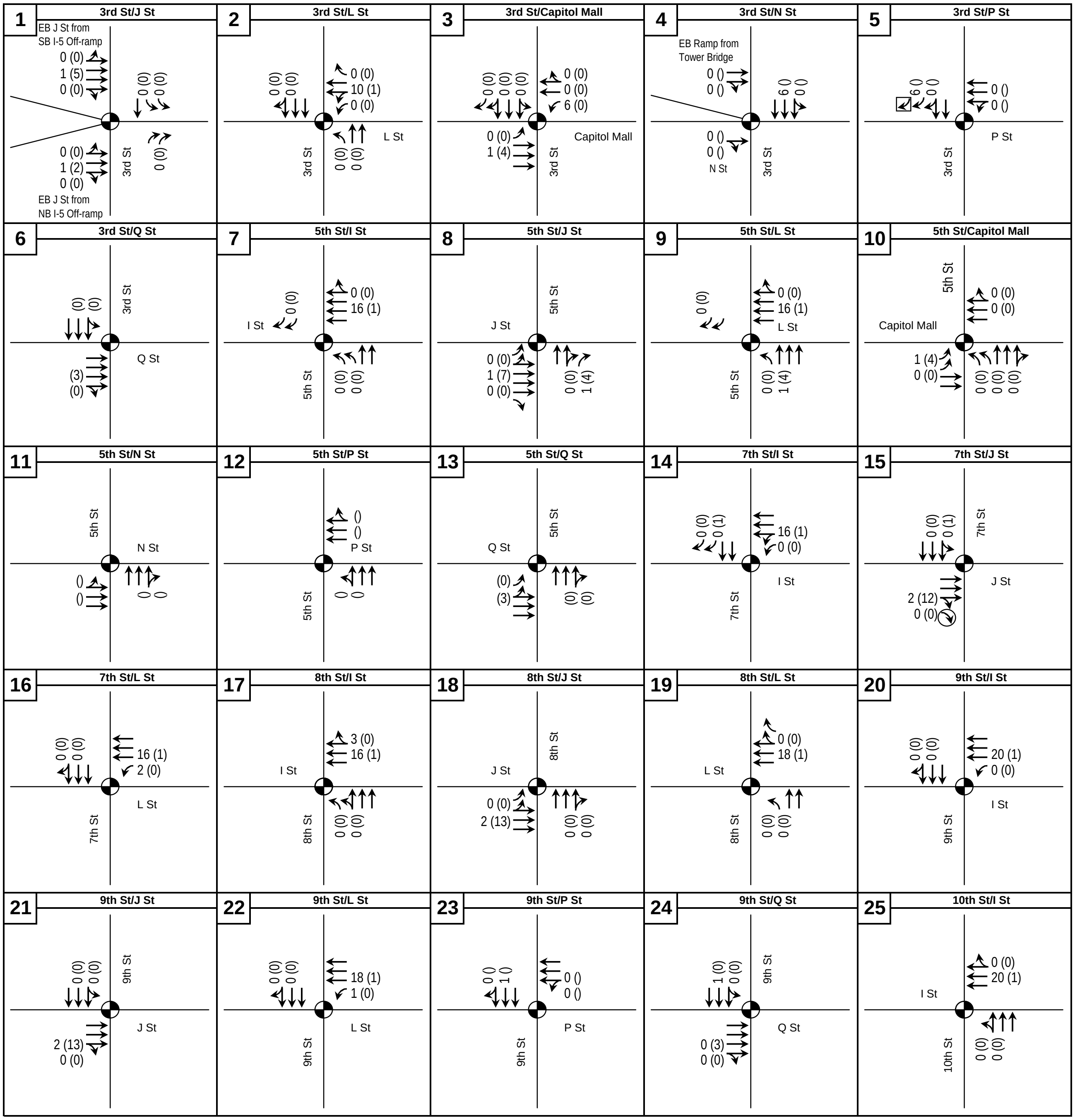
N W E S

Figure A.18
TRAFFIC VOLUMES FOR 10TH & J STREET PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

Note:
Project traffic does not include removal of traffic from exising land use on site

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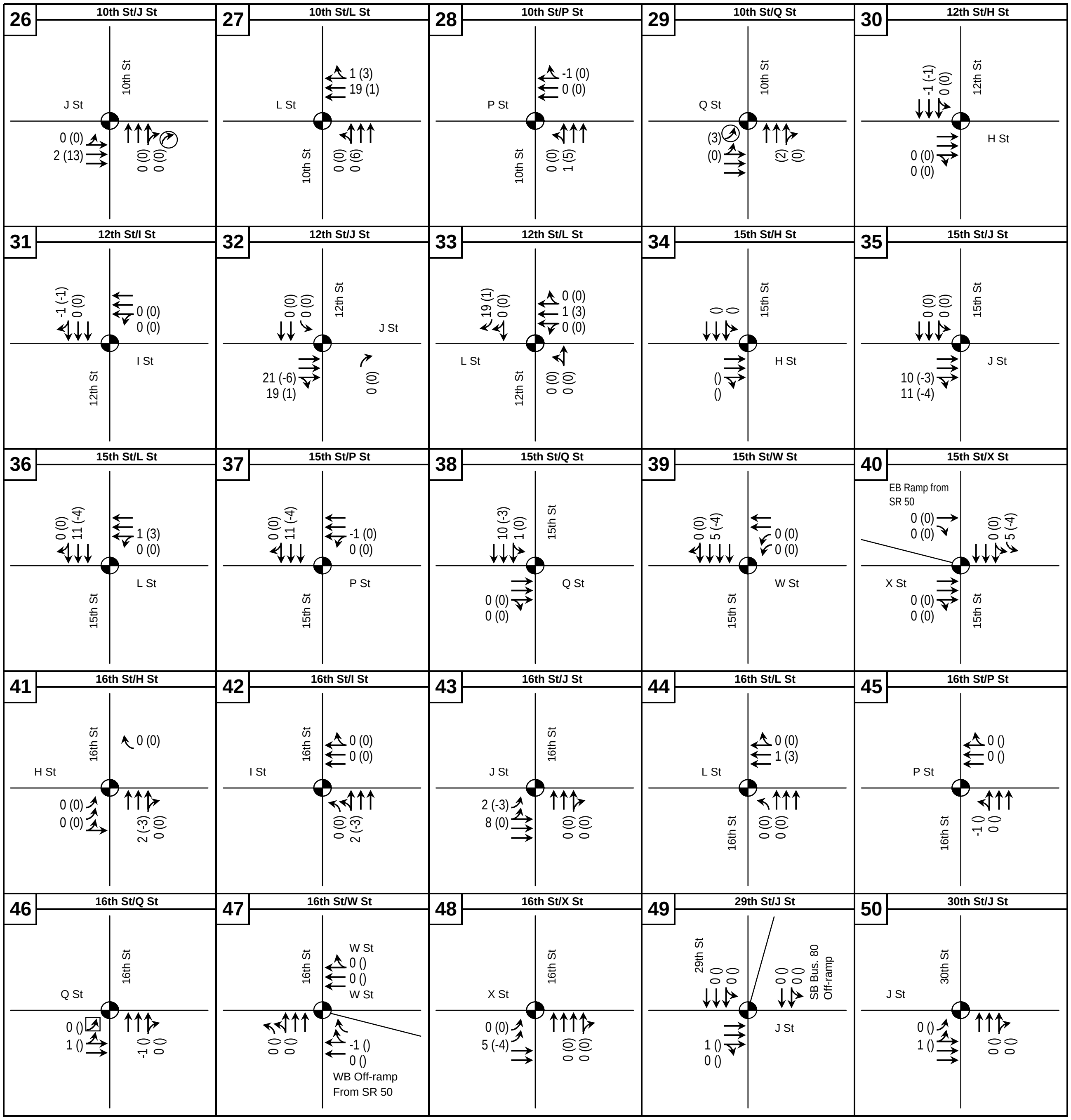
Figure A.19
TRAFFIC VOLUMES FOR
11TH & J STREET PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

Note:
Project traffic does not include removal of traffic from exising land use on site

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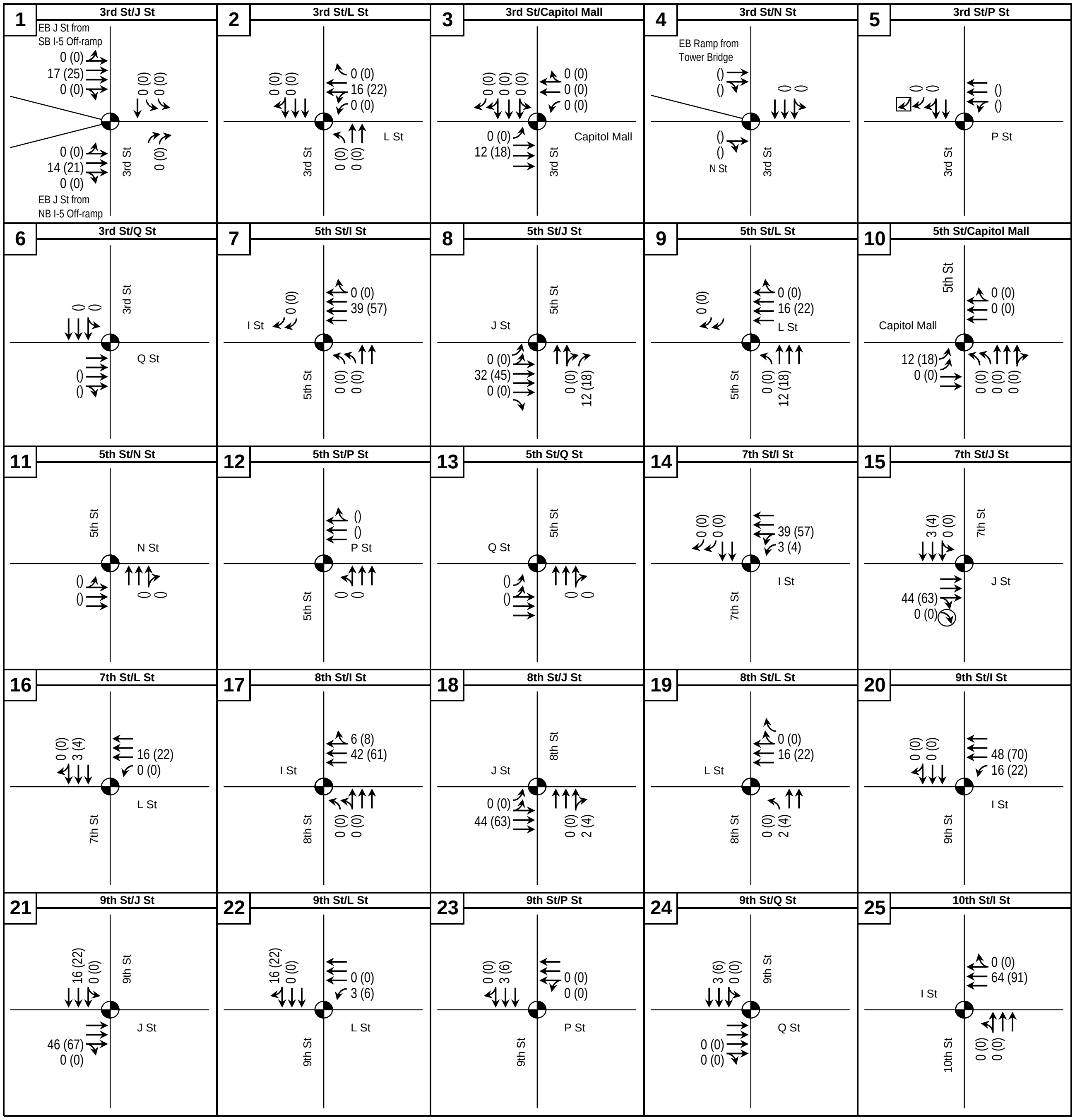
N W E S

Figure A.19
TRAFFIC VOLUMES FOR
11TH & J STREET PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

Note:
Project traffic does not include removal of traffic from exising land use on site

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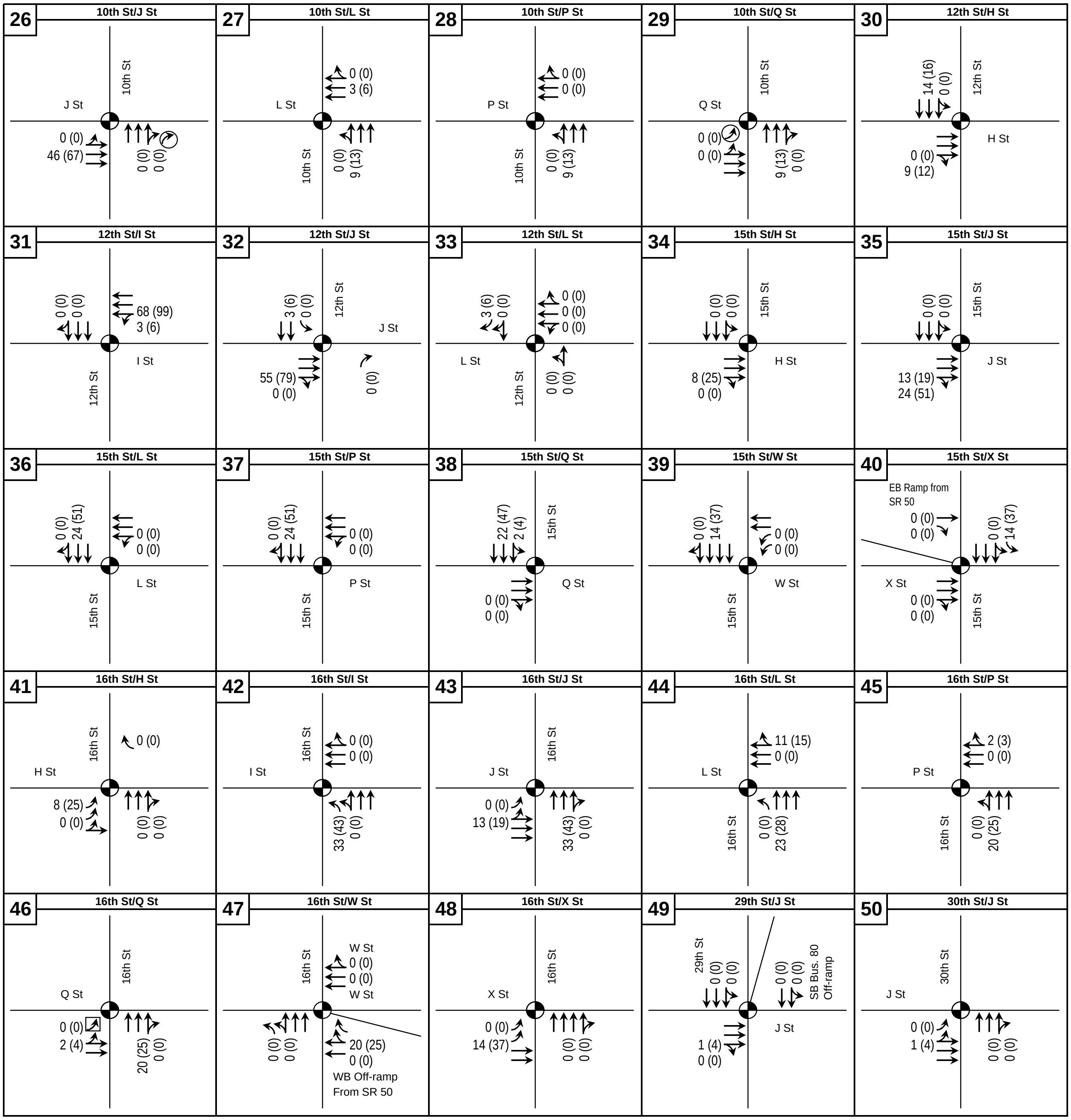
Figure A.20
TRAFFIC VOLUMES FOR EPIC TOWER PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

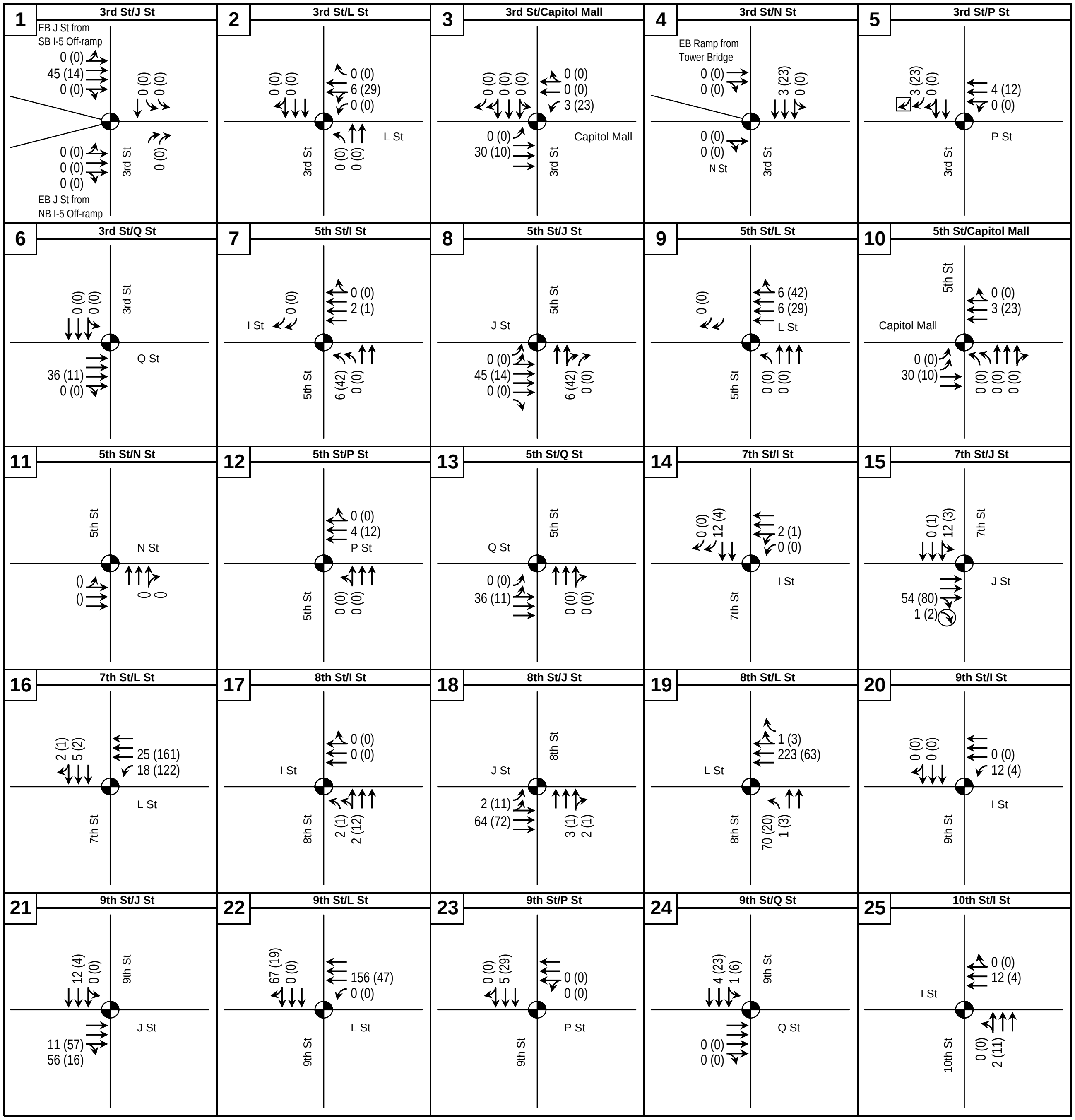
Note:
Project traffic does not include removal of traffic from exising land use on site

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

N W E S

Figure A.20
TRAFFIC VOLUMES FOR EPIC TOWER PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

Note:
Project traffic does not include removal of traffic from exising land use on site

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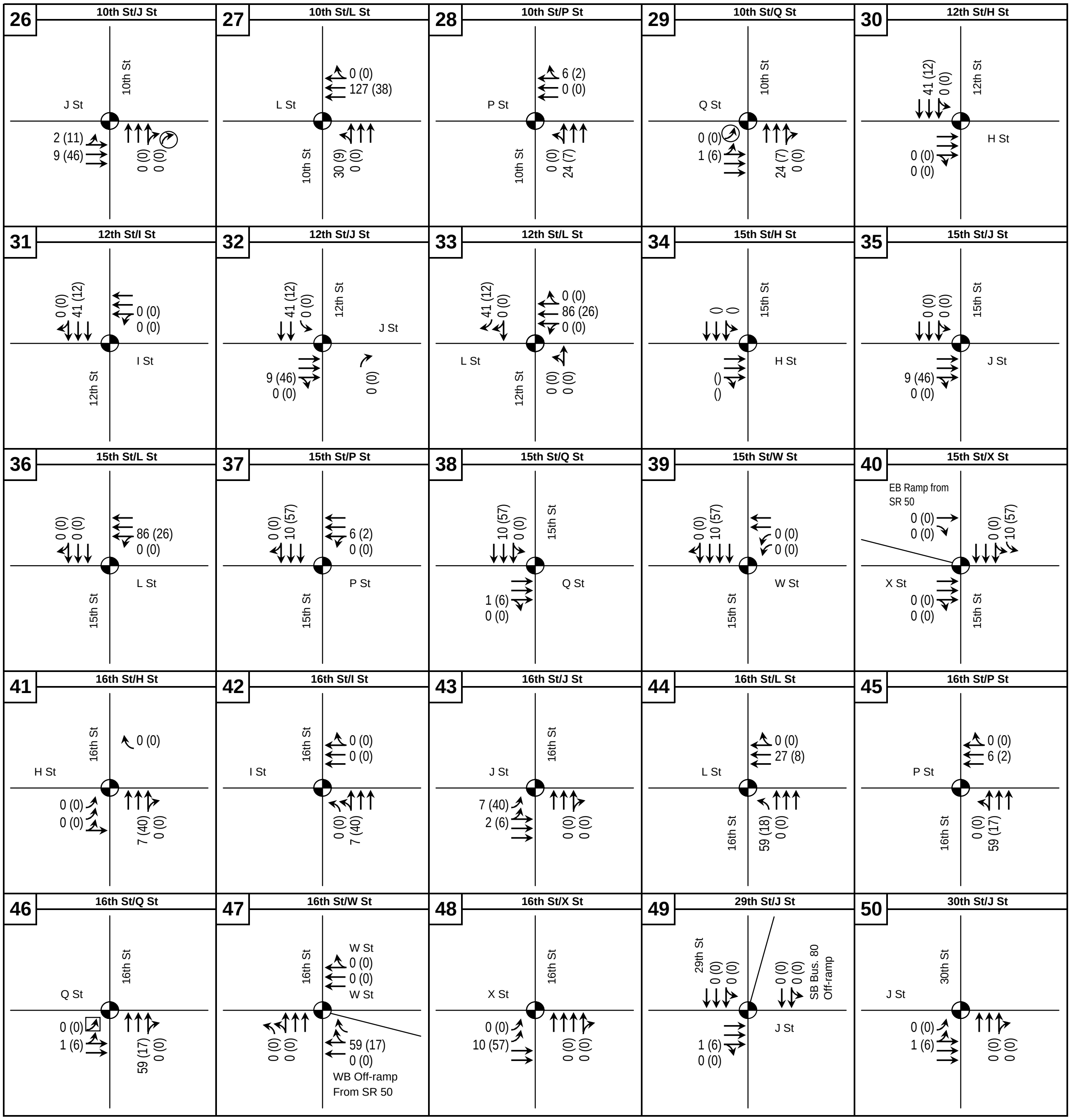
Sacramento Downtown Traffic Study

N W E S

Figure A.21
TRAFFIC VOLUMES FOR 701 L STREET PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

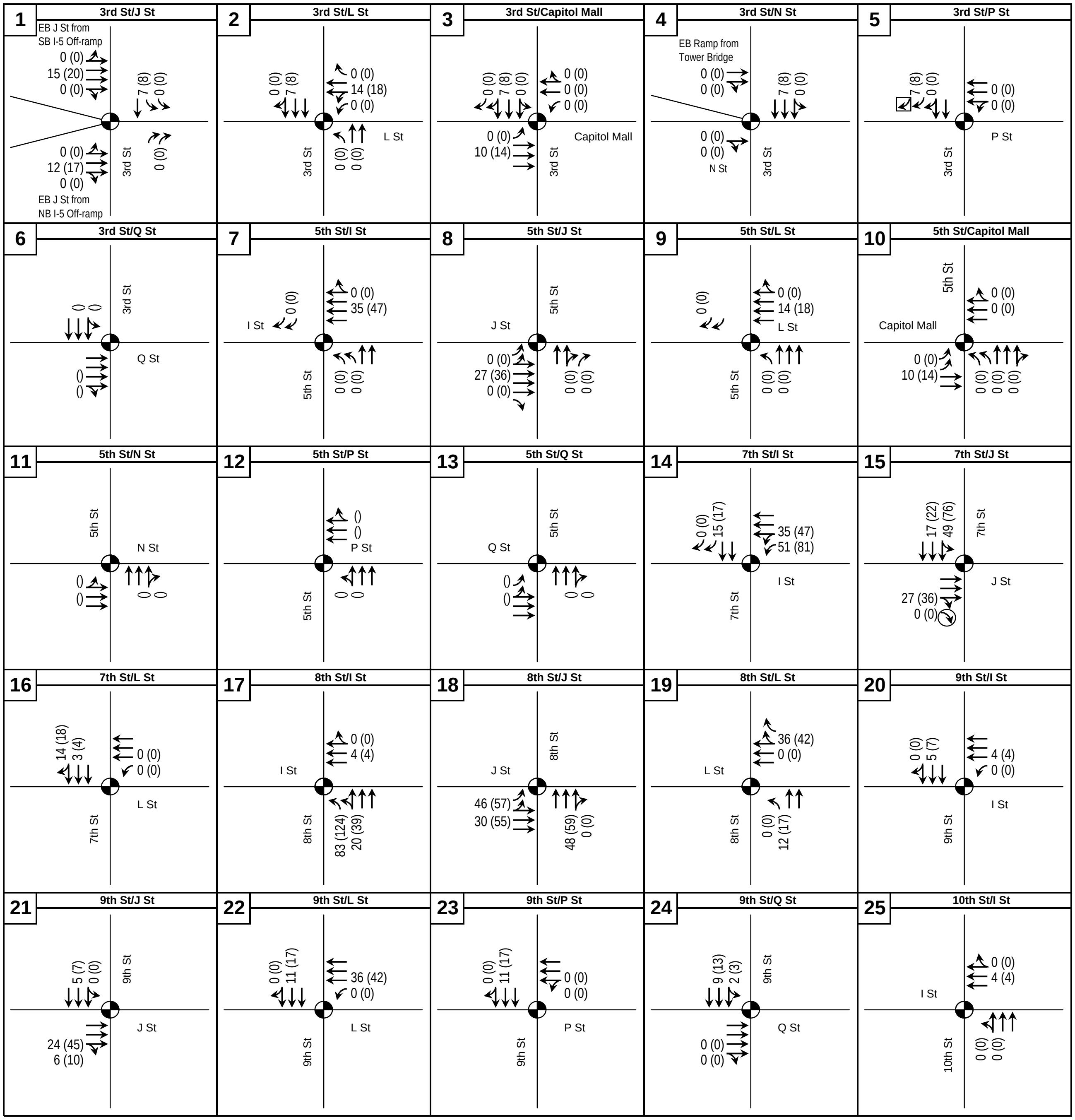
= Lane provided during PM peak, only

Note:
Project traffic does not include removal of traffic from exising land use on site

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

Figure A.21
TRAFFIC VOLUMES FOR 701 L STREET PROJECT



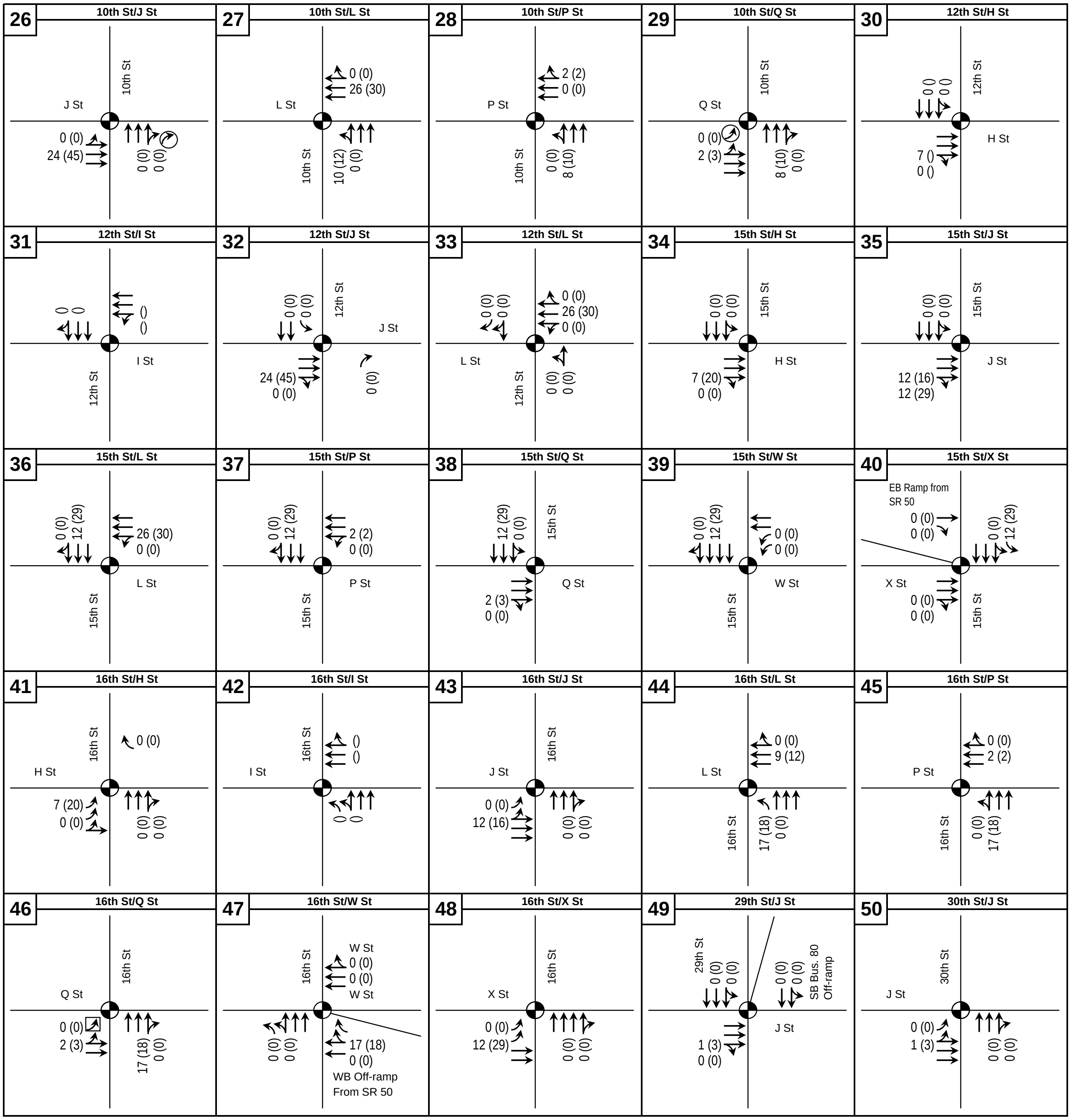
KEY
31 (27) = AM (PM) peak hour traffic volume
= Signalized intersection
= Intersection approach lane
= Lane provided during AM peak, only
= Lane provided during PM peak, only

Note:
Project traffic does not include removal of traffic from exising land use on site

Dowling Associates, Inc.

Sacramento Downtown Traffic Study

Figure A.22
TRAFFIC VOLUMES FOR 8TH & I STREET PROJECT



KEY

31 (27) = AM (PM) peak hour traffic volume

= Signalized intersection

= Intersection approach lane

= Lane provided during AM peak, only

= Lane provided during PM peak, only

Note:
Project traffic does not include removal of traffic from exising land use on site

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Sacramento Downtown Traffic Study

N W E S

Figure A.22
TRAFFIC VOLUMES FOR 8TH & I STREET PROJECT

Appendix D Levels of Service Worksheets

```
------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                            Existing Conditions
                               AM Peak Hour
------------------------------------------------------------------------------
                     Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #1 3rd St/J St
******************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.879
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):      44.4
Optimal Cycle:      109              Level Of Service:                 D
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted       Split Phase      Split Phase
Rights:          Include          Include          Include          Include
Min. Green:    0    0   15   15   15    0   35   35   35   50   50   50
Lanes:       0  0  0  0  2    2  0  1  0  0    0  1  2  1  0    0  1  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 28 Sep 2004 << 7:45
Base Vol:      0    0   91   88  106    0    4 1611  192   10 1568  449
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   0    0   91   88  106    0    4 1611  192   10 1568  449
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    0    0   91   88  106    0    4 1611  192   10 1568  449
Reduct Vol:    0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   0    0   91   88  106    0    4 1611  192   10 1568  449
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    0    0   91   88  106    0    4 1611  192   10 1568  449
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 0.67 0.55 0.90 1.00 0.81 0.81 0.81 0.79 0.79 0.79
Lanes:       0.00 0.00 2.00 2.00 1.00 0.00 0.01 3.57 0.42 0.01 2.33 0.66
Final Sat.:    0    0 2558 2093 1710    0   14 5460  651   22 3492 1000
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.04 0.04 0.06 0.00 0.30 0.30 0.30 0.45 0.45 0.45
Crit Moves:                       ****      ****                     ****
Green/Cycle: 0.00 0.00 0.14 0.14 0.14 0.00 0.32 0.32 0.32 0.46 0.46 0.46
Volume/Cap:  0.00 0.00 0.26 0.31 0.45 0.00 0.92 0.92 0.92 0.98 0.98 0.98
Delay/Veh:    0.0  0.0 43.8 45.0 49.3  0.0 44.0 44.0 44.0 44.4 44.4 44.4
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0 43.8 45.0 49.3  0.0 44.0 44.0 44.0 44.4 44.4 44.4
HCM2k95th:     0    0    4    5    8    0   30   30   30   46   46   46
******************************************************************************
```



```
------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                            Existing Conditions
                               AM Peak Hour
------------------------------------------------------------------------------
                     Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #2 3rd St/L St
******************************************************************************
Cycle (sec):         70              Critical Vol./Cap. (X):        0.261
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      13.2
Optimal Cycle:       76              Level Of Service:                 B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0    0    0   34   34    0    0    0   36   36   36
Lanes:       0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 28 Sep 2004 << 8
Base Vol:      0    0    0    0  541  138    0    0    0  125  314   75
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   0    0    0    0  541  138    0    0    0  125  314   75
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    0    0    0    0  541  138    0    0    0  125  314   75
Reduct Vol:    0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   0    0    0    0  541  138    0    0    0  125  314   75
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    0    0    0    0  541  138    0    0    0  125  314   75
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 1.00 0.79 0.79 1.00 1.00 1.00 0.73 0.73 0.77
Lanes:       0.00 0.00 0.00 0.00 2.39 0.61 0.00 0.00 0.00 1.00 2.00 1.00
Final Sat.:    0    0    0    0 3608  920    0    0    0 1381 2762 1454
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.00 0.15 0.15 0.00 0.00 0.00 0.09 0.11 0.05
Crit Moves:                       ****                      ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.45 0.45 0.00 0.00 0.00 0.47 0.47 0.47
Volume/Cap:  0.00 0.00 0.00 0.00 0.34 0.34 0.00 0.00 0.00 0.19 0.24 0.11
Delay/Veh:    0.0  0.0  0.0  0.0 14.1 14.1  0.0  0.0  0.0 11.8 12.2 11.4
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  0.0 14.1 14.1  0.0  0.0  0.0 11.8 12.2 11.4
HCM2k95th:     0    0    0    0    8    8    0    0    0    5    6    2
******************************************************************************
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-----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                          Existing Conditions
                             AM Peak Hour
-----------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #3 3rd St/Capitol Mall
*****************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.377
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):       19.0
Optimal Cycle:        79              Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected      Prot+Permit
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0   29   29     0   14   25     0   16   27     0
Lanes:        0  0  0  0  0    0  1  1  1  0    0  0  3  0  0    1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 28 Sep 2004 << 7:45
Base Vol:       0    0     0  189  462     6    0  638     0   91  129     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  189  462     6    0  638     0   91  129     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  189  462     6    0  638     0   91  129     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  189  462     6    0  638     0   91  129     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  189  462     6    0  638     0   91  129     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.82 0.82  0.82 1.00 0.82  1.00 0.86 0.86  1.00
Lanes:       0.00 0.00  0.00 0.86 2.11  0.03 0.00 3.00  0.00 1.00 2.00  0.00
Final Sat.:     0    0     0 1340 3276    43    0 4668     0 1625 3249     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.14 0.14  0.14 0.00 0.14  0.00 0.06 0.04  0.00
Crit Moves:                  ****                  ****        ****
Green/Cycle: 0.00 0.00  0.00 0.37 0.37  0.37 0.00 0.32  0.00 0.56 0.52  0.00
Volume/Cap:  0.00 0.00  0.00 0.38 0.38  0.38 0.00 0.43  0.00 0.18 0.08  0.00
Delay/Veh:    0.0  0.0   0.0 19.1 19.1  19.1  0.0 22.3   0.0  9.4  9.6   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 19.1 19.1  19.1  0.0 22.3   0.0  9.4  9.6   0.0
HCM2k95th:      0    0     0    8    8     8    0    9     0    3    2     0
*****************************************************************************
```



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-----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                          Existing Conditions
                             AM Peak Hour
-----------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #4 3rd St/N St
*****************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.425
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):       21.1
Optimal Cycle:        79              Level Of Service:                  C
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Split Phase      Split Phase        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0   16    16   33   33     0    0   21    21    0    0     0
Lanes:        0  0  0  1  0    0  1  2  0  0    0  0  1  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 28 Sep 2004 << 7:15
Base Vol:       0   60     4  362  267     0    0  318   122    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0   60     4  362  267     0    0  318   122    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0   60     4  362  267     0    0  318   122    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0   60     4  362  267     0    0  318   122    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0   60     4  362  267     0    0  318   122    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.99  0.99 0.88 0.88  1.00 1.00 0.91  0.91 1.00 1.00  1.00
Lanes:       0.00 0.94  0.06 1.00 2.00  0.00 0.00 1.45  0.55 0.00 0.00  0.00
Final Sat.:     0 1765   118 1681 3361     0    0 2499   959    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.03  0.03 0.22 0.08  0.00 0.00 0.13  0.13 0.00 0.00  0.00
Crit Moves:       ****       ****                  ****
Green/Cycle: 0.00 0.20  0.20 0.42 0.42  0.00 0.00 0.27  0.27 0.00 0.00  0.00
Volume/Cap:  0.00 0.17  0.17 0.52 0.19  0.00 0.00 0.48  0.48 0.00 0.00  0.00
Delay/Veh:    0.0 27.0  27.0 18.6 14.7   0.0  0.0 26.2  26.2  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 27.0  27.0 18.6 14.7   0.0  0.0 26.2  26.2  0.0  0.0   0.0
HCM2k95th:      0    3     3   13    5     0    0   10    10    0    0     0
*****************************************************************************
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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                             Existing Conditions
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #5 3rd St/P St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):         0.217
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):          8.9
Optimal Cycle:        56               Level Of Service:                   A
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   19    19    0    0     0   31   31     0
Lanes:        0  0  0  0  0   0  0  1  1  1   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 28 Sep 2004 << 7:30
Base Vol:       0    0     0    0  199   137    0    0     0  158  506     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  199   137    0    0     0  158  506     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  199   137    0    0     0  158  506     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  199   137    0    0     0  158  506     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  199   137    0    0     0  158  506     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.89  0.89 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 1.78  1.22 0.00 0.00  0.00 0.71 2.29  0.00
Final Sat.:     0    0     0    0 3011  2073    0    0     0 1234 3953     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.07  0.07 0.00 0.00  0.00 0.13 0.13  0.00
Crit Moves:                       ****                        ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.34  0.34 0.00 0.00  0.00 0.55 0.55  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.19  0.19 0.00 0.00  0.00 0.23 0.23  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 13.3  13.3  0.0  0.0   0.0  6.6  6.6   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 13.3  13.3  0.0  0.0   0.0  6.6  6.6   0.0
HCM2k95th:      0    0     0    0    3     3    0    0     0    5    5     0
********************************************************************************
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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                             Existing Conditions
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #6 3rd St/Q St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):         0.464
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):          9.7
Optimal Cycle:        56               Level Of Service:                   A
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   19   19     0    0   31    31    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  3  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 28 Sep 2004 << 7:15
Base Vol:       0    0     0  129  202     0    0 1997   308    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  129  202     0    0 1997   308    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  129  202     0    0 1997   308    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  129  202     0    0 1997   308    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  129  202     0    0 1997   308    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.89  0.89 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 1.00 2.00  0.00 0.00 3.47  0.53 0.00 0.00  0.00
Final Sat.:     0    0     0 1729 3458     0    0 5872   906    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.07 0.06  0.00 0.00 0.34  0.34 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.34 0.34  0.00 0.00 0.55  0.55 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.22 0.17  0.00 0.00 0.61  0.61 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 13.5 13.2   0.0  0.0  9.2   9.2  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 13.5 13.2   0.0  0.0  9.2   9.2  0.0  0.0   0.0
HCM2k95th:      0    0     0    4    3     0    0   14    14    0    0     0
********************************************************************************
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---------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                           Existing Conditions
                              AM Peak Hour
---------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*********************************************************************************
Intersection #7 5th St/I St
*********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):         0.202
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        11.0
Optimal Cycle:        56              Level Of Service:                   B
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:   30   30    0     0    0    0     0    0    0     0   20   20
Lanes:         2  0  2  0  0    0  0  0  0  0    0  0  0  0  0    0  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 20 Jan 2005 << 8
Base Vol:     148  752    0     0    0    0     0    0    0     0  753   81
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  148  752    0     0    0    0     0    0    0     0  753   81
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   148  752    0     0    0    0     0    0    0     0  753   81
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:  148  752    0     0    0    0     0    0    0     0  753   81
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   148  752    0     0    0    0     0    0    0     0  753   81
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.87 0.86  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 0.81  0.81
Lanes:       2.00 2.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 3.61  0.39
Final Sat.:  3317 3249    0     0    0    0     0    0    0     0 5536  595
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.23  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.14  0.14
Crit Moves:  ****                                                    ****
Green/Cycle: 0.54 0.54  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.36  0.36
Volume/Cap:  0.08 0.43  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.38  0.38
Delay/Veh:    6.4  8.6   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 13.9  13.9
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   6.4  8.6   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 13.9  13.9
HCM2k95th:      2    8     0     0    0     0     0    0     0     0    6     6
*********************************************************************************
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---------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                           Existing Conditions
                              AM Peak Hour
---------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*********************************************************************************
Intersection #8 5th St/J St
*********************************************************************************
Cycle (sec):         100              Critical Vol./Cap. (X):         0.607
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        20.5
Optimal Cycle:       106              Level Of Service:                   C
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0   40   40     0    0    0    60   60   60     0    0    0
Lanes:         0  0  1  1  1    0  0  0  0  0    1  1  3  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Jan 2005 << 7:45
Base Vol:       0  260  274     0    0    0   680 2325   96     0    0    0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  260  274     0    0    0   680 2325   96     0    0    0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  260  274     0    0    0   680 2325   96     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0  260  274     0    0    0   680 2325   96     0    0    0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0  260  274     0    0    0   680 2325   96     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.79  0.79  1.00 1.00  1.00  0.70 0.70  0.77  1.00 1.00  1.00
Lanes:       0.00 1.46  1.54  0.00 0.00  0.00  1.13 3.87  1.00  0.00 0.00  0.00
Final Sat.:     0 2190  2308     0    0    0  1497 5117  1454     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.12  0.12  0.00 0.00  0.00  0.45 0.45  0.07  0.00 0.00  0.00
Crit Moves:       ****                          ****
Green/Cycle: 0.00 0.38  0.38  0.00 0.00  0.00  0.57 0.57  0.57  0.00 0.00  0.00
Volume/Cap:  0.00 0.31  0.31  0.00 0.00  0.00  0.80 0.80  0.12  0.00 0.00  0.00
Delay/Veh:    0.0 23.8  23.8   0.0  0.0   0.0  20.2 20.2  11.0   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 23.8  23.8   0.0  0.0   0.0  20.2 20.2  11.0   0.0  0.0   0.0
HCM2k95th:      0    8     8     0    0     0    32   32     3     0    0     0
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Downtown Sacramento Traffic Study
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #9 5th St/L St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.229
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	13.8
Optimal Cycle:	79	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	40	40	0	0	0	40	0	0	0	0	30	30
Lanes:	1 0 3 0 0			0 0 0 0 2			0 0 0 0 0			0 0 3 1 0		
Volume Module: >> Count Date: 13 Jan 2085 << 8												
Base Vol:	76	483	0	0	0	98	0	0	0	0	514	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	76	483	0	0	0	98	0	0	0	0	514	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	76	483	0	0	0	98	0	0	0	0	514	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	483	0	0	0	98	0	0	0	0	514	93
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	76	483	0	0	0	98	0	0	0	0	514	93
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.69	0.82	1.00	1.00	1.00	0.67	1.00	1.00	1.00	1.00	0.80	0.80
Lanes:	1.00	3.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	3.39	0.61
Final Sat.:	1315	4668	0	0	0	2558	0	0	0	0	5150	932
Capacity Analysis Module:												
Vol/Sat:	0.06	0.10	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.10	0.10
Crit Moves:		****									****	
Green/Cycle:	0.51	0.51	0.00	0.00	0.00	0.51	0.00	0.00	0.00	0.00	0.38	0.38
Volume/Cap:	0.11	0.20	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.26	0.26
Delay/Veh:	10.6	10.9	0.0	0.0	0.0	10.1	0.0	0.0	0.0	0.0	17.2	17.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.6	10.9	0.0	0.0	0.0	10.1	0.0	0.0	0.0	0.0	17.2	17.2
HCM2k95th:	3	5	0	0	0	2	0	0	0	0	6	6

Downtown Sacramento Traffic Study
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #10 5th St/Capitol Mall

Cycle (sec):	70	Critical Vol./Cap. (X):	0.161
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	20.2
Optimal Cycle:	76	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	35	35	0	0	0	0	17	35	0	0	18	18
Lanes:	2 0 2 1 0			0 0 0 0 0			2 0 2 0 0			0 0 2 1 0		
Volume Module: >> Count Date: 13 Jan 2005 << 8												
Base Vol:	126	297	60	0	0	0	491	354	0	0	96	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	297	60	0	0	0	491	354	0	0	96	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	126	297	60	0	0	0	491	354	0	0	96	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	297	60	0	0	0	491	354	0	0	96	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	126	297	60	0	0	0	491	354	0	0	96	37
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.80	0.80	1.00	1.00	1.00	0.83	0.86	1.00	1.00	0.78	0.78
Lanes:	2.00	2.50	0.50	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.17	0.83
Final Sat.:	3234	3787	765	0	0	0	3152	3249	0	0	3228	1244
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.08	0.00	0.00	0.00	0.16	0.11	0.00	0.00	0.03	0.03
Crit Moves:	****							****		****		
Green/Cycle:	0.46	0.46	0.46	0.00	0.00	0.00	0.22	0.46	0.00	0.00	0.24	0.24
Volume/Cap:	0.08	0.17	0.17	0.00	0.00	0.00	0.70	0.24	0.00	0.00	0.13	0.13
Delay/Veh:	11.6	12.2	12.2	0.0	0.0	0.0	32.8	12.8	0.0	0.0	23.1	23.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.6	12.2	12.2	0.0	0.0	0.0	32.8	12.8	0.0	0.0	23.1	23.1
HCM2k95th:	2	4	4	0	0	0	13	6	0	0	2	2

Downtown Sacramento Traffic Study
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #11 5th St/N St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.299
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 13.2
Optimal Cycle: 76 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	35	35	0	0	0	35	35	0	0	0	0
Lanes:		0 0 2 1 0			0 0 0 0 0			0 1 2 0 0			0 0 0 0 0	
Volume Module: >> Count Date: 13 Jan 2005 <<												
Base Vol:	0	619	193	0	0	0	63	523	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	619	193	0	0	0	63	523	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	619	193	0	0	0	63	523	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	619	193	0	0	0	63	523	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	619	193	0	0	0	63	523	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.88	0.88	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.29	0.71	0.00	0.00	0.00	0.32	2.68	0.00	0.00	0.00	0.00
Final Sat.:	0	3812	1188	0	0	0	558	4629	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.16	0.00	0.00	0.00	0.11	0.11	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.46	0.46	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.35	0.35	0.00	0.00	0.00	0.25	0.25	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	13.6	13.6	0.0	0.0	0.0	12.7	12.7	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.6	13.6	0.0	0.0	0.0	12.7	12.7	0.0	0.0	0.0	0.0
HCM2k95th:	0	8	8	0	0	0	6	6	0	0	0	0

Downtown Sacramento Traffic Study
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #12 5th St/P St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.353
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.3
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	30	30	0	0	0	0	0	0	0	0	20	20
Lanes:		0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0	
Volume Module: >> Count Date: 21 Apr 2005 << 7:45												
Base Vol:	178	704	0	0	0	0	0	0	0	0	413	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	178	704	0	0	0	0	0	0	0	0	413	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	178	704	0	0	0	0	0	0	0	0	413	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	178	704	0	0	0	0	0	0	0	0	413	237
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	178	704	0	0	0	0	0	0	0	0	413	237
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86
Lanes:	0.61	2.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	1.00
Final Sat.:	1047	4140	0	0	0	0	0	0	0	0	3268	1634
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.15
Crit Moves:	****											****
Green/Cycle:	0.54	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.36
Volume/Cap:	0.32	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.41
Delay/Veh:	7.6	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8	14.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.6	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8	14.3
HCM2k95th:	6	6	0	0	0	0	0	0	0	0	6	7

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                      Downtown Sacramento Traffic Study
                             Existing Conditions
                                AM Peak Hour
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                       Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
***********************************************************************************
Intersection #13 5th St/Q St
***********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.434
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        9.5
Optimal Cycle:        56               Level Of Service:                A
***********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   19    19    0    0     0   31   31     0    0    0     0
Lanes:        0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 26 Apr 2005 << 7:30
Base Vol:       0  311    49    0    0     0  560 1633     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0  311    49    0    0     0  560 1633     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0  311    49    0    0     0  560 1633     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0  311    49    0    0     0  560 1633     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0  311    49    0    0     0  560 1633     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.89  0.89 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.59  0.41 0.00 0.00  0.00 1.02 2.98  0.00 0.00 0.00  0.00
Final Sat.:     0 4391   692    0    0     0 1766 5150     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.07  0.07 0.00 0.00  0.00 0.32 0.32  0.00 0.00 0.00  0.00
Crit Moves:       ****                      ****
Green/Cycle: 0.00 0.34  0.34 0.00 0.00  0.00 0.55 0.55  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.21  0.21 0.00 0.00  0.00 0.57 0.57  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 13.4  13.4  0.0  0.0   0.0  8.8  8.8   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 13.4  13.4  0.0  0.0   0.0  8.8  8.8   0.0  0.0  0.0   0.0
HCM2k95th:      0    4     4    0    0     0   12   12     0    0    0     0
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-----------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                             Existing Conditions
                                AM Peak Hour
-----------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
***********************************************************************************
Intersection #14 7th St/I St
***********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.267
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        9.8
Optimal Cycle:        56               Level Of Service:                A
***********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   23    23    0    0     0   27   27     0
Lanes:        0  0  0  0  0   0  0  2  0  2   0  0  0  0  0   1  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 30 Sep 2004 << 8
Base Vol:       0    0     0    0  266   218    0    0     0  253  701     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  266   218    0    0     0  253  701     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  266   218    0    0     0  253  701     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  266   218    0    0     0  253  701     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  266   218    0    0     0  253  701     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.86  0.67 1.00 1.00  1.00 0.82 0.82  1.00
Lanes:       0.00 0.00  0.00 0.00 2.00  2.00 0.00 0.00  0.00 1.06 2.94  0.00
Final Sat.:     0    0     0    0 3249  2558    0    0     0 1651 4574     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.08  0.09 0.00 0.00  0.00 0.15 0.15  0.00
Crit Moves:                             ****                 ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.41  0.41 0.00 0.00  0.00 0.48 0.48  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.20  0.21 0.00 0.00  0.00 0.32 0.32  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 10.9  11.1  0.0  0.0   0.0  9.1  9.1   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 10.9  11.1  0.0  0.0   0.0  9.1  9.1   0.0
HCM2k95th:      0    0     0    0    4     3    0    0     0    6    6     0
***********************************************************************************
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------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                              Existing Conditions
                                 AM Peak Hour
------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #15 7th St/J St
******************************************************************************
Cycle (sec):        100             Critical Vol./Cap. (X):        0.566
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       16.5
Optimal Cycle:      106             Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0    35   35     0     0   65    65     0    0     0
Lanes:        0  0  0  0  0    0  1  2  0  0    0  0  2  1  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Dec 2005 << 7:45
Base Vol:       0    0     0   156  254     0     0 1986   280     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0   156  254     0     0 1986   280     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0   156  254     0     0 1986   280     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0   156  254     0     0 1986   280     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0     0   156  254     0     0 1986   280     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  0.82 0.82  1.00  1.00 0.80  0.80  1.00 1.00  1.00
Lanes:       0.00 0.00  0.00  1.00 2.00  0.00  0.00 3.00  1.00  0.00 0.00  0.00
Final Sat.:     0    0     0  1556 3112     0     0 4580  1527     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.10 0.08  0.00  0.00 0.43  0.18  0.00 0.00  0.00
Crit Moves:                   ****                   ****
Green/Cycle: 0.00 0.00  0.00  0.33 0.33  0.00  0.00 0.61  0.61  0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00  0.30 0.25  0.00  0.00 0.71  0.30  0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0  27.0 26.2   0.0   0.0 15.3   9.8   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  27.0 26.2   0.0   0.0 15.3   9.8   0.0  0.0   0.0
HCM2k95th:      0    0     0     8    6     0     0   26     9     0    0     0
******************************************************************************
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------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                              Existing Conditions
                                 AM Peak Hour
------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #16 7th St/L St
******************************************************************************
Cycle (sec):         50             Critical Vol./Cap. (X):        0.256
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       11.2
Optimal Cycle:       56             Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0     0   29    29     0    0     0    21   21     0
Lanes:        0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Dec 2005 << 8
Base Vol:       0    0     0     0  334   175     0    0     0   188  662     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0  334   175     0    0     0   188  662     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     0  334   175     0    0     0   188  662     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0     0  334   175     0    0     0   188  662     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0     0     0  334   175     0    0     0   188  662     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  1.00 0.78  0.78  1.00 1.00  1.00  0.90 0.82  1.00
Lanes:       0.00 0.00  0.00  0.00 2.00  1.00  0.00 0.00  0.00  1.00 3.00  0.00
Final Sat.:     0    0     0     0 2950  1475     0    0     0  1710 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.00 0.11  0.12  0.00 0.00  0.00  0.11 0.14  0.00
Crit Moves:                              ****                   ****
Green/Cycle: 0.00 0.00  0.00  0.00 0.52  0.52  0.00 0.00  0.00  0.38 0.38  0.00
Volume/Cap:  0.00 0.00  0.00  0.00 0.22  0.23  0.00 0.00  0.00  0.29 0.38  0.00
Delay/Veh:    0.0  0.0   0.0   0.0  7.6   7.6   0.0  0.0   0.0  13.4 13.4   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   0.0  7.6   7.6   0.0  0.0   0.0  13.4 13.4   0.0
HCM2k95th:      0    0     0     0    4     4     0    0     0     5    7     0
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Downtown Sacramento Traffic Study
Existing Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #17 8th St/I St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.312
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.3
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	0	0	0	0	0	0	25	25
Lanes:	0 1	2	0 0	0 0	0	0 0	0 0	0	0 0	0 0	2	1 0
Volume Module:												
Base Vol:	121	329	0	0	0	0	0	0	0	0	851	126
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	121	329	0	0	0	0	0	0	0	0	851	126
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	121	329	0	0	0	0	0	0	0	0	851	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	329	0	0	0	0	0	0	0	0	851	126
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	121	329	0	0	0	0	0	0	0	0	851	126
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89
Lanes:	0.81	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.61	0.39
Final Sat.:	1395	3792	0	0	0	0	0	0	0	0	4432	656
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.19
Crit Moves:	****										****	
Green/Cycle:	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Volume/Cap:	0.19	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.43
Delay/Veh:	9.4	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8	10.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.4	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8	10.8
HCM2k95th:	3	3	0	0	0	0	0	0	0	0	7	7

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #18 8th S/tJ St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.283
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 16.1
Optimal Cycle: 106 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	35	35	0	0	0	65	65	0	0	0	0
Lanes:	0 0	2	1 0	0 0	0	0 0	1 1	2	0 0	0 0	0	0 0
Volume Module: >> Count Date: 7 Dec 2005 << 7:45												
Base Vol:	0	304	151	0	0	0	256	1880	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	304	151	0	0	0	256	1880	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	304	151	0	0	0	256	1880	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	304	151	0	0	0	256	1880	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	304	151	0	0	0	256	1880	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.78	0.78	1.00	1.00	1.00	0.82	0.82	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	0.00	0.00	0.00	1.00	3.00	0.00	0.00	0.00	0.00
Final Sat.:	0	2963	1472	0	0	0	1556	4668	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.10	0.00	0.00	0.00	0.16	0.40	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.33	0.33	0.00	0.00	0.00	0.61	0.61	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.31	0.31	0.00	0.00	0.00	0.27	0.66	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	27.0	27.0	0.0	0.0	0.0	9.6	14.3	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	27.0	27.0	0.0	0.0	0.0	9.6	14.3	0.0	0.0	0.0	0.0
HCM2k95th:	0	8	8	0	0	0	8	22	0	0	0	0

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--------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
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--------------------------------------------------------------------------------
                       Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #19 8th St/L St
********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.283
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       11.5
Optimal Cycle:       56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:   29   29     0    0    0     0    0    0     0    0   21    21
Lanes:       0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Dec 2005 << 7:45
Base Vol:     111  308     0    0    0     0    0    0     0    0  740   165
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:  111  308     0    0    0     0    0    0     0    0  740   165
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:   111  308     0    0    0     0    0    0     0    0  740   165
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:  111  308     0    0    0     0    0    0     0    0  740   165
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:   111  308     0    0    0     0    0    0     0    0  740   165
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  0.82 0.82  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.80  0.80
Lanes:       0.79 2.21  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 3.00  1.00
Final Sat.:  1237 3432     0    0    0     0    0    0     0    0 4542  1514
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.09 0.09  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.16  0.11
Crit Moves:  ****                                                ****
Green/Cycle: 0.52 0.52  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.38  0.38
Volume/Cap:  0.17 0.17  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.43  0.29
Delay/Veh:    7.3  7.3   0.0  0.0  0.0   0.0  0.0  0.0   0.0  0.0 13.7  12.5
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   7.3  7.3   0.0  0.0  0.0   0.0  0.0  0.0   0.0  0.0 13.7  12.5
HCM2k95th:      3    3     0    0    0     0    0    0     0    0    8     5
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--------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
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--------------------------------------------------------------------------------
                       Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #20 9th St/I St
********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.264
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):       12.7
Optimal Cycle:       62              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0    0     0    0   22    22    0    0     0   28   28     0
Lanes:       0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jan 2006 << 7:45
Base Vol:       0    0     0    0  214   192    0    0     0  137  853     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  214   192    0    0     0  137  853     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  214   192    0    0     0  137  853     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  214   192    0    0     0  137  853     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  214   192    0    0     0  137  853     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.76  0.76 1.00 1.00  1.00 0.90 0.82  1.00
Lanes:       0.00 0.00  0.00 0.00 2.00  1.00 0.00 0.00  0.00 1.00 3.00  0.00
Final Sat.:     0    0     0    0 2891  1446    0    0     0 1710 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.07  0.13 0.00 0.00  0.00 0.08 0.18  0.00
Crit Moves:                             ****                 ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.35  0.35 0.00 0.00  0.00 0.45 0.45  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.21  0.37 0.00 0.00  0.00 0.18 0.40  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 14.2  15.9  0.0  0.0   0.0 10.6 12.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 14.2  15.9  0.0  0.0   0.0 10.6 12.0   0.0
HCM2k95th:      0    0     0    0    4     7    0    0     0    4    8     0
********************************************************************************
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Downtown Sacramento Traffic Study
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #21 9th St/J St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.473
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 18.1
Optimal Cycle: 106 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	40	40	0	0	60	60	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module: >> Count Date: 12 Jan 2005 << 7:45												
Base Vol:	0	0	0	71	278	0	0	1527	179	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	71	278	0	0	1527	179	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	71	278	0	0	1527	179	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	71	278	0	0	1527	179	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	71	278	0	0	1527	179	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	0.82	1.00	1.00	0.81	0.81	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.61	2.39	0.00	0.00	2.69	0.31	0.00	0.00	0.00
Final Sat.:	0	0	0	950	3719	0	0	4112	482	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.07	0.07	0.00	0.00	0.37	0.37	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.57	0.57	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.66	0.66	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	22.5	22.5	0.0	0.0	17.2	17.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	22.5	22.5	0.0	0.0	17.2	17.2	0.0	0.0	0.0
HCM2k95th:	0	0	0	6	6	0	0	22	22	0	0	0

Downtown Sacramento Traffic Study
Existing Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #22 9th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.284
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 9.6
Optimal Cycle: 56 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	21	21	0	0	0	29	29	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			1 0 3 0 0		
Volume Module: >> Count Date: 6 Dec 2005 << 7:45												
Base Vol:	0	0	0	0	255	146	0	0	0	264	969	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	255	146	0	0	0	264	969	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	255	146	0	0	0	264	969	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	255	146	0	0	0	264	969	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	255	146	0	0	0	264	969	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.77	0.77	1.00	1.00	1.00	0.90	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	2941	1471	0	0	0	1710	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.09	0.10	0.00	0.00	0.00	0.15	0.21	0.00
Crit Moves:						****				****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.00	0.52	0.52	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.23	0.26	0.00	0.00	0.00	0.30	0.40	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	12.3	12.6	0.0	0.0	0.0	8.6	8.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	12.3	12.6	0.0	0.0	0.0	8.6	8.7	0.0
HCM2k95th:	0	0	0	0	4	4	0	0	0	6	7	0

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-----------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                         Existing Conditions
                            AM Peak Hour
-----------------------------------------------------------------------------
                   Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #23 9th St/P St
*****************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.287
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        9.0
Optimal Cycle:       26              Level Of Service:                  A
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0    0    0   10    0    0    0    0    0   10    0
Lanes:       0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0    0    0  458   133    0    0    0   108  592    0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0    0    0    0  458   133    0    0    0   108  592    0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0    0    0    0  458   133    0    0    0   108  592    0
Reduct Vol:    0    0    0    0    0     0    0    0    0     0    0    0
Reduced Vol:   0    0    0    0  458   133    0    0    0   108  592    0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0    0    0    0  458   133    0    0    0   108  592    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  1.00 0.88  0.88  1.00 1.00  1.00  0.91 0.91  1.00
Lanes:       0.00 0.00  0.00  0.00 2.32  0.68  0.00 0.00  0.00  0.46 2.54  0.00
Final Sat.:    0    0    0    0 3883  1128    0    0    0   800 4387    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.00 0.12  0.12  0.00 0.00  0.00  0.13 0.13  0.00
Crit Moves:                        ****                              ****
Green/Cycle: 0.00 0.00  0.00  0.00 0.41  0.41  0.00 0.00  0.00  0.47 0.47  0.00
Volume/Cap:  0.00 0.00  0.00  0.00 0.29  0.29  0.00 0.00  0.00  0.29 0.29  0.00
Delay/Veh:    0.0  0.0   0.0   0.0  9.9   9.9   0.0  0.0   0.0   8.2  8.2   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   0.0  9.9   9.9   0.0  0.0   0.0   8.2  8.2   0.0
HCM2k95th:     0    0    0    0    5     5    0    0    0     4    4    0
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-----------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                         Existing Conditions
                            AM Peak Hour
-----------------------------------------------------------------------------
                   Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #24 9th St/Q St
*****************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.351
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       10.6
Optimal Cycle:       56              Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0    0   25   25    0    0   25   25    0    0    0
Lanes:       0  0  0  0  0    0  1  2  0  0    0  0  3  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0    0  169  391     0    0 1288   113    0    0    0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0    0    0  169  391     0    0 1288   113    0    0    0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0    0    0  169  391     0    0 1288   113    0    0    0
Reduct Vol:    0    0    0    0    0     0    0    0     0    0    0    0
Reduced Vol:   0    0    0  169  391     0    0 1288   113    0    0    0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0    0    0  169  391     0    0 1288   113    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  0.91 0.91  1.00  1.00 0.90  0.90  1.00 1.00  1.00
Lanes:       0.00 0.00  0.00  0.91 2.09  0.00  0.00 3.68  0.32  0.00 0.00  0.00
Final Sat.:    0    0    0 1565 3622     0    0 6282   551    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.11 0.11  0.00  0.00 0.21  0.21  0.00 0.00  0.00
Crit Moves:                   ****                   ****
Green/Cycle: 0.00 0.00  0.00  0.45 0.45  0.00  0.00 0.45  0.45  0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00  0.24 0.24  0.00  0.00 0.46  0.46  0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0   9.7  9.7   0.0   0.0 10.9  10.9   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   9.7  9.7   0.0   0.0 10.9  10.9   0.0  0.0   0.0
HCM2k95th:     0    0    0    4    4     0    0    9     9    0    0    0
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--------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                           Existing Conditions
                              AM Peak Hour
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #25 10th St/I St
********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.431
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):       14.4
Optimal Cycle:       62              Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:   26   26    0    0    0    0    0    0    0    0   24   24
Lanes:       0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Dec 2005 << 7:45
Base Vol:    176  510    0    0    0    0    0    0    0    0  787  130
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 176  510    0    0    0    0    0    0    0    0  787  130
User Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:  176  510    0    0    0    0    0    0    0    0  787  130
Reduct Vol:    0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol: 176  510    0    0    0    0    0    0    0    0  787  130
PCE Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:  176  510    0    0    0    0    0    0    0    0  787  130
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.82 0.82 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.80 0.80
Lanes:      0.77 2.23 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.57 0.43
Final Sat.: 1198 3471    0    0    0    0    0    0    0    0 3922  648
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.15 0.15 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.20 0.20
Crit Moves: ****                                                ****
Green/Cycle: 0.42 0.42 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.39 0.39
Volume/Cap: 0.35 0.35 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.52 0.52
Delay/Veh:  12.7 12.7  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 15.7 15.7
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.7 12.7  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 15.7 15.7
HCM2k95th:     7    7    0    0    0    0    0    0    0    0   10   10
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--------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                           Existing Conditions
                              AM Peak Hour
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #26 10th St/J St
********************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.493
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):       21.3
Optimal Cycle:      112              Level Of Service:                 C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   40   40    0    0    0   60   60    0    0    0    0
Lanes:       0  0  2  1  1   0  0  0  0  0   0  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 8 Dec 2005 << 8
Base Vol:      0  464  200    0    0    0  278 1254    0    0    0    0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   0  464  200    0    0    0  278 1254    0    0    0    0
User Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    0  464  200    0    0    0  278 1254    0    0    0    0
Reduct Vol:    0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   0  464  200    0    0    0  278 1254    0    0    0    0
PCE Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    0  464  200    0    0    0  278 1254    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.78 0.78 1.00 1.00 1.00 0.82 0.82 1.00 1.00 1.00 1.00
Lanes:      0.00 2.80 1.20 0.00 0.00 0.00 0.54 2.46 0.00 0.00 0.00 0.00
Final Sat.:    0 4154 1790    0    0    0  847 3821    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.00 0.11 0.11 0.00 0.00 0.00 0.33 0.33 0.00 0.00 0.00 0.00
Crit Moves:      ****                     ****
Green/Cycle: 0.00 0.36 0.36 0.00 0.00 0.00 0.54 0.54 0.00 0.00 0.00 0.00
Volume/Cap: 0.00 0.31 0.31 0.00 0.00 0.00 0.61 0.61 0.00 0.00 0.00 0.00
Delay/Veh:   0.0 26.4 26.4  0.0  0.0  0.0 19.1 19.1  0.0  0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  0.0 26.4 26.4  0.0  0.0  0.0 19.1 19.1  0.0  0.0  0.0  0.0
HCM2k95th:     0    9    9    0    0    0   21   21    0    0    0    0
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-----------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                             Existing Conditions
                                AM Peak Hour
-----------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #27 10th St/L St
*****************************************************************************
Cycle (sec):          50                Critical Vol./Cap. (X):        0.543
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        12.0
Optimal Cycle:        56                Level Of Service:                  B
*****************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    21   21    0     0    0    0     0    0    0     0   29   29
Lanes:        0  1  2  0  0    0  0  0  0  0    0  0  0  0  0    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 6 Dec 2005 << 8
Base Vol:     244  685    0     0    0    0     0    0    0     0 1020  271
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:  244  685    0     0    0    0     0    0    0     0 1020  271
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:   244  685    0     0    0    0     0    0    0     0 1020  271
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:  244  685    0     0    0    0     0    0    0     0 1020  271
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:   244  685    0     0    0    0     0    0    0     0 1020  271
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  0.82 0.82 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 0.79 0.79
Lanes:       0.79 2.21 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 2.37 0.63
Final Sat.:  1226 3442    0     0    0    0     0    0    0     0 3574  950
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.20 0.20 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.29 0.29
Crit Moves:  ****                                                  ****
Green/Cycle: 0.38 0.38 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.52 0.52
Volume/Cap:  0.53 0.53 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.55 0.55
Delay/Veh:   14.8 14.8  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0 10.0 10.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:  14.8 14.8  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0 10.0 10.0
HCM2k95th:     10   10    0     0    0    0     0    0    0     0   11   11
*****************************************************************************
```



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-----------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                             Existing Conditions
                                AM Peak Hour
-----------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #28 10th St/P St
*****************************************************************************
Cycle (sec):          50                Critical Vol./Cap. (X):        0.459
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        11.4
Optimal Cycle:        56                Level Of Service:                  B
*****************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    25   25    0     0    0    0     0    0    0     0   25   25
Lanes:        0  1  2  0  0    0  0  0  0  0    0  0  0  0  0    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     130 1243    0     0    0    0     0    0    0     0  519  202
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:  130 1243    0     0    0    0     0    0    0     0  519  202
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:   130 1243    0     0    0    0     0    0    0     0  519  202
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:  130 1243    0     0    0    0     0    0    0     0  519  202
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:   130 1243    0     0    0    0     0    0    0     0  519  202
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  0.91 0.91 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 0.87 0.87
Lanes:       0.28 2.72 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 2.16 0.84
Final Sat.:   491 4696    0     0    0    0     0    0    0     0 3577 1392
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.26 0.26 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.15 0.15
Crit Moves:  ****                                                  ****
Green/Cycle: 0.45 0.45 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.45 0.45
Volume/Cap:  0.59 0.59 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.33 0.33
Delay/Veh:   12.1 12.1  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0 10.1 10.1
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:  12.1 12.1  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0 10.1 10.1
HCM2k95th:     11   11    0     0    0    0     0    0    0     0    5    5
*****************************************************************************
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--------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                            Existing Conditions
                               AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #29 10th St/Q St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.448
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       10.9
Optimal Cycle:        56               Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   25    25    0    0     0   25   25     0    0    0     0
Lanes:        0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  876    91    0    0     0  375 1083     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0  876    91    0    0     0  375 1083     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0  876    91    0    0     0  375 1083     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0  876    91    0    0     0  375 1083     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0  876    91    0    0     0  375 1083     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.90  0.90 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.72  0.28 0.00 0.00  0.00 1.03 2.97  0.00 0.00 0.00  0.00
Final Sat.:     0 4633   481    0    0     0 1779 5137     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.19  0.19 0.00 0.00  0.00 0.21 0.21  0.00 0.00 0.00  0.00
Crit Moves:       ****                       ****
Green/Cycle: 0.00 0.45  0.45 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.42  0.42 0.00 0.00  0.00 0.47 0.47  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 10.7  10.7  0.0  0.0   0.0 11.0 11.0   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 10.7  10.7  0.0  0.0   0.0 11.0 11.0   0.0  0.0  0.0   0.0
HCM2k95th:      0    8     8    0    0     0    9    9     0    0    0     0
********************************************************************************
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--------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                            Existing Conditions
                               AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #30 12th St/H St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.427
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       16.5
Optimal Cycle:        66               Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   27   27     0    0   33    33    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 23 Mar 2005 << 7:30
Base Vol:       0    0     0  288 1260     0    0  419    40    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  288 1260     0    0  419    40    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  288 1260     0    0  419    40    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  288 1260     0    0  419    40    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  288 1260     0    0  419    40    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.90  0.90 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.56 2.44  0.00 0.00 2.74  0.26 0.00 0.00  0.00
Final Sat.:     0    0     0  965 4222     0    0 4673   446    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.30 0.30  0.00 0.00 0.09  0.09 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.41 0.41  0.00 0.00 0.50  0.50 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.73 0.73  0.00 0.00 0.18  0.18 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 18.7 18.7   0.0  0.0  9.2   9.2  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 18.7 18.7   0.0  0.0  9.2   9.2  0.0  0.0   0.0
HCM2k95th:      0    0     0   18   18     0    0    4     4    0    0     0
********************************************************************************
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-------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                            Existing Conditions
                               AM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
        2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #31 12th St/I St
********************************************************************************
Cycle (sec):          0              Critical Vol./Cap. (X):        0.497
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       6.3
Optimal Cycle:       23              Level Of Service:                A
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0    0     0    7    7     0    0    0     3    7    0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 8 Dec 2005 << 7:45
Base Vol:       0    0    0     0  804  356     0    0    0    61  627    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0     0  804  356     0    0    0    61  627    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0     0  804  356     0    0    0    61  627    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0     0  804  356     0    0    0    61  627    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0     0  804  356     0    0    0    61  627    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  1.00 0.87 0.87  1.00 1.00 1.00  0.91 0.91 1.00
Lanes:       0.00 0.00 0.00  0.00 2.08 0.92  0.00 0.00 0.00  0.27 2.73 0.00
Final Sat.:     0    0    0     0 3430 1519     0    0    0   460 4727    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.00 0.23 0.23  0.00 0.00 0.00  0.13 0.13 0.00
Crit Moves:                       ****                              ****
Green/Cycle: 0.00 0.00 0.00  0.00 0.43 0.43  0.00 0.00 0.00  0.30 0.30 0.00
Volume/Cap:  0.00 0.00 0.00  0.00 0.54 0.54  0.00 0.00 0.00  0.44 0.44 0.00
Delay/Veh:    0.0  0.0  0.0   0.0  5.8  5.8   0.0  0.0  0.0   7.3  7.3  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0   0.0  5.8  5.8   0.0  0.0  0.0   7.3  7.3  0.0
HCM2k95th:      0    0    0     0    6    6     0    0    0     4    4    0
********************************************************************************
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-------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                            Existing Conditions
                               AM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
        2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #32 12th St/J St
********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.563
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      16.1
Optimal Cycle:       56              Level Of Service:                B
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0   31    31   31   31     0   19   19     0    0    0
Lanes:        0  0  0  0  1   1  0  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 8 Dec 2005 << 8
Base Vol:       0    0  114   323  503    0     0 1292  149     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0  114   323  503    0     0 1292  149     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0  114   323  503    0     0 1292  149     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0  114   323  503    0     0 1292  149     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0  114   323  503    0     0 1292  149     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 0.87  0.77 0.95 1.00  1.00 0.90 0.90  1.00 1.00 1.00
Lanes:       0.00 0.00 1.00  1.00 2.00 0.00  0.00 2.69 0.31  0.00 0.00 0.00
Final Sat.:     0    0 1644  1461 3610    0     0 4581  528     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.07  0.22 0.14 0.00  0.00 0.28 0.28  0.00 0.00 0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00 0.55  0.55 0.55 0.00  0.00 0.34 0.34  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.13  0.40 0.25 0.00  0.00 0.83 0.83  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  6.3   8.6  6.8  0.0   0.0 21.8 21.8   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  6.3   8.6  6.8  0.0   0.0 21.8 21.8   0.0  0.0  0.0
HCM2k95th:      0    0    2     9    5    0     0   18   18     0    0    0
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----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                          Existing Conditions
                             AM Peak Hour
----------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
****************************************************************************
Intersection #33 12th St/L St
****************************************************************************
Cycle (sec):        50              Critical Vol./Cap. (X):        0.416
Loss Time (sec):     9 (Y+R =  4 sec) Average Delay (sec/veh):      12.6
Optimal Cycle:      59              Level Of Service:                  B
****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    25   25    0     0   25   25     0    0    0    25   25   25
Lanes:        0  1  0  0  0    0  0  0  1  1    0  0  0  0  0    0  1  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 6 Dec 2005 << 8
Base Vol:       5    1    0     0    1  549     0    0    0     3  743  152
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    5    1    0     0    1  549     0    0    0     3  743  152
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     5    1    0     0    1  549     0    0    0     3  743  152
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    5    1    0     0    1  549     0    0    0     3  743  152
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     5    1    0     0    1  549     0    0    0     3  743  152
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  0.92 0.92 1.00  1.00 0.85 0.85  1.00 1.00 1.00  0.87 0.87 0.87
Lanes:       0.83 0.17 0.00  0.00 0.01 1.99  0.00 0.00 0.00  0.01 2.48 0.51
Final Sat.:  1454  291    0     0    6 3224     0    0    0    16 4080  835
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.00 0.17 0.17  0.00 0.00 0.00  0.18 0.18 0.18
Crit Moves:                       ****                          ****
Green/Cycle: 0.42 0.42 0.00  0.00 0.42 0.42  0.00 0.00 0.00  0.42 0.42 0.42
Volume/Cap:  0.01 0.01 0.00  0.00 0.40 0.40  0.00 0.00 0.00  0.43 0.43 0.43
Delay/Veh:    9.9  9.9  0.0   0.0 12.7 12.7   0.0  0.0  0.0  12.6 12.6 12.6
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   9.9  9.9  0.0   0.0 12.7 12.7   0.0  0.0  0.0  12.6 12.6 12.6
HCM2k95th:      0    0    0     0    7    7     0    0    0     8    8    8
****************************************************************************
```



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----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                          Existing Conditions
                             AM Peak Hour
----------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
****************************************************************************
Intersection #34 15th St/H St
****************************************************************************
Cycle (sec):        50              Critical Vol./Cap. (X):        0.271
Loss Time (sec):     6 (Y+R =  4 sec) Average Delay (sec/veh):       9.7
Optimal Cycle:      56              Level Of Service:                  A
****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0    0    25   25    0     0   25   25     0    0    0
Lanes:        0  0  0  0  0    0  1  2  0  0    0  0  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Dec 2005 << 7:30
Base Vol:       0    0    0    31  559    0     0  346  209     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0    31  559    0     0  346  209     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0    31  559    0     0  346  209     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0    31  559    0     0  346  209     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0    31  559    0     0  346  209     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.91 0.91 1.00  1.00 0.86 0.86  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  0.16 2.84 0.00  0.00 2.00 1.00  0.00 0.00 0.00
Final Sat.:     0    0    0   273 4914    0     0 3261 1630     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.11 0.11 0.00  0.00 0.11 0.13  0.00 0.00 0.00
Crit Moves:                  ****                        ****
Green/Cycle: 0.00 0.00 0.00  0.45 0.45 0.00  0.00 0.45 0.45  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.25 0.25 0.00  0.00 0.24 0.29  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0   9.7  9.7  0.0   0.0  9.7  9.9   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0   9.7  9.7  0.0   0.0  9.7  9.9   0.0  0.0  0.0
HCM2k95th:      0    0    0     5    5    0     0    4    5     0    0    0
****************************************************************************
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------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                            Existing Conditions
                               AM Peak Hour
------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #35 15th St/J St
******************************************************************************
Cycle (sec):         50               Critical Vol./Cap. (X):        0.436
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       11.1
Optimal Cycle:       56               Level Of Service:                  B
******************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0   25   25     0    0   25    25    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Dec 2005 << 8
Base Vol:       0    0     0  140  604     0    0  896   328    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  140  604     0    0  896   328    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  140  604     0    0  896   328    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  140  604     0    0  896   328    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  140  604     0    0  896   328    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.87  0.87 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.56 2.44  0.00 0.00 2.20  0.80 0.00 0.00  0.00
Final Sat.:     0    0     0  976 4211     0    0 3645  1334    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.14 0.14  0.00 0.00 0.25  0.25 0.00 0.00  0.00
Crit Moves:                  ****                 ****
Green/Cycle: 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.32 0.32  0.00 0.00 0.55  0.55 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 10.1 10.1   0.0  0.0 11.7  11.7  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 10.1 10.1   0.0  0.0 11.7  11.7  0.0  0.0   0.0
HCM2k95th:      0    0     0    6    6     0    0   11    11    0    0     0
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------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                            Existing Conditions
                               AM Peak Hour
------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #36 15th St/L St
******************************************************************************
Cycle (sec):         50               Critical Vol./Cap. (X):        0.376
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       10.9
Optimal Cycle:       56               Level Of Service:                  B
******************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0    0   30    30    0    0     0   20   20     0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 14 Dec 2005 << 7:45
Base Vol:       0    0     0    0  635   185    0    0     0   59  834     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  635   185    0    0     0   59  834     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  635   185    0    0     0   59  834     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  635   185    0    0     0   59  834     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  635   185    0    0     0   59  834     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.88  0.88 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 2.32  0.68 0.00 0.00  0.00 0.20 2.80  0.00
Final Sat.:     0    0     0    0 3880  1130    0    0     0  343 4844     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.16  0.16 0.00 0.00  0.00 0.17 0.17  0.00
Crit Moves:                       ****                       ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.54  0.54 0.00 0.00  0.00 0.36 0.36  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.31  0.31 0.00 0.00  0.00 0.48 0.48  0.00
Delay/Veh:    0.0  0.0   0.0  0.0  7.3   7.3  0.0  0.0   0.0 14.2 14.2   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0  7.3   7.3  0.0  0.0   0.0 14.2 14.2   0.0
HCM2k95th:      0    0     0    0    6     6    0    0     0    8    8     0
******************************************************************************
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Downtown Sacramento Traffic Study
Existing Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #37 15th St/P St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.383
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.2
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	28	28	0	0	0	22	22	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			0 1 2 0 0		
Volume Module:												
Base Vol:	0	0	0	0	530	168	0	0	0	107	943	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	530	168	0	0	0	107	943	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	530	168	0	0	0	107	943	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	530	168	0	0	0	107	943	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	530	168	0	0	0	107	943	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.88	0.88	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	2.28	0.72	0.00	0.00	0.00	0.31	2.69	0.00
Final Sat.:	0	0	0	0	3797	1204	0	0	0	529	4658	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.14	0.14	0.00	0.00	0.00	0.20	0.20	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.50	0.50	0.00	0.00	0.00	0.39	0.39	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.28	0.28	0.00	0.00	0.00	0.52	0.52	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	8.2	8.2	0.0	0.0	0.0	13.2	13.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	8.2	8.2	0.0	0.0	0.0	13.2	13.2	0.0
HCM2k95th:	0	0	0	0	5	5	0	0	0	9	9	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #38 15th St/Q St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.295
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.0
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	27	27	0	0	23	23	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	0	0	108	553	0	0	571	117	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	108	553	0	0	571	117	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	108	553	0	0	571	117	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	108	553	0	0	571	117	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	108	553	0	0	571	117	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.89	0.89	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.49	2.51	0.00	0.00	2.49	0.51	0.00	0.00	0.00
Final Sat.:	0	0	0	847	4340	0	0	4197	860	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.13	0.00	0.00	0.14	0.14	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.48	0.48	0.00	0.00	0.41	0.41	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.26	0.26	0.00	0.00	0.33	0.33	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	8.7	8.7	0.0	0.0	11.3	11.3	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	8.7	8.7	0.0	0.0	11.3	11.3	0.0	0.0	0.0
HCM2k95th:	0	0	0	4	4	0	0	5	5	0	0	0

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---------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                          Existing Conditions
                             AM Peak Hour
---------------------------------------------------------------------------

                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
***************************************************************************
Intersection #39 15th St/W St
***************************************************************************
Cycle (sec):         70             Critical Vol./Cap. (X):        0.224
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):     12.3
Optimal Cycle:       76             Level Of Service:                  B
***************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0    0    0   32   32    0    0    0   38   38    0
Lanes:       0  0  0  0  0    0  0  3  1  0    0  0  0  0  0    1  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Dec 2005 << 7:45
Base Vol:      0    0    0    0  585   19    0    0    0  205  871    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   0    0    0    0  585   19    0    0    0  205  871    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    0    0    0    0  585   19    0    0    0  205  871    0
Reduct Vol:    0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   0    0    0    0  585   19    0    0    0  205  871    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    0    0    0    0  585   19    0    0    0  205  871    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 1.00 0.91 0.91 1.00 1.00 1.00 0.91 0.91 1.00
Lanes:       0.00 0.00 0.00 0.00 3.87 0.13 0.00 0.00 0.00 1.00 3.00 0.00
Final Sat.:    0    0    0    0 6665  216    0    0    0 1729 5187    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.00 0.09 0.09 0.00 0.00 0.00 0.12 0.17 0.00
Crit Moves:                       ****                       ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.42 0.42 0.00 0.00 0.00 0.50 0.50 0.00
Volume/Cap:  0.00 0.00 0.00 0.00 0.21 0.21 0.00 0.00 0.00 0.24 0.34 0.00
Delay/Veh:    0.0  0.0  0.0  0.0 14.0 14.0  0.0  0.0  0.0 10.8 11.5  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  0.0 14.0 14.0  0.0  0.0  0.0 10.8 11.5  0.0
HCM2k95th:     0    0    0    0    5    5    0    0    0    6    8    0
***************************************************************************
```



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---------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                          Existing Conditions
                             AM Peak Hour
---------------------------------------------------------------------------

                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
***************************************************************************
Intersection #40 15th St/X St
***************************************************************************
Cycle (sec):         70             Critical Vol./Cap. (X):        0.433
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):     22.5
Optimal Cycle:       79             Level Of Service:                  C
***************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Split Phase      Split Phase       Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   14   14   24   24    0    0   32   32    0    0    0
Lanes:       0  0  2  1  0    1  1  2  0  0    0  0  1  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Dec 2005 << 7:45
Base Vol:      0  483   23  317  369    0    0  558   91    0    0    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   0  483   23  317  369    0    0  558   91    0    0    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    0  483   23  317  369    0    0  558   91    0    0    0
Reduct Vol:    0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   0  483   23  317  369    0    0  558   91    0    0    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    0  483   23  317  369    0    0  558   91    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 0.90 0.90 0.89 0.89 1.00 1.00 0.93 0.93 1.00 1.00 1.00
Lanes:       0.00 2.86 0.14 1.85 2.15 0.00 0.00 1.72 0.28 0.00 0.00 0.00
Final Sat.:    0 4917  234 3122 3635    0    0 3039  496    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.10 0.10 0.10 0.10 0.00 0.00 0.18 0.18 0.00 0.00 0.00
Crit Moves:       ****                ****           ****
Green/Cycle: 0.00 0.18 0.18 0.30 0.30 0.00 0.00 0.41 0.41 0.00 0.00 0.00
Volume/Cap:  0.00 0.55 0.55 0.33 0.33 0.00 0.00 0.45 0.45 0.00 0.00 0.00
Delay/Veh:    0.0 30.4 30.4 21.4 21.4  0.0  0.0 17.4 17.4  0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0 30.4 30.4 21.4 21.4  0.0  0.0 17.4 17.4  0.0  0.0  0.0
HCM2k95th:     0    9    9    6    6    0    0   12   12    0    0    0
***************************************************************************
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--------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                          Existing Conditions
                             AM Peak Hour
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #41 16th St/H St
********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.373
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       11.3
Optimal Cycle:       56              Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   25    25    0    0     0   16   25     0    0    0     9
Lanes:       0  0  2  1  0   0  0  0  0  0   2  1  0  0  0   0  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 6 Dec 2005 << 7:30
Base Vol:      0  995    22    0    0     0  144  254     0    0    0    39
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0  995    22    0    0     0  144  254     0    0    0    39
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0  995    22    0    0     0  144  254     0    0    0    39
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0  995    22    0    0     0  144  254     0    0    0    39
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0  995    22    0    0     0  144  254     0    0    0    39
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.91  0.91  1.00 1.00  1.00  0.95 0.98  1.00  1.00 1.00  0.87
Lanes:       0.00 2.94  0.06  0.00 0.00  0.00  2.00 1.00  0.00  0.00 0.00  1.00
Final Sat.:    0 5060   112    0    0     0 3620 1866     0    0    0  1644
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.20  0.20  0.00 0.00  0.00  0.04 0.14  0.00  0.00 0.00  0.02
Crit Moves:       ****                              ****        ****
Green/Cycle: 0.00 0.45  0.45  0.00 0.00  0.00  0.29 0.45  0.00  0.00 0.00  0.16
Volume/Cap:  0.00 0.44  0.44  0.00 0.00  0.00  0.14 0.30  0.00  0.00 0.00  0.15
Delay/Veh:    0.0 10.8  10.8   0.0  0.0   0.0  14.9 10.1   0.0   0.0  0.0  20.5
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 10.8  10.8   0.0  0.0   0.0  14.9 10.1   0.0   0.0  0.0  20.5
HCM2k95th:     0    8     8    0    0     0    2    6     0    0    0     1
********************************************************************************
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--------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                          Existing Conditions
                             AM Peak Hour
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #42 16th St/I St
********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.364
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       10.3
Optimal Cycle:       56              Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:   25   25     0    0    0     0    0    0     0    0   25    25
Lanes:       1  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 6 Dec 2005 << 7:45
Base Vol:    314  828     0    0    0     0    0    0     0    0  637   168
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse: 314  828     0    0    0     0    0    0     0    0  637   168
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:  314  828     0    0    0     0    0    0     0    0  637   168
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol: 314  828     0    0    0     0    0    0     0    0  637   168
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:  314  828     0    0    0     0    0    0     0    0  637   168
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.91 0.91  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 0.88  0.88
Lanes:       1.10 2.90  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 2.37  0.63
Final Sat.:  1902 5014     0    0    0     0    0    0     0    0 3977  1049
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.17 0.17  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.16  0.16
Crit Moves:  ****                                                     ****
Green/Cycle: 0.45 0.45  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.45  0.45
Volume/Cap:  0.37 0.37  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.36  0.36
Delay/Veh:   10.4 10.4   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 10.3  10.3
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  10.4 10.4   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 10.3  10.3
HCM2k95th:     6    6     0    0    0     0    0    0     0    0    7     7
********************************************************************************
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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                            Existing Conditions
                               AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #43 16th St/J St
********************************************************************************
Cycle (sec):         50               Critical Vol./Cap. (X):        0.440
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        11.6
Optimal Cycle:       56               Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0   25    25    0    0     0   25   25     0    0    0     0
Lanes:        0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 30 Sep 2004 << 7:45
Base Vol:       0 1299   136    0    0     0  194 1003     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0 1299   136    0    0     0  194 1003     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0 1299   136    0    0     0  194 1003     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0 1299   136    0    0     0  194 1003     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0 1299   136    0    0     0  194 1003     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.90  0.90 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.72  0.28 0.00 0.00  0.00 1.00 3.00  0.00 0.00 0.00  0.00
Final Sat.:     0 4630   485    0    0     0 1729 5187     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.28  0.28 0.00 0.00  0.00 0.11 0.19  0.00 0.00 0.00  0.00
Crit Moves:       ****                      ****
Green/Cycle: 0.00 0.45  0.45 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.63  0.63 0.00 0.00  0.00 0.25 0.43  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 12.5  12.5  0.0  0.0   0.0  9.7 10.7   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 12.5  12.5  0.0  0.0   0.0  9.7 10.7   0.0  0.0  0.0   0.0
HCM2k95th:      0   14    14    0    0     0    4    8     0    0    0     0
********************************************************************************
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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                            Existing Conditions
                               AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #44 16th St/L St
********************************************************************************
Cycle (sec):         50               Critical Vol./Cap. (X):        0.310
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        10.8
Optimal Cycle:       56               Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    25   25     0    0    0     0    0    0     0    0   25    25
Lanes:        1  0  3  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 20 Jan 2005 << 7:45
Base Vol:     242 1214     0    0    0     0    0    0     0    0  628   128
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:  242 1214     0    0    0     0    0    0     0    0  628   128
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:   242 1214     0    0    0     0    0    0     0    0  628   128
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:  242 1214     0    0    0     0    0    0     0    0  628   128
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:   242 1214     0    0    0     0    0    0     0    0  628   128
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.91  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.89  0.89
Lanes:       1.00 3.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 2.49  0.51
Final Sat.:  1900 5187     0    0    0     0    0    0     0    0 4201   856
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.13 0.23  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.15  0.15
Crit Moves:  ****                                                   ****
Green/Cycle: 0.45 0.45  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.45  0.45
Volume/Cap:  0.29 0.52  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.33  0.33
Delay/Veh:   10.0 11.4   0.0  0.0  0.0   0.0  0.0  0.0   0.0  0.0 10.2  10.2
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:  10.0 11.4   0.0  0.0  0.0   0.0  0.0  0.0   0.0  0.0 10.2  10.2
HCM2k95th:      6   11     0    0    0     0    0    0     0    0    6     6
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--------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                             Existing Conditions
                                AM Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #45 16th St/P St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):         0.560
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        11.3
Optimal Cycle:        56               Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    29   29    0    0    0    0    0    0    0    0   21   21
Lanes:        0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     192 1355    0    0    0    0    0    0    0    0  875  149
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  192 1355    0    0    0    0    0    0    0    0  875  149
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   192 1355    0    0    0    0    0    0    0    0  875  149
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  192 1355    0    0    0    0    0    0    0    0  875  149
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   192 1355    0    0    0    0    0    0    0    0  875  149
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.91 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.89 0.89
Lanes:       0.37 2.63 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.56 0.44
Final Sat.:   644 4543    0    0    0    0    0    0    0    0 4335  738
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.30 0.30 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.20 0.20
Crit Moves:  ****                                                ****
Green/Cycle: 0.52 0.52 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.38 0.38
Volume/Cap:  0.58 0.58 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.54 0.54
Delay/Veh:    9.6  9.6  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 14.0 14.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   9.6  9.6  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 14.0 14.0
HCM2k95th:     12   12    0    0    0    0    0    0    0    0   10   10
********************************************************************************
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--------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                             Existing Conditions
                                AM Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #46 16th St/Q St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):         0.527
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        11.6
Optimal Cycle:        56               Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   25   25    0    0    0   25   25    0    0    0    0
Lanes:        0  0  2  1  0   0  0  0  0  0   0  1  1  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1273   42    0    0    0  272  506    0    0    0    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0 1273   42    0    0    0  272  506    0    0    0    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0 1273   42    0    0    0  272  506    0    0    0    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0 1273   42    0    0    0  272  506    0    0    0    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0 1273   42    0    0    0  272  506    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 0.91 0.91 1.00 1.00 1.00 0.95 0.95 1.00 1.00 1.00 1.00
Lanes:       0.00 2.90 0.10 0.00 0.00 0.00 0.70 1.30 0.00 0.00 0.00 0.00
Final Sat.:     0 4996  165    0    0    0 1262 2348    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.25 0.25 0.00 0.00 0.00 0.22 0.22 0.00 0.00 0.00 0.00
Crit Moves:       ****                      ****
Green/Cycle: 0.00 0.45 0.45 0.00 0.00 0.00 0.45 0.45 0.00 0.00 0.00 0.00
Volume/Cap:  0.00 0.57 0.57 0.00 0.00 0.00 0.48 0.48 0.00 0.00 0.00 0.00
Delay/Veh:    0.0 11.9 11.9  0.0  0.0  0.0 11.2 11.2  0.0  0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0 11.9 11.9  0.0  0.0  0.0 11.2 11.2  0.0  0.0  0.0  0.0
HCM2k95th:      0   12   12    0    0    0    9    9    0    0    0    0
********************************************************************************
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-----------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                              Existing Conditions
                                 AM Peak Hour
-----------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #47 16th St/W St
*****************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.414
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):       23.5
Optimal Cycle:        79              Level Of Service:                  C
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected       Split Phase      Split Phase
Rights:          Include          Include          Include          Include
Min. Green:   30   30    0     0    0    0     0   16   16     0   24   24
Lanes:       1  1  2  0  0    0  0  0  0  0    0  0  2  1  0    0  0  1  1  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 14 Dec 2005 << 7:45
Base Vol:     97 1007    0     0    0    0     0  515  157     0  286  594
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  97 1007    0     0    0    0     0  515  157     0  286  594
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   97 1007    0     0    0    0     0  515  157     0  286  594
Reduct Vol:    0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:  97 1007    0     0    0    0     0  515  157     0  286  594
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   97 1007    0     0    0    0     0  515  157     0  286  594
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.91 0.91  1.00  1.00 1.00  1.00  1.00 0.88  0.88  1.00 0.85  0.85
Lanes:       1.00 3.00  0.00  0.00 0.00  0.00  0.00 2.30  0.70  0.00 1.00  2.00
Final Sat.:  1729 5187    0     0    0    0     0 3836 1169     0 1623 3245
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.06 0.19  0.00  0.00 0.00  0.00  0.00 0.13  0.13  0.00 0.18  0.18
Crit Moves:  ****                                   ****              ****
Green/Cycle: 0.38 0.38  0.00  0.00 0.00  0.00  0.00 0.20  0.20  0.00 0.30  0.30
Volume/Cap:  0.15 0.51  0.00  0.00 0.00  0.00  0.00 0.66  0.66  0.00 0.58  0.60
Delay/Veh:   16.1 19.1   0.0   0.0  0.0   0.0   0.0 30.7  30.7   0.0 23.8  24.1
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  16.1 19.1   0.0   0.0  0.0   0.0   0.0 30.7  30.7   0.0 23.8  24.1
HCM2k95th:      3   12     0     0    0     0     0   12    12     0   13    13
*****************************************************************************
```



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-----------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
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-----------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #48 16th St/X St
*****************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.385
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       13.7
Optimal Cycle:        76              Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   35   35     0    0    0    35   35    0     0    0    0
Lanes:       0  0  3  1  0    0  0  0  0  0    2  0  2  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 14 Dec 2005 << 7:30
Base Vol:      0 1243   62     0    0    0   606  732    0     0    0    0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0 1243   62     0    0    0   606  732    0     0    0    0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0 1243   62     0    0    0   606  732    0     0    0    0
Reduct Vol:    0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   0 1243   62     0    0    0   606  732    0     0    0    0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0 1243   62     0    0    0   606  732    0     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.90  0.90  1.00 1.00  1.00  0.97 0.95  1.00  1.00 1.00  1.00
Lanes:       0.00 3.81  0.19  0.00 0.00  0.00  2.00 2.00  0.00  0.00 0.00  0.00
Final Sat.:     0 6541   326     0    0    0  3686 3610    0     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.19  0.19  0.00 0.00  0.00  0.16 0.20  0.00  0.00 0.00  0.00
Crit Moves:       ****                         ****
Green/Cycle: 0.00 0.46  0.46  0.00 0.00  0.00  0.46 0.46  0.00  0.00 0.00  0.00
Volume/Cap:  0.00 0.41  0.41  0.00 0.00  0.00  0.36 0.44  0.00  0.00 0.00  0.00
Delay/Veh:    0.0 13.7  13.7   0.0  0.0   0.0  13.4 14.1   0.0   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 13.7  13.7   0.0  0.0   0.0  13.4 14.1   0.0   0.0  0.0   0.0
HCM2k95th:      0   10    10     0    0     0     9   11     0     0    0     0
*****************************************************************************
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Downtown Sacramento Traffic Study
Existing Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #49 29th St/J St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.582
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	28.6
Optimal Cycle:	79	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	18	18	0	26	26	0	0	26	26	0	0	0
Lanes:	0 1 2 0 0			0 1 1 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module: >> Count Date: 7 Jun 2005 << 7:30												
Base Vol:	47	271	0	426	595	0	0	568	250	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	47	271	0	426	595	0	0	568	250	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	47	271	0	426	595	0	0	568	250	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	271	0	426	595	0	0	568	250	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	47	271	0	426	595	0	0	568	250	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.90	1.00	0.93	0.93	1.00	1.00	0.87	0.87	1.00	1.00	1.00
Lanes:	0.44	2.56	0.00	0.83	1.17	0.00	0.00	2.08	0.92	0.00	0.00	0.00
Final Sat.:	761	4389	0	1476	2062	0	0	3436	1512	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.00	0.29	0.29	0.00	0.00	0.17	0.17	0.00	0.00	0.00
Crit Moves:		****		****				****				
Green/Cycle:	0.23	0.23	0.00	0.33	0.33	0.00	0.00	0.33	0.33	0.00	0.00	0.00
Volume/Cap:	0.27	0.27	0.00	0.88	0.88	0.00	0.00	0.50	0.50	0.00	0.00	0.00
Delay/Veh:	25.7	25.7	0.0	34.4	34.4	0.0	0.0	22.4	22.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.7	25.7	0.0	34.4	34.4	0.0	0.0	22.4	22.4	0.0	0.0	0.0
HCM2k95th:	5	5	0	25	25	0	0	11	11	0	0	0

Downtown Sacramento Traffic Study
Existing Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #50 30th St/J St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.277
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	12.2
Optimal Cycle:	76	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	31	31	0	0	0	39	39	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module: >> Count Date: 7 Jun 2005 << 7:45												
Base Vol:	0	395	173	0	0	0	242	812	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	395	173	0	0	0	242	812	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	395	173	0	0	0	242	812	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	395	173	0	0	0	242	812	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	395	173	0	0	0	242	812	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.87	0.87	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.09	0.91	0.00	0.00	0.00	1.00	3.00	0.00	0.00	0.00	0.00
Final Sat.:	0	3441	1507	0	0	0	1729	5187	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.11	0.00	0.00	0.00	0.14	0.16	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.41	0.41	0.00	0.00	0.00	0.51	0.51	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.28	0.28	0.00	0.00	0.00	0.27	0.31	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	15.1	15.1	0.0	0.0	0.0	10.5	10.7	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	15.1	15.1	0.0	0.0	0.0	10.5	10.7	0.0	0.0	0.0	0.0
HCM2k95th:	0	6	6	0	0	0	6	7	0	0	0	0

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-----------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
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                               PM Peak Hour
-----------------------------------------------------------------------------

                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #1 3rd St/J St
*****************************************************************************
Cycle (sec):          0              Critical Vol./Cap. (X):        0.693
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):      15.7
Optimal Cycle:       41              Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted       Split Phase      Split Phase
Rights:          Include          Include          Include          Include
Min. Green:    0     0     4    4     4     0    4     4     4    4     4     4
Lanes:       0  0  0  0  2    2  0  1  0  0    0  1  2  1  0    0  1  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 28 Sep 2004 << 4:45
Base Vol:      0     0   184  219   318     0    2   353    59   10   858   407
Growth Adj:  1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Initial Bse:   0     0   184  219   318     0    2   353    59   10   858   407
User Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Volume:    0     0   184  219   318     0    2   353    59   10   858   407
Reduct Vol:    0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:   0     0   184  219   318     0    2   353    59   10   858   407
PCE Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Final Vol.:    0     0   184  219   318     0    2   353    59   10   858   407
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900  1900
Adjustment:  1.00  1.00  0.67 0.56  0.90  1.00 0.80  0.80  0.80 0.78  0.78  0.78
Lanes:       0.00  0.00  2.00 2.00  1.00  0.00 0.02  3.41  0.57 0.02  2.02  0.96
Final Sat.:    0     0  2558 2126  1710     0   29  5196   868   35  2991  1419
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00  0.00  0.07 0.10  0.19  0.00 0.07  0.07  0.07 0.29  0.29  0.29
Crit Moves:                        ****        ****                    ****
Green/Cycle: 0.00  0.00  0.27 0.27  0.27  0.00 0.10  0.10  0.10 0.41  0.41  0.41
Volume/Cap:  0.00  0.00  0.27 0.38  0.69  0.00 0.69  0.69  0.69 0.69  0.69  0.69
Delay/Veh:    0.0   0.0  12.8 14.2  21.8   0.0 24.4  24.4  24.4 12.0  12.0  12.0
User DelAdj: 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
AdjDel/Veh:   0.0   0.0  12.8 14.2  21.8   0.0 24.4  24.4  24.4 12.0  12.0  12.0
HCM2k95th:     0     0     3    5    10     0    6     6     6   11    11    11
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-----------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
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-----------------------------------------------------------------------------

                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #2 3rd St/L St
*****************************************************************************
Cycle (sec):         70              Critical Vol./Cap. (X):        0.510
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      15.4
Optimal Cycle:       76              Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0     0     0    0    20    20    0     0     0   50    50    50
Lanes:       0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 28 Sep 2004 << 4:45
Base Vol:      0     0     0    0   445   306    0     0     0  360  1353    99
Growth Adj:  1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Initial Bse:   0     0     0    0   445   306    0     0     0  360  1353    99
User Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Volume:    0     0     0    0   445   306    0     0     0  360  1353    99
Reduct Vol:    0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:   0     0     0    0   445   306    0     0     0  360  1353    99
PCE Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Final Vol.:    0     0     0    0   445   306    0     0     0  360  1353    99
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900  1900
Adjustment:  1.00  1.00  1.00 1.00  0.77  0.77 1.00  1.00  1.00 0.73  0.73  0.77
Lanes:       0.00  0.00  0.00 0.00  2.00  1.00 0.00  0.00  0.00 1.00  2.00  1.00
Final Sat.:    0     0     0    0  2922  1461    0     0     0 1381  2762  1454
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00  0.00  0.00 0.00  0.15  0.21 0.00  0.00  0.00 0.26  0.49  0.07
Crit Moves:                              ****                      ****
Green/Cycle: 0.00  0.00  0.00 0.00  0.26  0.26 0.00  0.00  0.00 0.66  0.66  0.66
Volume/Cap:  0.00  0.00  0.00 0.00  0.58  0.80 0.00  0.00  0.00 0.40  0.74  0.10
Delay/Veh:    0.0   0.0   0.0  0.0  26.2  33.0  0.0   0.0   0.0  6.3  11.0   5.0
User DelAdj: 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
AdjDel/Veh:   0.0   0.0   0.0  0.0  26.2  33.0  0.0   0.0   0.0  6.3  11.0   5.0
HCM2k95th:     0     0     0    0    10    16    0     0     0    9    23     2
*****************************************************************************
```

Downtown Sacramento Traffic Study
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 3rd St/Capitol Mall

Cycle (sec): 70 Critical Vol./Cap. (X): 0.423
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 18.1
Optimal Cycle: 79 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	29	29	0	14	21	0	20	27	0
Lanes:	0 0 0 0 0			0 1 1 1 0			0 0 3 0 0			1 0 2 0 0		
Volume Module: >> Count Date: 28 Sep 2004 << 4:45												
Base Vol:	0	0	0	43	760	0	0	466	0	167	467	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	43	760	0	0	466	0	167	467	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	43	760	0	0	466	0	167	467	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	43	760	0	0	466	0	167	467	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	43	760	0	0	466	0	167	467	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	0.82	0.91	1.00	0.82	1.00	0.86	0.86	1.00
Lanes:	0.00	0.00	0.00	0.16	2.84	0.00	0.00	3.00	0.00	1.00	2.00	0.00
Final Sat.:	0	0	0	250	4418	0	0	4668	0	1625	3249	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.17	0.00	0.00	0.10	0.00	0.10	0.14	0.00
Crit Moves:				****				****		****		
Green/Cycle:	0.00	0.00	0.00	0.37	0.37	0.00	0.00	0.27	0.00	0.56	0.52	0.00
Volume/Cap:	0.00	0.00	0.00	0.47	0.47	0.00	0.00	0.38	0.00	0.28	0.28	0.00
Delay/Veh:	0.0	0.0	0.0	20.0	20.0	0.0	0.0	24.5	0.0	10.1	11.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	20.0	20.0	0.0	0.0	24.5	0.0	10.1	11.1	0.0
HCM2k95th:	0	0	0	10	10	0	0	7	0	5	7	0

Downtown Sacramento Traffic Study
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 3rd St/N St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.415
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 19.0
Optimal Cycle: 79 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	16	16	36	36	0	0	18	18	0	0	0
Lanes:	0 0 0 1 0			0 1 2 0 0			0 0 1 1 0			0 0 0 0 0		
Volume Module: >> Count Date: 28 Sep 2004 << 4:45												
Base Vol:	0	79	25	128	898	0	0	129	184	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	79	25	128	898	0	0	129	184	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	79	25	128	898	0	0	129	184	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	79	25	128	898	0	0	129	184	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	79	25	128	898	0	0	129	184	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.97	0.97	0.90	0.90	1.00	1.00	0.87	0.87	1.00	1.00	1.00
Lanes:	0.00	0.76	0.24	0.37	2.63	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	0	1397	442	643	4513	0	0	1646	1646	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.06	0.20	0.20	0.00	0.00	0.08	0.11	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green/Cycle:	0.00	0.20	0.20	0.46	0.46	0.00	0.00	0.23	0.23	0.00	0.00	0.00
Volume/Cap:	0.00	0.28	0.28	0.44	0.44	0.00	0.00	0.34	0.49	0.00	0.00	0.00
Delay/Veh:	0.0	28.5	28.5	15.2	15.2	0.0	0.0	26.6	29.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	28.5	28.5	15.2	15.2	0.0	0.0	26.6	29.2	0.0	0.0	0.0
HCM2k95th:	0	5	5	11	11	0	0	6	9	0	0	0

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-------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                               Existing Conditions
                                  PM Peak Hour
-------------------------------------------------------------------------------
                        Level Of Service Computation Report
                2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #5 3rd St/P St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.742
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      14.1
Optimal Cycle:        56              Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0   19    19     0    0     0    31   31     0
Lanes:        0  0  0  0  0    0  0  1  1  1    0  0  0  0  0    0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 28 Sep 2004 << 4:30
Base Vol:       0    0     0     0  417   677     0    0     0   151 2129     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0  417   677     0    0     0   151 2129     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     0  417   677     0    0     0   151 2129     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0     0  417   677     0    0     0   151 2129     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0     0     0  417   677     0    0     0   151 2129     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  1.00 0.86  0.86  1.00 1.00  1.00  0.91 0.91  1.00
Lanes:       0.00 0.00  0.00  0.00 1.14  1.86  0.00 0.00  0.00  0.20 2.80  0.00
Final Sat.:     0    0     0     0 1872  3039     0    0     0   344 4843     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.00 0.22  0.22  0.00 0.00  0.00  0.44 0.44  0.00
Crit Moves:                        ****                         ****
Green/Cycle: 0.00 0.00  0.00  0.00 0.34  0.34  0.00 0.00  0.00  0.55 0.55  0.00
Volume/Cap:  0.00 0.00  0.00  0.00 0.66  0.66  0.00 0.00  0.00  0.79 0.79  0.00
Delay/Veh:    0.0  0.0   0.0   0.0 17.8  17.8   0.0  0.0   0.0  12.3 12.3   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   0.0 17.8  17.8   0.0  0.0   0.0  12.3 12.3   0.0
HCM2k95th:      0    0     0     0   12    12     0    0     0    19   19     0
********************************************************************************
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-------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                               Existing Conditions
                                  PM Peak Hour
-------------------------------------------------------------------------------
                        Level Of Service Computation Report
                2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #6 3rd St/Q St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.228
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      10.3
Optimal Cycle:        56              Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    19   19     0     0   31    31     0    0     0
Lanes:        0  0  0  0  0    0  1  2  0  0    0  0  3  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 28 Sep 2004 << 4:45
Base Vol:       0    0     0   160  442     0     0  525    72     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0   160  442     0     0  525    72     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0   160  442     0     0  525    72     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0   160  442     0     0  525    72     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0     0   160  442     0     0  525    72     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  0.91 0.91  1.00  1.00 0.89  0.89  1.00 1.00  1.00
Lanes:       0.00 0.00  0.00  0.80 2.20  0.00  0.00 3.52  0.48  0.00 0.00  0.00
Final Sat.:     0    0     0  1379 3808     0     0 5972   819     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.12 0.12  0.00  0.00 0.09  0.09  0.00 0.00  0.00
Crit Moves:                   ****                   ****
Green/Cycle: 0.00 0.00  0.00  0.34 0.34  0.00  0.00 0.55  0.55  0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00  0.34 0.34  0.00  0.00 0.16  0.16  0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0  14.4 14.4   0.0   0.0  6.2   6.2   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  14.4 14.4   0.0   0.0  6.2   6.2   0.0  0.0   0.0
HCM2k95th:      0    0     0     6    6     0     0    3     3     0    0     0
********************************************************************************
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--------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                               Existing Conditions
                                  PM Peak Hour
--------------------------------------------------------------------------------
                        Level Of Service Computation Report
               2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #7 5th St/I St
********************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.594
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      14.6
Optimal Cycle:      106              Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:   21   21    0     0    0    0     0    0    0     0   79   79
Lanes:       2  0  2  0  0    0  0  0  0  0    0  0  0  0  0    0  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 20 Jan 2005 << 4:45
Base Vol:     419  347    0     0    0    0     0    0    0     0 2640   55
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:  419  347    0     0    0    0     0    0    0     0 2640   55
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:   419  347    0     0    0    0     0    0    0     0 2640   55
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:  419  347    0     0    0    0     0    0    0     0 2640   55
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:   419  347    0     0    0    0     0    0    0     0 2640   55
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  0.87 0.86 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 0.82 0.82
Lanes:       2.00 2.00 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 3.92 0.08
Final Sat.:  3317 3249    0     0    0    0     0    0    0     0 6079  127
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.13 0.11 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.43 0.43
Crit Moves:  ****                                                  ****
Green/Cycle: 0.20 0.20 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.75 0.75
Volume/Cap:  0.64 0.54 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.58 0.58
Delay/Veh:   43.7 41.4  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0  6.6  6.6
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:  43.7 41.4  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0  6.6  6.6
HCM2k95th:     12   10    0     0    0    0     0    0    0     0   18   18
********************************************************************************
```



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--------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                               Existing Conditions
                                  PM Peak Hour
--------------------------------------------------------------------------------
                        Level Of Service Computation Report
               2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #8 5th St/J St
********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.455
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      11.4
Optimal Cycle:       56              Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   25   25     0    0    0    25   25   25     0    0    0
Lanes:       0  0  1  1  1    0  0  0  0  0    1  1  3  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 20 Jan 2005 << 4:45
Base Vol:       0  449  407     0    0    0   324 1112  130     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0  449  407     0    0    0   324 1112  130     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0  449  407     0    0    0   324 1112  130     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0  449  407     0    0    0   324 1112  130     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0  449  407     0    0    0   324 1112  130     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 0.79 0.79  1.00 1.00 1.00  0.70 0.70 0.77  1.00 1.00 1.00
Lanes:       0.00 1.57 1.43  0.00 0.00 0.00  1.13 3.87 1.00  0.00 0.00 0.00
Final Sat.:     0 2375 2153     0    0    0  1492 5121 1454     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.19 0.19  0.00 0.00 0.00  0.22 0.22 0.09  0.00 0.00 0.00
Crit Moves:       ****                       ****
Green/Cycle: 0.00 0.45 0.45  0.00 0.00 0.00  0.45 0.45 0.45  0.00 0.00 0.00
Volume/Cap:  0.00 0.42 0.42  0.00 0.00 0.00  0.49 0.49 0.20  0.00 0.00 0.00
Delay/Veh:    0.0 11.2 11.2   0.0  0.0  0.0  11.5 11.5 10.1   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0 11.2 11.2   0.0  0.0  0.0  11.5 11.5 10.1   0.0  0.0  0.0
HCM2k95th:      0    7    7     0    0    0     9    9    3     0    0    0
********************************************************************************
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-----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                           Existing Conditions
                              PM Peak Hour
-----------------------------------------------------------------------------

                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #9 5th St/L St
*****************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.573
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):       21.7
Optimal Cycle:        79              Level Of Service:                  C
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    45   45    0    0    0   45    0    0    0    0   25   25
Lanes:        1  0  3  0  0   0  0  0  0  2   0  0  0  0  0   0  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Jan 2005 << 4:45
Base Vol:     320  664    0    0    0   59    0    0    0    0 1484  140
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  320  664    0    0    0   59    0    0    0    0 1484  140
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   320  664    0    0    0   59    0    0    0    0 1484  140
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  320  664    0    0    0   59    0    0    0    0 1484  140
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   320  664    0    0    0   59    0    0    0    0 1484  140
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.69 0.82 1.00 1.00 1.00 0.67 1.00 1.00 1.00 1.00 0.81 0.81
Lanes:       1.00 3.00 0.00 0.00 0.00 2.00 0.00 0.00 0.00 0.00 3.66 0.34
Final Sat.:  1315 4668    0    0    0 2558    0    0    0    0 5614  530
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.24 0.14 0.00 0.00 0.00 0.02 0.00 0.00 0.00 0.00 0.26 0.26
Crit Moves:  ****                                                ****
Green/Cycle: 0.57 0.57 0.00 0.00 0.00 0.57 0.00 0.00 0.00 0.00 0.32 0.32
Volume/Cap:  0.43 0.25 0.00 0.00 0.00 0.04 0.00 0.00 0.00 0.00 0.84 0.84
Delay/Veh:   11.4  8.8  0.0  0.0  0.0  7.5  0.0  0.0  0.0  0.0 29.5 29.5
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  11.4  8.8  0.0  0.0  0.0  7.5  0.0  0.0  0.0  0.0 29.5 29.5
HCM2k95th:     11    6    0    0    0    1    0    0    0    0   20   20
*****************************************************************************
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-----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                           Existing Conditions
                              PM Peak Hour
-----------------------------------------------------------------------------

                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #10 5th St/Capitol Mall
*****************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.168
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       18.0
Optimal Cycle:        76              Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    35   35    0    0    0    0   17   35    0    0   18   18
Lanes:        2  0  2  1  0   0  0  0  0  0   2  0  2  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Jan 2005 << 4:45
Base Vol:     244  626   43    0    0    0  340  262    0    0  329   55
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  244  626   43    0    0    0  340  262    0    0  329   55
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   244  626   43    0    0    0  340  262    0    0  329   55
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  244  626   43    0    0    0  340  262    0    0  329   55
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   244  626   43    0    0    0  340  262    0    0  329   55
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.86 0.81 0.81 1.00 1.00 1.00 0.83 0.86 1.00 1.00 0.80 0.80
Lanes:       2.00 2.81 0.19 0.00 0.00 0.00 2.00 2.00 0.00 0.00 2.57 0.43
Final Sat.:  3284 4325  297    0    0    0 3152 3249    0    0 3916  655
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.14 0.14 0.00 0.00 0.00 0.11 0.08 0.00 0.00 0.08 0.08
Crit Moves:  ****                               ****      ****
Green/Cycle: 0.46 0.46 0.46 0.00 0.00 0.00 0.22 0.46 0.00 0.00 0.24 0.24
Volume/Cap:  0.16 0.31 0.31 0.00 0.00 0.00 0.48 0.18 0.00 0.00 0.35 0.35
Delay/Veh:   12.2 13.3 13.3  0.0  0.0  0.0 28.0 12.3  0.0  0.0 25.1 25.1
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  12.2 13.3 13.3  0.0  0.0  0.0 28.0 12.3  0.0  0.0 25.1 25.1
HCM2k95th:      4    7    7    0    0    0    9    4    0    0    6    6
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-------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                            Existing Conditions
                               PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #11 5th St/N St
*******************************************************************************
Cycle (sec):          70            Critical Vol./Cap. (X):        0.283
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        13.2
Optimal Cycle:        76            Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0   35    35    0    0     0   35   35     0    0    0     0
Lanes:        0  0  2  1  0   0  0  0  0  0   0  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Jan 2005 << 4:45
Base Vol:       0  710   124    0    0     0   72  427     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0  710   124    0    0     0   72  427     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0  710   124    0    0     0   72  427     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0  710   124    0    0     0   72  427     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0  710   124    0    0     0   72  427     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.89  0.89 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.55  0.45 0.00 0.00  0.00 0.43 2.57  0.00 0.00 0.00  0.00
Final Sat.:     0 4319   754    0    0     0  748 4439     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.16  0.16 0.00 0.00  0.00 0.10 0.10  0.00 0.00 0.00  0.00
Crit Moves:       ****                       ****
Green/Cycle: 0.00 0.46  0.46 0.00 0.00  0.00 0.46 0.46  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.36  0.36 0.00 0.00  0.00 0.21 0.21  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 13.7  13.7  0.0  0.0   0.0 12.4 12.4   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 13.7  13.7  0.0  0.0   0.0 12.4 12.4   0.0  0.0  0.0   0.0
HCM2k95th:      0    9     9    0    0     0    5    5     0    0    0     0
*******************************************************************************
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-------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                            Existing Conditions
                               PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #12 5th St/P St
*******************************************************************************
Cycle (sec):          50            Critical Vol./Cap. (X):        0.590
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        12.0
Optimal Cycle:        56            Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    21   21     0    0    0     0    0    0     0    0   29    29
Lanes:        0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 21 Apr 2005 << 4:30
Base Vol:     336  551     0    0    0     0    0    0     0    0 1392   288
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:  336  551     0    0    0     0    0    0     0    0 1392   288
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:   336  551     0    0    0     0    0    0     0    0 1392   288
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:  336  551     0    0    0     0    0    0     0    0 1392   288
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:   336  551     0    0    0     0    0    0     0    0 1392   288
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  0.91 0.91  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.89  0.89
Lanes:       1.00 2.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 2.49  0.51
Final Sat.:  1729 3458     0    0    0     0    0    0     0    0 4186   866
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.19 0.16  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.33  0.33
Crit Moves:  ****                                                  ****
Green/Cycle: 0.38 0.38  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.52  0.52
Volume/Cap:  0.52 0.42  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.64  0.64
Delay/Veh:   14.7 13.6   0.0  0.0  0.0   0.0  0.0  0.0   0.0  0.0 11.0  11.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:  14.7 13.6   0.0  0.0  0.0   0.0  0.0  0.0   0.0  0.0 11.0  11.0
HCM2k95th:      9    8     0    0    0     0    0    0     0    0   14    14
*******************************************************************************
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--------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                             Existing Conditions
                                PM Peak Hour
--------------------------------------------------------------------------------
                        Level Of Service Computation Report
               2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #13 5th St/Q St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.257
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       9.9
Optimal Cycle:        56              Level Of Service:                  A
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   21    21    0    0     0   29   29     0    0    0     0
Lanes:       0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 26 Apr 2005 << 4:30
Base Vol:      0  550    73    0    0     0  259  484     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0  550    73    0    0     0  259  484     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0  550    73    0    0     0  259  484     0    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0  550    73    0    0     0  259  484     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0  550    73    0    0     0  259  484     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.89  0.89 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.65  0.35 0.00 0.00  0.00 1.39 2.61  0.00 0.00 0.00  0.00
Final Sat.:    0 4497   597    0    0     0 2411 4505     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.12  0.12 0.00 0.00  0.00 0.11 0.11  0.00 0.00 0.00  0.00
Crit Moves:       ****                       ****
Green/Cycle: 0.00 0.38  0.38 0.00 0.00  0.00 0.52 0.52  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.33  0.33 0.00 0.00  0.00 0.21 0.21  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 12.9  12.9  0.0  0.0   0.0  7.4  7.4   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 12.9  12.9  0.0  0.0   0.0  7.4  7.4   0.0  0.0  0.0   0.0
HCM2k95th:     0    6     6    0    0     0    4    4     0    0    0     0
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--------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                             Existing Conditions
                                PM Peak Hour
--------------------------------------------------------------------------------
                        Level Of Service Computation Report
               2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #14 7th St/I St
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap. (X):        0.336
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      18.2
Optimal Cycle:       106              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0     0    0   34    34    0    0     0   66   66     0
Lanes:       0  0  0  0  0   0  0  2  0  2   0  0  0  0  0   1  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 30 Sep 2004 << 4:45
Base Vol:      0    0     0    0  368   496    0    0     0  191 1618     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0     0    0  368   496    0    0     0  191 1618     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0    0     0    0  368   496    0    0     0  191 1618     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0     0    0  368   496    0    0     0  191 1618     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0    0     0    0  368   496    0    0     0  191 1618     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.86  0.67 1.00 1.00  1.00 0.82 0.82  1.00
Lanes:       0.00 0.00  0.00 0.00 2.00  2.00 0.00 0.00  0.00 1.00 3.00  0.00
Final Sat.:    0    0     0    0 3249  2558    0    0     0 1556 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.11  0.19 0.00 0.00  0.00 0.12 0.35  0.00
Crit Moves:                             ****                       ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.32  0.32 0.00 0.00  0.00 0.62 0.62  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.35  0.60 0.00 0.00  0.00 0.20 0.56  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 28.5  33.6  0.0  0.0   0.0  8.7 12.2   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 28.5  33.6  0.0  0.0   0.0  8.7 12.2   0.0
HCM2k95th:     0    0     0    0    9    14    0    0     0    6   18     0
********************************************************************************
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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                            Existing Conditions
                               PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #15 7th St/J St
*******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.524
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      12.4
Optimal Cycle:       56              Level Of Service:                 B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0     0   22   22     0    0   28    28    0    0     0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Dec 2005 << 4:45
Base Vol:      0    0     0   83  471     0    0 1289   294    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0     0   83  471     0    0 1289   294    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0    0     0   83  471     0    0 1289   294    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0     0   83  471     0    0 1289   294    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0    0     0   83  471     0    0 1289   294    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.82 0.82  1.00 1.00 0.80  0.80 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.45 2.55  0.00 0.00 2.44  0.56 0.00 0.00  0.00
Final Sat.:    0    0     0  699 3969     0    0 3695   843    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.12 0.12  0.00 0.00 0.35  0.35 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.39 0.39  0.00 0.00 0.50  0.50 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.30 0.30  0.00 0.00 0.70  0.70 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 12.1 12.1   0.0  0.0 12.6  12.6  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 12.1 12.1   0.0  0.0 12.6  12.6  0.0  0.0   0.0
HCM2k95th:     0    0     0    5    5     0    0   15    15    0    0     0
*******************************************************************************
```



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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                            Existing Conditions
                               PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #16 7th St/L St
*******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.251
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      14.5
Optimal Cycle:       56              Level Of Service:                 B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0     0    0   29    29    0    0     0   21   21     0
Lanes:       0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Dec 2005 << 4:45
Base Vol:      0    0     0    0  469   214    0    0     0  121 1306     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0     0    0  469   214    0    0     0  121 1306     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0    0     0    0  469   214    0    0     0  121 1306     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0     0    0  469   214    0    0     0  121 1306     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0    0     0    0  469   214    0    0     0  121 1306     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.78  0.78 1.00 1.00  1.00 0.90 0.82  1.00
Lanes:       0.00 0.00  0.00 0.00 2.06  0.94 0.00 0.00  0.00 1.00 3.00  0.00
Final Sat.:    0    0     0    0 3055  1394    0    0     0 1710 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.15  0.15 0.00 0.00  0.00 0.07 0.28  0.00
Crit Moves:                       ****                              ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.52  0.52 0.00 0.00  0.00 0.38 0.38  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.30  0.30 0.00 0.00  0.00 0.19 0.75  0.00
Delay/Veh:    0.0  0.0   0.0  0.0  8.0   8.0  0.0  0.0   0.0 12.4 18.1   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0  8.0   8.0  0.0  0.0   0.0 12.4 18.1   0.0
HCM2k95th:     0    0     0    0    5     5    0    0     0    4   15     0
*******************************************************************************
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--------------------------------------------------------------------------------
                         Downtown Sacramento Traffic Study
                                Existing Conditions
                                   PM Peak Hour
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                          Level Of Service Computation Report
                2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #17 8th St/I St
********************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.580
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       17.5
Optimal Cycle:      106              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    34   34    0    0    0    0    0    0    0    0   66   66
Lanes:       0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     359  472    0    0    0    0    0    0    0    0 1666   83
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  359  472    0    0    0    0    0    0    0    0 1666   83
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   359  472    0    0    0    0    0    0    0    0 1666   83
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  359  472    0    0    0    0    0    0    0    0 1666   83
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   359  472    0    0    0    0    0    0    0    0 1666   83
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.91 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.90 0.90
Lanes:       1.00 2.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.86 0.14
Final Sat.:  1729 3458    0    0    0    0    0    0    0    0 4906  244
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.21 0.14 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.34 0.34
Crit Moves:  ****                                                  ****
Green/Cycle: 0.32 0.32 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.62 0.62
Volume/Cap:  0.65 0.43 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.55 0.55
Delay/Veh:   32.0 28.5  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 11.6 11.6
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  32.0 28.5  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 11.6 11.6
HCM2k95th:     20   12    0    0    0    0    0    0    0    0   19   19
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--------------------------------------------------------------------------------
                         Downtown Sacramento Traffic Study
                                Existing Conditions
                                   PM Peak Hour
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                          Level Of Service Computation Report
                2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #18 8th S/tJ St
********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.236
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       12.1
Optimal Cycle:       56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0   25   25    0    0    0   25   25    0    0    0    0
Lanes:       0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Dec 2005 << 5
Base Vol:       0  417  208    0    0    0  108 1297    0    0    0    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0  417  208    0    0    0  108 1297    0    0    0    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0  417  208    0    0    0  108 1297    0    0    0    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0  417  208    0    0    0  108 1297    0    0    0    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0  417  208    0    0    0  108 1297    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 0.78 0.78 1.00 1.00 1.00 0.82 0.82 1.00 1.00 1.00 1.00
Lanes:       0.00 2.00 1.00 0.00 0.00 0.00 1.00 3.00 0.00 0.00 0.00 0.00
Final Sat.:     0 2959 1476    0    0    0 1556 4668    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.14 0.14 0.00 0.00 0.00 0.07 0.28 0.00 0.00 0.00 0.00
Crit Moves:       ****                          ****
Green/Cycle: 0.00 0.45 0.45 0.00 0.00 0.00 0.45 0.45 0.00 0.00 0.00 0.00
Volume/Cap:  0.00 0.32 0.32 0.00 0.00 0.00 0.16 0.62 0.00 0.00 0.00 0.00
Delay/Veh:    0.0 10.4 10.4  0.0  0.0  0.0  9.3 13.2  0.0  0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0 10.4 10.4  0.0  0.0  0.0  9.3 13.2  0.0  0.0  0.0  0.0
HCM2k95th:      0    6    6    0    0    0    3   11    0    0    0    0
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------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                              Existing Conditions
                                 PM Peak Hour
------------------------------------------------------------------------------

                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #19 8th St/L St
******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.438
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        15.2
Optimal Cycle:        56              Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    29   29    0    0    0    0    0    0    0    0   21   21
Lanes:        0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Dec 2005 << 4:45
Base Vol:     158  335    0    0    0    0    0    0    0    0 1319   81
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  158  335    0    0    0    0    0    0    0    0 1319   81
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   158  335    0    0    0    0    0    0    0    0 1319   81
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  158  335    0    0    0    0    0    0    0    0 1319   81
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   158  335    0    0    0    0    0    0    0    0 1319   81
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.82 0.82 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.81 0.81
Lanes:       0.96 2.04 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.00 1.00
Final Sat.:  1496 3172    0    0    0    0    0    0    0    0 4626 1542
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.11 0.11 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.29 0.05
Crit Moves:  ****                                                ****
Green/Cycle: 0.52 0.52 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.38 0.38
Volume/Cap:  0.20 0.20 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.76 0.14
Delay/Veh:    7.5  7.5  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 18.3 11.6
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   7.5  7.5  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 18.3 11.6
HCM2k95th:      4    4    0    0    0    0    0    0    0    0   15    2
******************************************************************************
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------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                              Existing Conditions
                                 PM Peak Hour
------------------------------------------------------------------------------

                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #20 9th St/I St
******************************************************************************
Cycle (sec):         100              Critical Vol./Cap. (X):        0.401
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):        20.7
Optimal Cycle:       112              Level Of Service:                  C
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0    0    0   35   35    0    0    0   65   65    0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jan 2006 << 4:30
Base Vol:       0    0    0    0  385  330    0    0    0  223 1445    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0    0    0    0  385  330    0    0    0  223 1445    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0    0    0    0  385  330    0    0    0  223 1445    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0    0    0    0  385  330    0    0    0  223 1445    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0    0    0    0  385  330    0    0    0  223 1445    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 1.00 0.76 0.76 1.00 1.00 1.00 0.90 0.82 1.00
Lanes:       0.00 0.00 0.00 0.00 2.00 1.00 0.00 0.00 0.00 1.00 3.00 0.00
Final Sat.:     0    0    0    0 2897 1449    0    0    0 1710 4668    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.00 0.13 0.23 0.00 0.00 0.00 0.13 0.31 0.00
Crit Moves:                            ****                 ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.31 0.31 0.00 0.00 0.00 0.58 0.58 0.00
Volume/Cap:  0.00 0.00 0.00 0.00 0.43 0.73 0.00 0.00 0.00 0.22 0.53 0.00
Delay/Veh:    0.0  0.0  0.0  0.0 31.3 39.0  0.0  0.0  0.0 11.9 15.0  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  0.0 31.3 39.0  0.0  0.0  0.0 11.9 15.0  0.0
HCM2k95th:      0    0    0    0   11   20    0    0    0    8   18    0
******************************************************************************
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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                            Existing Conditions
                               PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #21 9th St/J St
********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.451
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      12.4
Optimal Cycle:       56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0    0    25   25    0     0   25   25     0    0    0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jan 2006 << 4:45
Base Vol:       0    0    0    93  480    0     0 1159  129     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0    93  480    0     0 1159  129     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0    93  480    0     0 1159  129     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0    93  480    0     0 1159  129     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0    93  480    0     0 1159  129     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.82 0.82 1.00  1.00 0.81 0.81  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  0.49 2.51 0.00  0.00 2.70 0.30  0.00 0.00 0.00
Final Sat.:     0    0    0   758 3911    0     0 4138  461     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.12 0.12 0.00  0.00 0.28 0.28  0.00 0.00 0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00 0.00  0.45 0.45 0.00  0.00 0.45 0.45  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.27 0.27 0.00  0.00 0.63 0.63  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0  10.1 10.1  0.0   0.0 13.4 13.4   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  10.1 10.1  0.0   0.0 13.4 13.4   0.0  0.0  0.0
HCM2k95th:      0    0    0     5    5    0     0   11   11     0    0    0
********************************************************************************
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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                            Existing Conditions
                               PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #22 9th St/L St
********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.543
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      11.5
Optimal Cycle:       56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0    0     0   21   21     0    0    0    29   29    0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 6 Dec 2005 << 4:45
Base Vol:       0    0    0     0  564  127     0    0    0   569 1123    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0     0  564  127     0    0    0   569 1123    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0     0  564  127     0    0    0   569 1123    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0     0  564  127     0    0    0   569 1123    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0     0  564  127     0    0    0   569 1123    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  1.00 0.80 0.80  1.00 1.00 1.00  0.90 0.82 1.00
Lanes:       0.00 0.00 0.00  0.00 2.45 0.55  0.00 0.00 0.00  1.00 3.00 0.00
Final Sat.:     0    0    0     0 3704  834     0    0    0  1710 4668    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.00 0.15 0.15  0.00 0.00 0.00  0.33 0.24 0.00
Crit Moves:                       ****                       ****
Green/Cycle: 0.00 0.00 0.00  0.00 0.38 0.38  0.00 0.00 0.00  0.52 0.52 0.00
Volume/Cap:  0.00 0.00 0.00  0.00 0.41 0.41  0.00 0.00 0.00  0.64 0.46 0.00
Delay/Veh:    0.0  0.0  0.0   0.0 13.6 13.6   0.0  0.0  0.0  13.3  9.2  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0   0.0 13.6 13.6   0.0  0.0  0.0  13.3  9.2  0.0
HCM2k95th:      0    0    0     0    7    7     0    0    0    13    8    0
********************************************************************************
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------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                             Existing Conditions
                                PM Peak Hour
------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #23 9th St/P St
******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.566
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        10.8
Optimal Cycle:        29               Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0    0     0   10    0     0    0    0     0   10    0
Lanes:       0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0    0     0 1015  240     0    0    0   200 1090    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   0    0    0     0 1015  240     0    0    0   200 1090    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    0    0    0     0 1015  240     0    0    0   200 1090    0
Reduct Vol:    0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   0    0    0     0 1015  240     0    0    0   200 1090    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:    0    0    0     0 1015  240     0    0    0   200 1090    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  1.00 0.88 0.88  1.00 1.00 1.00  0.91 0.91 1.00
Lanes:       0.00 0.00 0.00  0.00 2.43 0.57  0.00 0.00 0.00  0.47 2.53 0.00
Final Sat.:    0    0    0     0 4073  963     0    0    0   804 4383    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.00 0.25 0.25  0.00 0.00 0.00  0.25 0.25 0.00
Crit Moves:                       ****                          ****
Green/Cycle: 0.00 0.00 0.00  0.00 0.44 0.44  0.00 0.00 0.00  0.44 0.44 0.00
Volume/Cap:  0.00 0.00 0.00  0.00 2.43 0.57  0.00 0.00 0.00  0.57 0.57 0.00
Delay/Veh:    0.0  0.0  0.0   0.0 10.8 10.8   0.0  0.0  0.0  10.8 10.8  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0   0.0 10.8 10.8   0.0  0.0  0.0  10.8 10.8  0.0
HCM2k95th:     0    0    0     0   11   11     0    0    0    10   10    0
******************************************************************************
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------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                             Existing Conditions
                                PM Peak Hour
------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #24 9th St/Q St
******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.387
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        10.9
Optimal Cycle:        56               Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0    0    25   25    0     0   25   25     0    0    0
Lanes:       0  0  0  0  0    0  1  2  0  0    0  0  3  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0    0   159 1116    0     0  569  103     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   0    0    0   159 1116    0     0  569  103     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    0    0    0   159 1116    0     0  569  103     0    0    0
Reduct Vol:    0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   0    0    0   159 1116    0     0  569  103     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:    0    0    0   159 1116    0     0  569  103     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.91 0.91 1.00  1.00 0.89 0.89  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  0.37 2.63 0.00  0.00 3.39 0.61  0.00 0.00 0.00
Final Sat.:    0    0    0   647 4540    0     0 5721 1036     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.25 0.25 0.00  0.00 0.10 0.10  0.00 0.00 0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00 0.00  0.45 0.45 0.00  0.00 0.45 0.45  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.55 0.55 0.00  0.00 0.22 0.22  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0  11.7 11.7  0.0   0.0  9.6  9.6   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  11.7 11.7  0.0   0.0  9.6  9.6   0.0  0.0  0.0
HCM2k95th:     0    0    0    10   10    0     0    4    4     0    0    0
******************************************************************************
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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                              Existing Conditions
                                 PM Peak Hour
-------------------------------------------------------------------------------
                        Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #25 10th St/I St
*******************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.571
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):       21.2
Optimal Cycle:      112              Level Of Service:                 C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    35   35    0    0    0    0    0    0    0    0   65   65
Lanes:        0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Dec 2005 << 4:30
Base Vol:      246  477    0    0    0    0    0    0    0    0 1552   77
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   246  477    0    0    0    0    0    0    0    0 1552   77
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    246  477    0    0    0    0    0    0    0    0 1552   77
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   246  477    0    0    0    0    0    0    0    0 1552   77
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    246  477    0    0    0    0    0    0    0    0 1552   77
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:   0.82 0.82 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.81 0.81
Lanes:        1.00 2.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.86 0.14
Final Sat.:   1556 3112    0    0    0    0    0    0    0    0 4417  219
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.16 0.15 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.35 0.35
Crit Moves:   ****                                                ****
Green/Cycle:  0.31 0.31 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.58 0.58
Volume/Cap:   0.51 0.49 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.61 0.61
Delay/Veh:    32.7 32.4  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 16.2 16.2
User DelAdj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   32.7 32.4  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 16.2 16.2
HCM2k95th:      13   13    0    0    0    0    0    0    0    0   21   21
*******************************************************************************
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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                              Existing Conditions
                                 PM Peak Hour
-------------------------------------------------------------------------------
                        Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #26 10th St/J St
*******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.541
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):       16.6
Optimal Cycle:       62              Level Of Service:                 B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0   26   26    0    0    0   24   24    0    0    0    0
Lanes:        0  0  2  1  0   0  0  0  0  0   0  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 8 Dec 2005 << 5
Base Vol:        0  571  151    0    0    0  129 1163    0    0    0    0
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:     0  571  151    0    0    0  129 1163    0    0    0    0
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:      0  571  151    0    0    0  129 1163    0    0    0    0
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:     0  571  151    0    0    0  129 1163    0    0    0    0
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:      0  571  151    0    0    0  129 1163    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:   1.00 0.79 0.79 1.00 1.00 1.00 0.82 0.82 1.00 1.00 1.00 1.00
Lanes:        0.00 2.37 0.63 0.00 0.00 0.00 0.30 2.70 0.00 0.00 0.00 0.00
Final Sat.:      0 3578  946    0    0    0  466 4202    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.00 0.16 0.16 0.00 0.00 0.00 0.28 0.28 0.00 0.00 0.00 0.00
Crit Moves:        ****                     ****
Green/Cycle:  0.00 0.42 0.42 0.00 0.00 0.00 0.39 0.39 0.00 0.00 0.00 0.00
Volume/Cap:   0.00 0.38 0.38 0.00 0.00 0.00 0.71 0.71 0.00 0.00 0.00 0.00
Delay/Veh:     0.0 13.0 13.0  0.0  0.0  0.0 18.6 18.6  0.0  0.0  0.0  0.0
User DelAdj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:    0.0 13.0 13.0  0.0  0.0  0.0 18.6 18.6  0.0  0.0  0.0  0.0
HCM2k95th:       0    7    7    0    0    0   13   13    0    0    0    0
*******************************************************************************
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---------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                              Existing Conditions
                                 PM Peak Hour
---------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
*********************************************************************************
Intersection #27 10th St/L St
*********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.641
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       13.5
Optimal Cycle:       56              Level Of Service:                  B
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:   21   21    0    0    0    0    0    0    0    0   29   29
Lanes:       0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 30 Apr 2000 <<
Base Vol:     181  641    0    0    0    0    0    0    0    0 1490  313
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  181  641    0    0    0    0    0    0    0    0 1490  313
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   181  641    0    0    0    0    0    0    0    0 1490  313
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  181  641    0    0    0    0    0    0    0    0 1490  313
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   181  641    0    0    0    0    0    0    0    0 1490  313
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.82 0.82 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.80 0.80
Lanes:       0.66 2.34 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.48 0.52
Final Sat.:  1028 3640    0    0    0    0    0    0    0    0 3758  789
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.18 0.18 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.40 0.40
Crit Moves:  ****                                                ****
Green/Cycle: 0.38 0.38 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.52 0.52
Volume/Cap:  0.47 0.47 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.77 0.77
Delay/Veh:   14.2 14.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 13.2 13.2
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  14.2 14.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 13.2 13.2
HCM2k95th:      8    8    0    0    0    0    0    0    0    0   18   18
*********************************************************************************
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---------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                              Existing Conditions
                                 PM Peak Hour
---------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
*********************************************************************************
Intersection #28 10th St/P St
*********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.418
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        8.6
Optimal Cycle:       26              Level Of Service:                  A
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0   10    0    0    0    0    0    0    0    0   10    0
Lanes:       0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     155  472    0    0    0    0    0    0    0    0 1131  130
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  155  472    0    0    0    0    0    0    0    0 1131  130
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   155  472    0    0    0    0    0    0    0    0 1131  130
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  155  472    0    0    0    0    0    0    0    0 1131  130
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   155  472    0    0    0    0    0    0    0    0 1131  130
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.91 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.90 0.90
Lanes:       0.74 2.26 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.69 0.31
Final Sat.:  1282 3905    0    0    0    0    0    0    0    0 4582  527
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.12 0.12 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.25 0.25
Crit Moves:       ****                                           ****
Green/Cycle: 0.29 0.29 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.59 0.59
Volume/Cap:  0.42 0.42 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.42 0.42
Delay/Veh:   14.6 14.6  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  5.7  5.7
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  14.6 14.6  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  5.7  5.7
HCM2k95th:      5    5    0    0    0    0    0    0    0    0    7    7
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Downtown Sacramento Traffic Study
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #29 10th St/Q St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.272
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 8.5
Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	10	0	0	0	0	0	10	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			0 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	619	125	0	0	0	40	437	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	619	125	0	0	0	40	437	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	619	125	0	0	0	40	437	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	619	125	0	0	0	40	437	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	619	125	0	0	0	40	437	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.89	0.89	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.50	0.50	0.00	0.00	0.00	0.25	2.75	0.00	0.00	0.00	0.00
Final Sat.:	0	4208	850	0	0	0	435	4752	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.15	0.00	0.00	0.00	0.09	0.09	0.00	0.00	0.00	0.00
Crit Moves:		****						****				
Green/Cycle:	0.00	0.54	0.54	0.00	0.00	0.00	0.34	0.34	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.27	0.27	0.00	0.00	0.00	0.27	0.27	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	6.2	6.2	0.0	0.0	0.0	12.1	12.1	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	6.2	6.2	0.0	0.0	0.0	12.1	12.1	0.0	0.0	0.0	0.0
HCM2k95th:	0	5	5	0	0	0	4	4	0	0	0	0

Downtown Sacramento Traffic Study
Existing Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 12th St/H St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.451
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 13.3
Optimal Cycle: 66 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	27	27	0	0	33	33	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module: >> Count Date: 23 Mar 2005 << 4:30												
Base Vol:	0	0	0	231	897	0	0	969	27	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	231	897	0	0	969	27	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	231	897	0	0	969	27	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	231	897	0	0	969	27	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	231	897	0	0	969	27	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.61	2.39	0.00	0.00	2.92	0.08	0.00	0.00	0.00
Final Sat.:	0	0	0	1062	4125	0	0	5026	140	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.22	0.22	0.00	0.00	0.19	0.19	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.41	0.41	0.00	0.00	0.50	0.50	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.53	0.53	0.00	0.00	0.39	0.39	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	15.7	15.7	0.0	0.0	10.7	10.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	15.7	15.7	0.0	0.0	10.7	10.7	0.0	0.0	0.0
HCM2k95th:	0	0	0	12	12	0	0	9	9	0	0	0

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---------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                             Existing Conditions
                                PM Peak Hour
---------------------------------------------------------------------------------
                     Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
*********************************************************************************
Intersection #31 12th St/I St
*********************************************************************************
Cycle (sec):         0              Critical Vol./Cap. (X):        0.565
Loss Time (sec):     6 (Y+R =  4 sec) Average Delay (sec/veh):        7.3
Optimal Cycle:      25              Level Of Service:                  A
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:         Include          Include          Include          Include
Min. Green:    0    0    0    0    7    7    0    0    0    3    7    0
Lanes:       0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 8 Dec 2005 << 4:45
Base Vol:      0    0    0    0  774  268    0    0    0   66 1077    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   0    0    0    0  774  268    0    0    0   66 1077    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    0    0    0    0  774  268    0    0    0   66 1077    0
Reduct Vol:    0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   0    0    0    0  774  268    0    0    0   66 1077    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    0    0    0    0  774  268    0    0    0   66 1077    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 1.00 0.87 0.87 1.00 1.00 1.00 0.91 0.91 1.00
Lanes:       0.00 0.00 0.00 0.00 2.23 0.77 0.00 0.00 0.00 0.17 2.83 0.00
Final Sat.:    0    0    0    0 3703 1282    0    0    0  300 4887    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.00 0.21 0.21 0.00 0.00 0.00 0.22 0.22 0.00
Crit Moves:                       ****                            ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.37 0.37 0.00 0.00 0.00 0.39 0.39 0.00
Volume/Cap:  0.00 0.00 0.00 0.00 0.56 0.56 0.00 0.00 0.00 0.56 0.56 0.00
Delay/Veh:    0.0  0.0  0.0  0.0  7.5  7.5  0.0  0.0  0.0  7.1  7.1  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  0.0  7.5  7.5  0.0  0.0  0.0  7.1  7.1  0.0
HCM2k95th:     0    0    0    0    7    7    0    0    0    7    7    0
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---------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                             Existing Conditions
                                PM Peak Hour
---------------------------------------------------------------------------------
                     Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
*********************************************************************************
Intersection #32 12th St/J St
*********************************************************************************
Cycle (sec):        50              Critical Vol./Cap. (X):        0.536
Loss Time (sec):     6 (Y+R =  4 sec) Average Delay (sec/veh):       14.3
Optimal Cycle:      56              Level Of Service:                  B
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Permitted        Permitted        Protected        Protected
Rights:         Include          Include          Include          Include
Min. Green:    0    0   31   31   31   31    0   19   19    0    0    0
Lanes:       0  0  0  0  1    1  0  2  0  0    0  0  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 8 Dec 2005 << 5
Base Vol:      0    0  243  318  516    0    0 1203  131    0    0    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   0    0  243  318  516    0    0 1203  131    0    0    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    0    0  243  318  516    0    0 1203  131    0    0    0
Reduct Vol:    0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   0    0  243  318  516    0    0 1203  131    0    0    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    0    0  243  318  516    0    0 1203  131    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 0.87 0.77 0.95 1.00 1.00 0.90 0.90 1.00 1.00 1.00
Lanes:       0.00 0.00 1.00 1.00 2.00 0.00 0.00 2.71 0.29 0.00 0.00 0.00
Final Sat.:    0    0 1644 1461 3610    0    0 4607  502    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.15 0.22 0.14 0.00 0.00 0.26 0.26 0.00 0.00 0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00 0.55 0.55 0.55 0.00 0.00 0.34 0.34 0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.27 0.39 0.26 0.00 0.00 0.77 0.77 0.00 0.00 0.00
Delay/Veh:    0.0  0.0  7.3  8.6  6.8  0.0  0.0 19.9 19.9  0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  7.3  8.6  6.8  0.0  0.0 19.9 19.9  0.0  0.0  0.0
HCM2k95th:     0    0    5    8    5    0    0   16   16    0    0    0
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---------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                           Existing Conditions
                              PM Peak Hour
---------------------------------------------------------------------------
                   Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
***************************************************************************
Intersection #33 12th St/L St
***************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.547
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):       14.0
Optimal Cycle:        59              Level Of Service:                  B
***************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    25   25    0     0   25   25     0    0    0    25   25   25
Lanes:        1  0  0  0  0   0  0  0  1  1   0  0  0  0  0   0  1  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 6 Dec 2005 << 4:45
Base Vol:       5    0    0     0    0  712     0    0    0     1 1082  136
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    5    0    0     0    0  712     0    0    0     1 1082  136
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     5    0    0     0    0  712     0    0    0     1 1082  136
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    5    0    0     0    0  712     0    0    0     1 1082  136
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     5    0    0     0    0  712     0    0    0     1 1082  136
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  0.93 1.00 1.00  1.00 1.00 0.85  1.00 1.00 1.00  0.88 0.88 0.88
Lanes:       1.00 0.00 0.00  0.00 0.00 2.00  0.00 0.00 0.00  0.01 2.66 0.33
Final Sat.:  1758    0    0     0    0 3230     0    0    0     4 4449  559
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.00 0.00 0.22  0.00 0.00 0.00  0.24 0.24 0.24
Crit Moves:                             ****                   ****
Green/Cycle: 0.42 0.00 0.00  0.00 0.00 0.42  0.00 0.00 0.00  0.42 0.42 0.42
Volume/Cap:  0.01 0.00 0.00  0.00 0.00 0.52  0.00 0.00 0.00  0.57 0.57 0.57
Delay/Veh:    9.8  0.0  0.0   0.0  0.0 14.0   0.0  0.0  0.0  14.1 14.1 14.1
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   9.8  0.0  0.0   0.0  0.0 14.0   0.0  0.0  0.0  14.1 14.1 14.1
HCM2k95th:      0    0    0     0    0   10     0    0    0    11   11   11
***************************************************************************
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---------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                           Existing Conditions
                              PM Peak Hour
---------------------------------------------------------------------------
                   Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
***************************************************************************
Intersection #34 15th St/H St
***************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.467
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       11.9
Optimal Cycle:        56              Level Of Service:                  B
***************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0    25   25    0     0   25   25     0    0    0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Dec 2005 << 4:30
Base Vol:       0    0    0    69  585    0     0 1151  310     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0    69  585    0     0 1151  310     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0    69  585    0     0 1151  310     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0    69  585    0     0 1151  310     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0    69  585    0     0 1151  310     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.91 0.91 1.00  1.00 0.88 0.88  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  0.32 2.68 0.00  0.00 2.36 0.64  0.00 0.00 0.00
Final Sat.:     0    0    0   547 4640    0     0 3956 1065     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.13 0.13 0.00  0.00 0.29 0.29  0.00 0.00 0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00 0.00  0.45 0.45 0.00  0.00 0.45 0.45  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.28 0.28 0.00  0.00 0.65 0.65  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0   9.9  9.9  0.0   0.0 12.8 12.8   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0   9.9  9.9  0.0   0.0 12.8 12.8   0.0  0.0  0.0
HCM2k95th:      0    0    0     5    5    0     0   15   15     0    0    0
***************************************************************************
```

Downtown Sacramento Traffic Study
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 15th St/J St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.687
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 19.9
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	25	25	0	0	25	25	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module: >> Count Date: 13 Dec 2005 << 4:45												
Base Vol:	0	0	0	229	764	0	0	1605	507	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	229	764	0	0	1605	507	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	229	764	0	0	1605	507	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	229	764	0	0	1605	507	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	229	764	0	0	1605	507	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.88	0.88	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.69	2.31	0.00	0.00	2.28	0.72	0.00	0.00	0.00
Final Sat.:	0	0	0	1196	3991	0	0	3800	1200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.19	0.19	0.00	0.00	0.42	0.42	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.45	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.43	0.43	0.00	0.00	0.95	0.95	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	10.7	10.7	0.0	0.0	24.2	24.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	10.7	10.7	0.0	0.0	24.2	24.2	0.0	0.0	0.0
HCM2k95th:	0	0	0	8	8	0	0	31	31	0	0	0

Downtown Sacramento Traffic Study
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 15th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.559
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.2
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	30	30	0	0	0	20	20	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			0 1 2 0 0		
Volume Module: >> Count Date: 14 Dec 2005 << 4:45												
Base Vol:	0	0	0	0	1285	293	0	0	0	155	809	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	1285	293	0	0	0	155	809	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	1285	293	0	0	0	155	809	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1285	293	0	0	0	155	809	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	1285	293	0	0	0	155	809	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.88	0.88	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	2.44	0.56	0.00	0.00	0.00	0.48	2.52	0.00
Final Sat.:	0	0	0	0	4106	936	0	0	0	834	4353	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.31	0.31	0.00	0.00	0.00	0.19	0.19	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.54	0.54	0.00	0.00	0.00	0.36	0.36	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.58	0.58	0.00	0.00	0.00	0.52	0.52	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	9.1	9.1	0.0	0.0	0.0	14.5	14.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	9.1	9.1	0.0	0.0	0.0	14.5	14.5	0.0
HCM2k95th:	0	0	0	0	13	13	0	0	0	9	9	0

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-----------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                          Existing Conditions
                             PM Peak Hour
-----------------------------------------------------------------------------
                   Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #37 15th St/P St
*****************************************************************************
Cycle (sec):        50               Critical Vol./Cap. (X):        0.509
Loss Time (sec):     6 (Y+R =  4 sec) Average Delay (sec/veh):        11.0
Optimal Cycle:      56               Level Of Service:                 B
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0      0   28   28      0    0    0     22   22    0
Lanes:        0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0      0 1188  224      0    0    0    163  746    0
Growth Adj:  1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
Initial Bse:    0    0    0      0 1188  224      0    0    0    163  746    0
User Adj:    1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Volume:     0    0    0      0 1188  224      0    0    0    163  746    0
Reduct Vol:     0    0    0      0    0    0      0    0    0      0    0    0
Reduced Vol:    0    0    0      0 1188  224      0    0    0    163  746    0
PCE Adj:     1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
Final Vol.:     0    0    0      0 1188  224      0    0    0    163  746    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900   1900 1900 1900   1900 1900 1900   1900 1900 1900
Adjustment:  1.00 1.00 1.00   1.00 0.89 0.89   1.00 1.00 1.00   0.91 0.91 1.00
Lanes:       0.00 0.00 0.00   0.00 2.52 0.48   0.00 0.00 0.00   0.54 2.46 0.00
Final Sat.:     0    0    0      0 4259  803      0    0    0    930 4257    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00   0.00 0.28 0.28   0.00 0.00 0.00   0.18 0.18 0.00
Crit Moves:                        ****                          ****
Green/Cycle: 0.00 0.00 0.00   0.00 0.50 0.50   0.00 0.00 0.00   0.39 0.39 0.00
Volume/Cap:  0.00 0.00 0.00   0.00 0.56 0.56   0.00 0.00 0.00   0.45 0.45 0.00
Delay/Veh:    0.0  0.0  0.0    0.0 10.0 10.0    0.0  0.0  0.0   12.7 12.7  0.0
User DelAdj: 1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0    0.0 10.0 10.0    0.0  0.0  0.0   12.7 12.7  0.0
HCM2k95th:      0    0    0      0   12   12      0    0    0      7    7    0
*****************************************************************************
```



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-----------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                          Existing Conditions
                             PM Peak Hour
-----------------------------------------------------------------------------
                   Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #38 15th St/Q St
*****************************************************************************
Cycle (sec):        50               Critical Vol./Cap. (X):        0.496
Loss Time (sec):     6 (Y+R =  4 sec) Average Delay (sec/veh):        11.1
Optimal Cycle:      56               Level Of Service:                 B
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0     27   27    0      0   23   23      0    0    0
Lanes:        0  0  0  0  0    0  1  2  0  0    0  0  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0    139 1203    0      0  802  132      0    0    0
Growth Adj:  1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
Initial Bse:    0    0    0    139 1203    0      0  802  132      0    0    0
User Adj:    1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Volume:     0    0    0    139 1203    0      0  802  132      0    0    0
Reduct Vol:     0    0    0      0    0    0      0    0    0      0    0    0
Reduced Vol:    0    0    0    139 1203    0      0  802  132      0    0    0
PCE Adj:     1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
Final Vol.:     0    0    0    139 1203    0      0  802  132      0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900   1900 1900 1900   1900 1900 1900   1900 1900 1900
Adjustment:  1.00 1.00 1.00   0.91 0.91 1.00   1.00 0.89 0.89   1.00 1.00 1.00
Lanes:       0.00 0.00 0.00   0.31 2.69 0.00   0.00 2.58 0.42   0.00 0.00 0.00
Final Sat.:     0    0    0    537 4650    0      0 4360  718      0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00   0.26 0.26 0.00   0.00 0.18 0.18   0.00 0.00 0.00
Crit Moves:                   ****                  ****
Green/Cycle: 0.00 0.00 0.00   0.48 0.48 0.00   0.00 0.41 0.41   0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00   0.54 0.54 0.00   0.00 0.45 0.45   0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0   10.4 10.4  0.0    0.0 12.1 12.1    0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0   10.4 10.4  0.0    0.0 12.1 12.1    0.0  0.0  0.0
HCM2k95th:      0    0    0     10   10    0      0    8    8      0    0    0
*****************************************************************************
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Downtown Sacramento Traffic Study
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #39 15th St/W St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.504
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 14.4
Optimal Cycle: 76 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	38	38	0	0	0	32	32	0
Lanes:	0 0 0 0 0			0 0 3 1 0			0 0 0 0 0			1 1 2 0 0		
Volume Module: >> Count Date: 13 Dec 2005 << 4:45												
Base Vol:	0	0	0	0	1604	148	0	0	0	361	1074	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	1604	148	0	0	0	361	1074	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	1604	148	0	0	0	361	1074	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1604	148	0	0	0	361	1074	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	1604	148	0	0	0	361	1074	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.90	0.90	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	3.66	0.34	0.00	0.00	0.00	1.01	2.99	0.00
Final Sat.:	0	0	0	0	6249	577	0	0	0	1740	5176	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.21	0.21	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.50	0.50	0.00	0.00	0.00	0.42	0.42	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.51	0.51	0.00	0.00	0.00	0.49	0.49	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	12.9	12.9	0.0	0.0	0.0	16.2	16.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	12.9	12.9	0.0	0.0	0.0	16.2	16.2	0.0
HCM2k95th:	0	0	0	0	14	14	0	0	0	12	12	0

Downtown Sacramento Traffic Study
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #40 15th St/X St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.647
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 29.5
Optimal Cycle: 82 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	17	17	24	24	0	0	32	32	0	0	0
Lanes:	0 0 2 1 0			1 1 2 0 0			0 0 1 1 0			0 0 0 0 0		
Volume Module: >> Count Date: 13 Dec 2005 << 4:45												
Base Vol:	0	535	67	766	1001	0	0	459	217	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	535	67	766	1001	0	0	459	217	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	535	67	766	1001	0	0	459	217	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	535	67	766	1001	0	0	459	217	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	535	67	766	1001	0	0	459	217	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.89	0.89	0.89	0.89	1.00	1.00	0.90	0.90	1.00	1.00	1.00
Lanes:	0.00	2.67	0.33	1.73	2.27	0.00	0.00	1.36	0.64	0.00	0.00	0.00
Final Sat.:	0	4531	567	2935	3836	0	0	2334	1103	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.12	0.26	0.26	0.00	0.00	0.20	0.20	0.00	0.00	0.00
Crit Moves:		****			****			****				
Green/Cycle:	0.00	0.21	0.21	0.29	0.29	0.00	0.00	0.39	0.39	0.00	0.00	0.00
Volume/Cap:	0.00	0.57	0.57	0.89	0.89	0.00	0.00	0.50	0.50	0.00	0.00	0.00
Delay/Veh:	0.0	30.0	30.0	33.3	33.3	0.0	0.0	19.3	19.3	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	30.0	30.0	33.3	33.3	0.0	0.0	19.3	19.3	0.0	0.0	0.0
HCM2k95th:	0	10	10	22	22	0	0	13	13	0	0	0

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #41 16th St/H St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.723
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	17.3
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	25	25	0	0	0	19	25	0	0	0	6
Lanes:	0 0 2 1 0			0 0 0 0 0			2 1 0 0 0			0 0 0 0 1		
Volume Module: >> Count Date: 6 Dec 2005 << 4:45												
Base Vol:	0	2028	20	0	0	0	794	413	0	0	0	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2028	20	0	0	0	794	413	0	0	0	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2028	20	0	0	0	794	413	0	0	0	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2028	20	0	0	0	794	413	0	0	0	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	2028	20	0	0	0	794	413	0	0	0	46
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.91	1.00	1.00	1.00	0.94	0.97	1.00	1.00	1.00	0.87
Lanes:	0.00	2.97	0.03	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00
Final Sat.:	0	5131	51	0	0	0	3568	1839	0	0	0	1644
Capacity Analysis Module:												
Vol/Sat:	0.00	0.40	0.40	0.00	0.00	0.00	0.22	0.22	0.00	0.00	0.00	0.03
Crit Moves:		****					****					****
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.34	0.45	0.00	0.00	0.00	0.11
Volume/Cap:	0.00	0.89	0.89	0.00	0.00	0.00	0.66	0.50	0.00	0.00	0.00	0.26
Delay/Veh:	0.0	18.7	18.7	0.0	0.0	0.0	16.6	11.2	0.0	0.0	0.0	23.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.7	18.7	0.0	0.0	0.0	16.6	11.2	0.0	0.0	0.0	23.8
HCM2k95th:	0	22	22	0	0	0	11	10	0	0	0	2

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #42 16th St/I St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.388
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	11.5
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	30	30	0	0	0	0	0	0	0	0	20	20
Lanes:	1 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module: >> Count Date: 6 Dec 2005 << 4:45												
Base Vol:	179	1647	0	0	0	0	0	0	0	0	708	398
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	179	1647	0	0	0	0	0	0	0	0	708	398
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	179	1647	0	0	0	0	0	0	0	0	708	398
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	179	1647	0	0	0	0	0	0	0	0	708	398
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	179	1647	0	0	0	0	0	0	0	0	708	398
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86
Lanes:	1.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	1.00
Final Sat.:	1729	5187	0	0	0	0	0	0	0	0	3271	1636
Capacity Analysis Module:												
Vol/Sat:	0.10	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.24
Crit Moves:	****											****
Green/Cycle:	0.54	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.36
Volume/Cap:	0.19	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.68
Delay/Veh:	6.7	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.4	16.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.7	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.4	16.5
HCM2k95th:	3	12	0	0	0	0	0	0	0	0	12	14

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                    Downtown Sacramento Traffic Study
                          Existing Conditions
                             PM Peak Hour
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
         2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #43 16th St/J St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.631
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      13.2
Optimal Cycle:        56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   25    25    0    0     0   25   25     0    0    0     0
Lanes:        0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 30 Sep 2004 << 4:15
Base Vol:       0 1627   136    0    0     0  379 1287     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0 1627   136    0    0     0  379 1287     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0 1627   136    0    0     0  379 1287     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0 1627   136    0    0     0  379 1287     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0 1627   136    0    0     0  379 1287     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.90  0.90 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.77  0.23 0.00 0.00  0.00 1.00 3.00  0.00 0.00 0.00  0.00
Final Sat.:     0 4729   395    0    0     0 1729 5187     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.34  0.34 0.00 0.00  0.00 0.22 0.25  0.00 0.00 0.00  0.00
Crit Moves:       ****                        ****
Green/Cycle: 0.00 0.45  0.45 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.77  0.77 0.00 0.00  0.00 0.49 0.56  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 14.7  14.7  0.0  0.0   0.0 11.1 11.6   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 14.7  14.7  0.0  0.0   0.0 11.1 11.6   0.0  0.0  0.0   0.0
HCM2k95th:      0   20    20    0    0     0    8   10     0    0    0     0
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--------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                          Existing Conditions
                             PM Peak Hour
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
         2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #44 16th St/L St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.341
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      11.8
Optimal Cycle:        56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    25   25     0    0    0     0    0    0     0    0   25    25
Lanes:        1  0  3  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 20 Jan 2005 << 4:45
Base Vol:     260 1515     0    0    0     0    0    0     0    0  645   195
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:  260 1515     0    0    0     0    0    0     0    0  645   195
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:   260 1515     0    0    0     0    0    0     0    0  645   195
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:  260 1515     0    0    0     0    0    0     0    0  645   195
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:   260 1515     0    0    0     0    0    0     0    0  645   195
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.91  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.88  0.88
Lanes:       1.00 3.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 2.30  0.70
Final Sat.:  1900 5187     0    0    0     0    0    0     0    0 3843  1162
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.14 0.29  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.17  0.17
Crit Moves:  ****                                                  ****
Green/Cycle: 0.45 0.45  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.45  0.45
Volume/Cap:  0.31 0.65  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.38  0.38
Delay/Veh:   10.1 12.8   0.0  0.0  0.0   0.0  0.0  0.0   0.0  0.0 10.4  10.4
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:  10.1 12.8   0.0  0.0  0.0   0.0  0.0  0.0   0.0  0.0 10.4  10.4
HCM2k95th:      6   15     0    0    0     0    0    0     0    0    7     7
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------------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                         Existing Conditions
                            PM Peak Hour
------------------------------------------------------------------------------
                  Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #45 16th St/P St
******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.472
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        10.8
Optimal Cycle:        56               Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:   29   29    0    0    0    0    0    0    0    0   21   21
Lanes:       0  1  2  0  0    0  0  0  0  0    0  0  0  0  0    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     125 1105    0    0    0    0    0    0    0    0  770  159
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  125 1105    0    0    0    0    0    0    0    0  770  159
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   125 1105    0    0    0    0    0    0    0    0  770  159
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  125 1105    0    0    0    0    0    0    0    0  770  159
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   125 1105    0    0    0    0    0    0    0    0  770  159
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.91 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.89 0.89
Lanes:       0.30 2.70 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.49 0.51
Final Sat.:   527 4660    0    0    0    0    0    0    0    0 4187  865
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.24 0.24 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.18 0.18
Crit Moves:  ****                                                ****
Green/Cycle: 0.52 0.52 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.38 0.38
Volume/Cap:  0.46 0.46 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.49 0.49
Delay/Veh:    8.7  8.7  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 13.6 13.6
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   8.7  8.7  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 13.6 13.6
HCM2k95th:      9    9    0    0    0    0    0    0    0    0    9    9
******************************************************************************
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------------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                         Existing Conditions
                            PM Peak Hour
------------------------------------------------------------------------------
                  Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #46 16th St/Q St
******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.470
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):         9.9
Optimal Cycle:        26               Level Of Service:                  A
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   10    0    0    0    0    0   10    0    0    0    0
Lanes:       0  0  2  1  0    0  0  0  0  0    1  1  1  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1028   63    0    0    0  204  726    0    0    0    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0 1028   63    0    0    0  204  726    0    0    0    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0 1028   63    0    0    0  204  726    0    0    0    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0 1028   63    0    0    0  204  726    0    0    0    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0 1028   63    0    0    0  204  726    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 0.90 0.90 1.00 1.00 1.00 0.95 0.95 1.00 1.00 1.00 1.00
Lanes:       0.00 2.83 0.17 0.00 0.00 0.00 1.00 2.00 0.00 0.00 0.00 0.00
Final Sat.:     0 4843  297    0    0    0 1805 3610    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.21 0.21 0.00 0.00 0.00 0.11 0.20 0.00 0.00 0.00 0.00
Crit Moves:       ****                           ****
Green/Cycle: 0.00 0.45 0.45 0.00 0.00 0.00 0.43 0.43 0.00 0.00 0.00 0.00
Volume/Cap:  0.00 0.47 0.47 0.00 0.00 0.00 0.26 0.47 0.00 0.00 0.00 0.00
Delay/Veh:    0.0  9.7  9.7  0.0  0.0  0.0  9.3 10.4  0.0  0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  9.7  9.7  0.0  0.0  0.0  9.3 10.4  0.0  0.0  0.0  0.0
HCM2k95th:      0    9    9    0    0    0    4    8    0    0    0    0
******************************************************************************
```

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-----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                           Existing Conditions
                              PM Peak Hour
-----------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #47 16th St/W St
*****************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):         0.448
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):       23.7
Optimal Cycle:        79              Level Of Service:                  C
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected      Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:    31   31    0    0    0    0    0   23   23    0   16   16
Lanes:       1  1  2  0  0   0  0  0  0  0   0  0  2  1  0   0  0  1  1  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 14 Dec 2005 << 5
Base Vol:     151  644    0    0    0    0    0  786  105    0  287  380
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  151  644    0    0    0    0    0  786  105    0  287  380
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   151  644    0    0    0    0    0  786  105    0  287  380
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  151  644    0    0    0    0    0  786  105    0  287  380
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   151  644    0    0    0    0    0  786  105    0  287  380
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.91 0.91 1.00 1.00 1.00 1.00 1.00 0.89 0.89 1.00 0.87 0.87
Lanes:       1.00 3.00 0.00 0.00 0.00 0.00 0.00 2.65 0.35 0.00 1.29 1.71
Final Sat.:  1729 5187    0    0    0    0    0 4493  600    0 2132 2823
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.09 0.12 0.00 0.00 0.00 0.00 0.00 0.17 0.17 0.00 0.13 0.13
Crit Moves:  ****                                ****                ****
Green/Cycle: 0.39 0.39 0.00 0.00 0.00 0.00 0.00 0.29 0.29 0.00 0.20 0.20
Volume/Cap:  0.22 0.32 0.00 0.00 0.00 0.00 0.00 0.60 0.60 0.00 0.66 0.66
Delay/Veh:   16.0 16.7  0.0  0.0  0.0  0.0  0.0 24.8 24.8  0.0 30.7 30.7
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  16.0 16.7  0.0  0.0  0.0  0.0  0.0 24.8 24.8  0.0 30.7 30.7
HCM2k95th:      5    7    0    0    0    0    0   13   13    0   12   12
*****************************************************************************
```



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-----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                           Existing Conditions
                              PM Peak Hour
-----------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #48 16th St/X St
*****************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):         0.478
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       15.8
Optimal Cycle:        76              Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   35   35    0    0    0   35   35    0    0    0    0
Lanes:       0  0  3  1  0   0  0  0  0  0   1  0  2  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 14 Dec 2005 << 5
Base Vol:       0  656   66    0    0    0  540 1066  265    0    0    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0  656   66    0    0    0  540 1066  265    0    0    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0  656   66    0    0    0  540 1066  265    0    0    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0  656   66    0    0    0  540 1066  265    0    0    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0  656   66    0    0    0  540 1066  265    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 0.90 0.90 1.00 1.00 1.00 0.85 0.95 0.85 1.00 1.00 1.00
Lanes:       0.00 3.63 0.37 0.00 0.00 0.00 1.00 2.00 1.00 0.00 0.00 0.00
Final Sat.:     0 6196  623    0    0    0 1615 3610 1615    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.11 0.11 0.00 0.00 0.00 0.33 0.30 0.16 0.00 0.00 0.00
Crit Moves:       ****                      ****
Green/Cycle: 0.00 0.46 0.46 0.00 0.00 0.00 0.46 0.46 0.46 0.00 0.00 0.00
Volume/Cap:  0.00 0.23 0.23 0.00 0.00 0.00 0.73 0.64 0.36 0.00 0.00 0.00
Delay/Veh:    0.0 12.4 12.4  0.0  0.0  0.0 20.2 16.6 13.5  0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0 12.4 12.4  0.0  0.0  0.0 20.2 16.6 13.5  0.0  0.0  0.0
HCM2k95th:      0    5    5    0    0    0   22   18    8    0    0    0
*****************************************************************************
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Downtown Sacramento Traffic Study
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #49 29th St/J St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.560
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 22.0
Optimal Cycle: 79 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	18	18	0	18	18	0	0	34	34	0	0	0
Lanes:	0 1 2 0 0			0 1 1 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module: >> Count Date: 7 Jun 2005 << 5												
Base Vol:	55	303	0	217	274	0	0	1089	349	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	55	303	0	217	274	0	0	1089	349	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	55	303	0	217	274	0	0	1089	349	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	303	0	217	274	0	0	1089	349	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	55	303	0	217	274	0	0	1089	349	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.90	1.00	0.93	0.93	1.00	1.00	0.88	0.88	1.00	1.00	1.00
Lanes:	0.46	2.54	0.00	0.88	1.12	0.00	0.00	2.27	0.73	0.00	0.00	0.00
Final Sat.:	791	4355	0	1560	1970	0	0	3787	1214	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.00	0.14	0.14	0.00	0.00	0.29	0.29	0.00	0.00	0.00
Crit Moves:	****				****			****				
Green/Cycle:	0.23	0.23	0.00	0.23	0.23	0.00	0.00	0.43	0.43	0.00	0.00	0.00
Volume/Cap:	0.31	0.31	0.00	0.61	0.61	0.00	0.00	0.67	0.67	0.00	0.00	0.00
Delay/Veh:	25.5	25.5	0.0	28.7	28.7	0.0	0.0	18.8	18.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.5	25.5	0.0	28.7	28.7	0.0	0.0	18.8	18.8	0.0	0.0	0.0
HCM2k95th:	5	5	0	12	12	0	0	19	19	0	0	0

Downtown Sacramento Traffic Study
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #50 30th St/J St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.452
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 14.0
Optimal Cycle: 76 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	31	31	0	0	0	39	39	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module: >> Count Date: 7 Jun 2005 << 5												
Base Vol:	0	927	182	0	0	0	383	978	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	927	182	0	0	0	383	978	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	927	182	0	0	0	383	978	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	927	182	0	0	0	383	978	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	927	182	0	0	0	383	978	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.89	0.89	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.51	0.49	0.00	0.00	0.00	1.13	2.87	0.00	0.00	0.00	0.00
Final Sat.:	0	4227	830	0	0	0	1946	4970	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.41	0.41	0.00	0.00	0.00	0.51	0.51	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.54	0.54	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	17.3	17.3	0.0	0.0	0.0	11.3	11.3	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	17.3	17.3	0.0	0.0	0.0	11.3	11.3	0.0	0.0	0.0	0.0
HCM2k95th:	0	13	13	0	0	0	9	9	0	0	0	0

Downtown Sacramento Traffic Study
Baseline Conditions
AM Peak Hour

Scenario Report

Scenario:	AM Baseline
Command:	Base AM
Volume:	Baseline AM
Geometry:	Baseline AM
Impact Fee:	Default Impact Fee
Trip Generation:	AM Baseline Projects
Trip Distribution:	Project
Paths:	Project
Routes:	Default Routes
Configuration:	Default Configuration

Downtown Sacramento Traffic Study
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 3rd St/J St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.943
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	59.9
Optimal Cycle:	109	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	15	15	15	0	35	35	35	50	50	50
Lanes:	0 0	0 0	2	2 0	1 0	0	0 1	2 1	0	0 1	1 1	0
Volume Module: >> Count Date: 28 Sep 2004 << 7:45												
Base Vol:	0	0	91	88	106	0	4	1611	192	10	1568	449
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	91	88	106	0	4	1611	192	10	1568	449
Added Vol:	0	0	0	0	1	0	0	136	50	0	130	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	91	88	107	0	4	1747	242	10	1698	449
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	91	88	107	0	4	1747	242	10	1698	449
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	91	88	107	0	4	1747	242	10	1698	449
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	91	88	107	0	4	1747	242	10	1698	449
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.67	0.55	0.90	1.00	0.80	0.80	0.80	0.79	0.79	0.79
Lanes:	0.00	0.00	2.00	2.00	1.00	0.00	0.01	3.51	0.48	0.01	2.37	0.62
Final Sat.:	0	0	2558	2093	1710	0	12	5358	742	21	3561	942
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.04	0.04	0.06	0.00	0.33	0.33	0.33	0.48	0.48	0.48
Crit Moves:					****				****		****	
Green/Cycle:	0.00	0.00	0.14	0.14	0.14	0.00	0.32	0.32	0.32	0.46	0.46	0.46
Volume/Cap:	0.00	0.00	0.26	0.31	0.45	0.00	1.02	1.02	1.02	1.04	1.04	1.04
Delay/Veh:	0.0	0.0	43.8	45.0	49.5	0.0	61.2	61.2	61.2	60.4	60.4	60.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	43.8	45.0	49.5	0.0	61.2	61.2	61.2	60.4	60.4	60.4
HCM2k95th:	0	0	4	5	8	0	38	38	38	53	53	53

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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                             Baseline Conditions
                                AM Peak Hour
-------------------------------------------------------------------------------
                       Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #2 3rd St/L St
*******************************************************************************
Cycle (sec):         70             Critical Vol./Cap. (X):        0.374
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):     18.6
Optimal Cycle:       79             Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:   10   44    0    0   34   34    0    0    0   26   26   26
Lanes:       1  0  2  0  0   0  0  2  1  0    0  0  0  0  0    1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 28 Sep 2004 << 8
Base Vol:       0    0    0     0  541  138     0    0    0   125  314   75
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0     0  541  138     0    0    0   125  314   75
Added Vol:     43    0    0     0  107    0     0    0    0    57   67    0
2-way Adj:      0   30    0     0    0    0     0    0    0     0    0  -30
Initial Fut:   43   30    0     0  648  138     0    0    0   182  381   45
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    43   30    0     0  648  138     0    0    0   182  381   45
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   43   30    0     0  648  138     0    0    0   182  381   45
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:    43   30    0     0  648  138     0    0    0   182  381   45
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  0.86 0.86 1.00  1.00 0.80 0.80  1.00 1.00 1.00  0.73 0.73 0.77
Lanes:       1.00 2.00 0.00  0.00 2.47 0.53  0.00 0.00 0.00  1.00 2.00 1.00
Final Sat.:  1625 3249    0     0 3749  798     0    0    0  1381 2762 1454
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.01 0.00  0.00 0.17 0.17  0.00 0.00 0.00  0.13 0.14 0.03
Crit Moves:  ****                 ****                         ****
Green/Cycle: 0.13 0.56 0.00  0.00 0.43 0.43  0.00 0.00 0.00  0.33 0.33 0.33
Volume/Cap:  0.21 0.02 0.00  0.00 0.40 0.40  0.00 0.00 0.00  0.40 0.42 0.09
Delay/Veh:   33.3  7.8  0.0   0.0 16.1 16.1   0.0  0.0  0.0  21.3 21.6 18.7
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:  33.3  7.8  0.0   0.0 16.1 16.1   0.0  0.0  0.0  21.3 21.6 18.7
HCM2k95th:      3    0    0     0    9    9     0    0    0     9    9    2
*******************************************************************************
```



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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                             Baseline Conditions
                                AM Peak Hour
-------------------------------------------------------------------------------
                       Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #3 3rd St/Capitol Mall
*******************************************************************************
Cycle (sec):         70             Critical Vol./Cap. (X):        0.519
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):     21.2
Optimal Cycle:       79             Level Of Service:                  C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected       Prot+Permit
Rights:           Include          Include          Include          Include
Min. Green:    0    0    0   29   29    0   14   25    0   16   27    0
Lanes:       0  0  0  0  0   0  1  1  1  1    1  0  3  0  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 28 Sep 2004 << 7:45
Base Vol:       0    0    0   189  462    0     0  638    0    91  129    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0   189  462    0     0  638    0    91  129    0
Added Vol:      0    0    0   131   67   68    36  201    0    33   35   33
2-way Adj:      0    0    0     0    0    0    30  -30    0     0    0    0
Initial Fut:    0    0    0   320  529   68    66  809    0   124  164   33
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0   320  529   68    66  809    0   124  164   33
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0   320  529   68    66  809    0   124  164   33
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0   320  529   68    66  809    0   124  164   33
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.80 0.80 0.80  0.86 0.82 1.00  0.85 0.83 0.83
Lanes:       0.00 0.00 0.00  1.00 2.00 1.00  1.00 3.00 0.00  1.00 1.66 0.34
Final Sat.:     0    0    0  1522 3044 1522  1625 4668    0  1624 2637  531
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.21 0.17 0.04  0.04 0.17 0.00  0.08 0.06 0.06
Crit Moves:                  ****                  ****        ****
Green/Cycle: 0.00 0.00 0.00  0.37 0.37 0.37  0.18 0.32 0.00  0.56 0.34 0.34
Volume/Cap:  0.00 0.00 0.00  0.57 0.47 0.12  0.23 0.55 0.00  0.27 0.18 0.18
Delay/Veh:    0.0  0.0  0.0  21.5 20.0 16.6  29.7 23.8  0.0  10.6 18.6 18.6
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  21.5 20.0 16.6  29.7 23.8  0.0  10.6 18.6 18.6
HCM2k95th:      0    0    0    13   10    3     4   11    0     4    4    4
*******************************************************************************
```

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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                             Baseline Conditions
                                AM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #4 3rd St/N St
*******************************************************************************
Cycle (sec):          70               Critical Vol./Cap. (X):        0.436
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):        20.9
Optimal Cycle:        79               Level Of Service:                 C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase       Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   16    16    33   33    0     0   21    21     0    0     0
Lanes:        0  0  0  1  0   0  1  2  0  0   0  0  1  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 28 Sep 2004 << 7:15
Base Vol:       0   60     4   362  267     0     0  318   122     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0   60     4   362  267     0     0  318   122     0    0     0
Added Vol:      0    0     0     9   91     0     0   16     1     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0   60     4   371  358     0     0  334   123     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0   60     4   371  358     0     0  334   123     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0   60     4   371  358     0     0  334   123     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0   60     4   371  358     0     0  334   123     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.99  0.99  0.89 0.89  1.00  1.00 0.91  0.91  1.00 1.00  1.00
Lanes:       0.00 0.94  0.06  1.00 2.00  0.00  0.00 1.46  0.54  0.00 0.00  0.00
Final Sat.:     0 1765   118  1686 3372     0     0 2533   933     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.03  0.03  0.22 0.11  0.00  0.00 0.13  0.13  0.00 0.00  0.00
Crit Moves:       ****        ****                   ****
Green/Cycle: 0.00 0.20  0.20  0.42 0.42  0.00  0.00 0.27  0.27  0.00 0.00  0.00
Volume/Cap:  0.00 0.17  0.17  0.53 0.25  0.00  0.00 0.50  0.50  0.00 0.00  0.00
Delay/Veh:    0.0 27.0  27.0  18.6 15.2   0.0   0.0 26.4  26.4   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 27.0  27.0  18.6 15.2   0.0   0.0 26.4  26.4   0.0  0.0   0.0
HCM2k95th:      0    3     3    13    6     0     0   10    10     0    0     0
*******************************************************************************
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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                             Baseline Conditions
                                AM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #5 3rd St/P St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.260
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):         9.2
Optimal Cycle:        56               Level Of Service:                 A
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0   19    19     0    0     0    31   31     0
Lanes:        0  0  0  0  0   0  0  1  1  1   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 28 Sep 2004 << 7:30
Base Vol:       0    0     0     0  199   137     0    0     0   158  506     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0  199   137     0    0     0   158  506     0
Added Vol:      0    0     0     0    0    83     0    0     0     0  105     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     0  199   220     0    0     0   158  611     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     0  199   220     0    0     0   158  611     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0     0  199   220     0    0     0   158  611     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0     0     0  199   220     0    0     0   158  611     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  1.00 0.87  0.87  1.00 1.00  1.00  0.91 0.91  1.00
Lanes:       0.00 0.00  0.00  0.00 1.42  1.58  0.00 0.00  0.00  0.62 2.38  0.00
Final Sat.:     0    0     0     0 2369  2619     0    0     0  1066 4121     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.00 0.08  0.08  0.00 0.00  0.00  0.15 0.15  0.00
Crit Moves:                        ****                          ****
Green/Cycle: 0.00 0.00  0.00  0.00 0.34  0.34  0.00 0.00  0.00  0.55 0.55  0.00
Volume/Cap:  0.00 0.00  0.00  0.00 0.25  0.25  0.00 0.00  0.00  0.27 0.27  0.00
Delay/Veh:    0.0  0.0   0.0   0.0 13.7  13.7   0.0  0.0   0.0   6.8  6.8   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   0.0 13.7  13.7   0.0  0.0   0.0   6.8  6.8   0.0
HCM2k95th:      0    0     0     0    4     4     0    0     0     5    5     0
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-----------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                             Baseline Conditions
                                AM Peak Hour
-----------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*****************************************************************************
Intersection #6 3rd St/Q St
*****************************************************************************
Cycle (sec):        50             Critical Vol./Cap. (X):        0.563
Loss Time (sec):     6 (Y+R =  4 sec) Average Delay (sec/veh):     11.6
Optimal Cycle:      56             Level Of Service:                 B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0    0    0   19   19    0    0   31   31    0    0    0
Lanes:       0  0  0  0  0    0  1  2  0  0    0  0  3  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 28 Sep 2004 << 7:15
Base Vol:        0    0    0  129  202    0    0 1997  308    0    0    0
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:     0    0    0  129  202    0    0 1997  308    0    0    0
Added Vol:       0    0    0    0    0    0    0  611    0    0    0    0
PasserByVol:     0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:     0    0    0  129  202    0    0 2608  308    0    0    0
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:      0    0    0  129  202    0    0 2608  308    0    0    0
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:     0    0    0  129  202    0    0 2608  308    0    0    0
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:      0    0    0  129  202    0    0 2608  308    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:   1.00 1.00 1.00 0.91 0.91 1.00 1.00 0.90 0.90 1.00 1.00 1.00
Lanes:        0.00 0.00 0.00 1.00 2.00 0.00 0.00 3.58 0.42 0.00 0.00 0.00
Final Sat.:      0    0    0 1729 3458    0    0 6087  719    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.00 0.00 0.00 0.07 0.06 0.00 0.00 0.43 0.43 0.00 0.00 0.00
Crit Moves:                  ****                ****
Green/Cycle:  0.00 0.00 0.00 0.34 0.34 0.00 0.00 0.55 0.55 0.00 0.00 0.00
Volume/Cap:   0.00 0.00 0.00 0.22 0.17 0.00 0.00 0.77 0.77 0.00 0.00 0.00
Delay/Veh:     0.0  0.0  0.0 13.5 13.2  0.0  0.0 11.4 11.4  0.0  0.0  0.0
User DelAdj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:    0.0  0.0  0.0 13.5 13.2  0.0  0.0 11.4 11.4  0.0  0.0  0.0
HCM2k95th:       0    0    0    4    3    0    0   20   20    0    0    0
*****************************************************************************
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-----------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                             Baseline Conditions
                                AM Peak Hour
-----------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*****************************************************************************
Intersection #7 5th St/I St
*****************************************************************************
Cycle (sec):        50             Critical Vol./Cap. (X):        0.418
Loss Time (sec):     6 (Y+R =  4 sec) Average Delay (sec/veh):     11.1
Optimal Cycle:      56             Level Of Service:                 B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:   30   30    0    0    0   30    0    0    0    0   20   20
Lanes:       2  0  2  0  0    0  0  0  0  2    0  0  0  0  0    0  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 20 Jan 2005 << 8
Base Vol:      148  752    0    0    0    0    0    0    0    0  753   81
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   148  752    0    0    0    0    0    0    0    0  753   81
Added Vol:       0    2    0    0    0    0    0    0    0    0   33    0
5th St Conv:     0    0    0    0    0   12    0    0    0    0    0    0
Initial Fut:   148  754    0    0    0   12    0    0    0    0  786   81
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    148  754    0    0    0   12    0    0    0    0  786   81
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   148  754    0    0    0   12    0    0    0    0  786   81
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    148  754    0    0    0   12    0    0    0    0  786   81
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:   0.54 0.86 1.00 1.00 1.00 0.67 1.00 1.00 1.00 1.00 0.81 0.81
Lanes:        2.00 2.00 0.00 0.00 0.00 2.00 0.00 0.00 0.00 0.00 3.63 0.37
Final Sat.:   2034 3249    0    0    0 2558    0    0    0    0 5564  573
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.07 0.23 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.14 0.14
Crit Moves:        ****      ****                                    ****
Green/Cycle:  0.54 0.54 0.00 0.00 0.00 0.54 0.00 0.00 0.00 0.00 0.36 0.36
Volume/Cap:   0.14 0.43 0.00 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.40 0.40
Delay/Veh:     6.8  8.6  0.0  0.0  0.0  6.1  0.0  0.0  0.0  0.0 14.0 14.0
User DelAdj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:    6.8  8.6  0.0  0.0  0.0  6.1  0.0  0.0  0.0  0.0 14.0 14.0
HCM2k95th:       2    8    0    0    0    0    0    0    0    0    6    6
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-----------------------------------------------------------------------------
                  Downtown Sacramento Traffic Study
                        Baseline Conditions
                           AM Peak Hour
-----------------------------------------------------------------------------
                  Level Of Service Computation Report
        2000 HCM Operations Method (Future Volume Alternative)
*****************************************************************************
Intersection #8 5th St/J St
*****************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.635
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       21.7
Optimal Cycle:      106              Level Of Service:                  C
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:         Include          Include          Include          Include
Min. Green:    0   40    40    0    0     0   60   60    60    0    0     0
Lanes:       0  0  1  1  1   0  0  0  0  0   1  1  3  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Jan 2005 << 7:45
Base Vol:      0  260   274    0    0     0  680 2325    96    0    0     0
Growth Adj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0  260   274    0    0     0  680 2325    96    0    0     0
Added Vol:     0    2     0    0    0     0    0  170    39    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   0  262   274    0    0     0  680 2495   135    0    0     0
User Adj:   1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0  262   274    0    0     0  680 2495   135    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0  262   274    0    0     0  680 2495   135    0    0     0
PCE Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0  262   274    0    0     0  680 2495   135    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment: 1.00 0.79  0.79 1.00 1.00  1.00 0.70 0.70  0.77 1.00 1.00  1.00
Lanes:      0.00 1.47  1.53 0.00 0.00  0.00 1.07 3.93  1.00 0.00 0.00  0.00
Final Sat.:    0 2199  2299    0    0     0 1416 5197  1454    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.00 0.12  0.12 0.00 0.00  0.00 0.48 0.48  0.09 0.00 0.00  0.00
Crit Moves:      ****                       ****
Green/Cycle: 0.00 0.38  0.38 0.00 0.00  0.00 0.57 0.57  0.57 0.00 0.00  0.00
Volume/Cap: 0.00 0.32  0.32 0.00 0.00  0.00 0.85 0.85  0.16 0.00 0.00  0.00
Delay/Veh:   0.0 23.8  23.8  0.0  0.0   0.0 21.8 21.8  11.4  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:  0.0 23.8  23.8  0.0  0.0   0.0 21.8 21.8  11.4  0.0  0.0   0.0
HCM2k95th:     0    8     8    0    0     0   37   37     5    0    0     0
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-----------------------------------------------------------------------------
                  Downtown Sacramento Traffic Study
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                           AM Peak Hour
-----------------------------------------------------------------------------
                  Level Of Service Computation Report
        2000 HCM Operations Method (Future Volume Alternative)
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Intersection #9 5th St/L St
*****************************************************************************
Cycle (sec):         70              Critical Vol./Cap. (X):        0.240
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):       14.0
Optimal Cycle:       79              Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Permitted        Permitted        Protected        Protected
Rights:         Include          Include          Include          Include
Min. Green:   40   40     0    0    0    40    0    0     0    0   30    30
Lanes:       1  0  3  0  0   0  0  0  0  2   0  0  0  0  0   0  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Jan 2085 << 8
Base Vol:     76  483     0    0    0    98    0    0     0    0  514    93
Growth Adj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:  76  483     0    0    0    98    0    0     0    0  514    93
Added Vol:     1    2     0    0    0    39    0    0     0    0   54     0
2-way Adj:   -30    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:  47  485     0    0    0   137    0    0     0    0  568    93
User Adj:   1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:   47  485     0    0    0   137    0    0     0    0  568    93
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:  47  485     0    0    0   137    0    0     0    0  568    93
PCE Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:   47  485     0    0    0   137    0    0     0    0  568    93
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment: 0.69 0.82  1.00 1.00 1.00  0.67 1.00 1.00  1.00 1.00 0.80  0.80
Lanes:      1.00 3.00  0.00 0.00 0.00  2.00 0.00 0.00  0.00 0.00 3.44  0.56
Final Sat.: 1315 4668     0    0    0  2558    0    0     0    0 5236   857
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.04 0.10  0.00 0.00 0.00  0.05 0.00 0.00  0.00 0.00 0.11  0.11
Crit Moves:      ****                                                ****
Green/Cycle: 0.51 0.51  0.00 0.00 0.00  0.51 0.00 0.00  0.00 0.00 0.38  0.38
Volume/Cap: 0.07 0.21  0.00 0.00 0.00  0.11 0.00 0.00  0.00 0.00 0.29  0.29
Delay/Veh:  10.2 10.9   0.0  0.0  0.0  10.3  0.0  0.0   0.0  0.0 17.4  17.4
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh: 10.2 10.9   0.0  0.0  0.0  10.3  0.0  0.0   0.0  0.0 17.4  17.4
HCM2k95th:     2    5     0    0    0     2    0    0     0    0    6     6
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 5th St/Capitol Mall

Cycle (sec):	70	Critical Vol./Cap. (X):	0.280
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	19.2
Optimal Cycle:	76	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	35	35	0	0	0	0	17	35	0	0	18	18
Lanes:	2 0 2 1 0			0 0 0 0 0			2 0 2 0 0			0 0 2 1 0		
Volume Module: >> Count Date: 13 Jan 2005 << 8												
Base Vol:	126	297	60	0	0	0	491	354	0	0	96	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	297	60	0	0	0	491	354	0	0	96	37
Added Vol:	25	1	42	0	0	0	2	330	0	0	76	0
2-way Adj:	0	0	0	0	0	0	-30	0	0	0	0	0
Initial Fut:	151	298	102	0	0	0	463	684	0	0	172	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	298	102	0	0	0	463	684	0	0	172	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	298	102	0	0	0	463	684	0	0	172	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	151	298	102	0	0	0	463	684	0	0	172	37
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.84	0.79	0.79	1.00	1.00	1.00	0.83	0.86	1.00	1.00	0.80	0.80
Lanes:	2.00	2.23	0.77	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.47	0.53
Final Sat.:	3191	3346	1145	0	0	0	3152	3249	0	0	3738	804
Capacity Analysis Module:												
Vol/Sat:	0.05	0.09	0.09	0.00	0.00	0.00	0.15	0.21	0.00	0.00	0.05	0.05
Crit Moves:	****							****		****		
Green/Cycle:	0.46	0.46	0.46	0.00	0.00	0.00	0.22	0.46	0.00	0.00	0.24	0.24
Volume/Cap:	0.10	0.19	0.19	0.00	0.00	0.00	0.66	0.46	0.00	0.00	0.19	0.19
Delay/Veh:	11.7	12.3	12.3	0.0	0.0	0.0	31.6	15.0	0.0	0.0	23.6	23.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.7	12.3	12.3	0.0	0.0	0.0	31.6	15.0	0.0	0.0	23.6	23.6
HCM2k95th:	3	4	4	0	0	0	12	11	0	0	3	3

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Intersection #11 5th St/N St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.318
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	13.4
Optimal Cycle:	76	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	35	35	0	0	0	35	35	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			0 1 2 0 0			0 0 0 0 0		
Volume Module: >> Count Date: 13 Jan 2005 <<												
Base Vol:	0	619	193	0	0	0	63	523	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	619	193	0	0	0	63	523	0	0	0	0
Added Vol:	0	68	0	0	0	0	0	25	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	687	193	0	0	0	63	548	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	687	193	0	0	0	63	548	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	687	193	0	0	0	63	548	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	687	193	0	0	0	63	548	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.88	0.88	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.34	0.66	0.00	0.00	0.00	0.31	2.69	0.00	0.00	0.00	0.00
Final Sat.:	0	3916	1100	0	0	0	535	4652	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.18	0.00	0.00	0.00	0.12	0.12	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.46	0.46	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.38	0.38	0.00	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	13.9	13.9	0.0	0.0	0.0	12.8	12.8	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.9	13.9	0.0	0.0	0.0	12.8	12.8	0.0	0.0	0.0	0.0
HCM2k95th:	0	9	9	0	0	0	6	6	0	0	0	0

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Intersection #12 5th St/P St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.376
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	10.7
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	30	30	0	0	0	0	0	0	0	0	20	20
Lanes:	0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module: >> Count Date: 21 Apr 2005 << 7:45												
Base Vol:	178	704	0	0	0	0	0	0	0	0	413	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	178	704	0	0	0	0	0	0	0	0	413	237
Added Vol:	1	59	0	0	0	0	0	0	0	0	104	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	179	763	0	0	0	0	0	0	0	0	517	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	179	763	0	0	0	0	0	0	0	0	517	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	179	763	0	0	0	0	0	0	0	0	517	246
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	179	763	0	0	0	0	0	0	0	0	517	246
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	0.87
Lanes:	0.57	2.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.03	0.97
Final Sat.:	986	4201	0	0	0	0	0	0	0	0	3346	1592
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.15
Crit Moves:	****										****	
Green/Cycle:	0.54	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.36
Volume/Cap:	0.34	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.43
Delay/Veh:	7.7	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.5	14.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.7	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.5	14.5
HCM2k95th:	7	7	0	0	0	0	0	0	0	0	8	8

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Intersection #13 5th St/Q St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.481
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	11.1
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	19	19	0	0	0	31	31	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module: >> Count Date: 26 Apr 2005 << 7:30												
Base Vol:	0	311	49	0	0	0	560	1633	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	311	49	0	0	0	560	1633	0	0	0	0
Added Vol:	0	0	0	0	0	0	60	551	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	311	49	0	0	0	620	2184	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	311	49	0	0	0	620	2184	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	311	49	0	0	0	620	2184	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	311	49	0	0	0	620	2184	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.89	0.89	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.59	0.41	0.00	0.00	0.00	1.00	3.00	0.00	0.00	0.00	0.00
Final Sat.:	0	4391	692	0	0	0	1729	5187	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.07	0.00	0.00	0.00	0.36	0.42	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.34	0.34	0.00	0.00	0.00	0.55	0.55	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.21	0.21	0.00	0.00	0.00	0.65	0.76	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	13.4	13.4	0.0	0.0	0.0	9.5	11.2	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.4	13.4	0.0	0.0	0.0	9.5	11.2	0.0	0.0	0.0	0.0
HCM2k95th:	0	4	4	0	0	0	14	17	0	0	0	0

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Intersection #14 7th St/I St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.302
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	10.0
Optimal Cycle:	56	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	23	23	0	0	0	27	27	0
Lanes:	0 0 0 0 0			0 0 2 0 2			0 0 0 0 0			1 1 2 0 0		
Volume Module: >> Count Date: 30 Sep 2004 << 8												
Base Vol:	0	0	0	0	266	218	0	0	0	253	701	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	266	218	0	0	0	253	701	0
Added Vol:	0	0	0	0	96	1	0	0	0	0	32	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	362	219	0	0	0	253	733	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	362	219	0	0	0	253	733	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	362	219	0	0	0	253	733	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	362	219	0	0	0	253	733	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.86	0.67	1.00	1.00	1.00	0.82	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	1.03	2.97	0.00
Final Sat.:	0	0	0	0	3249	2558	0	0	0	1597	4627	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.11	0.09	0.00	0.00	0.00	0.16	0.16	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.41	0.41	0.00	0.00	0.00	0.48	0.48	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.27	0.21	0.00	0.00	0.00	0.33	0.33	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	11.4	11.1	0.0	0.0	0.0	9.2	9.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	11.4	11.1	0.0	0.0	0.0	9.2	9.2	0.0
HCM2k95th:	0	0	0	0	5	3	0	0	0	6	6	0

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Intersection #15 7th St/J St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.615
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	17.8
Optimal Cycle:	106	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	35	35	0	0	65	65	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 1			0 0 0 0 0		
Volume Module: >> Count Date: 7 Dec 2005 << 7:45												
Base Vol:	0	0	0	156	254	0	0	1986	280	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	156	254	0	0	1986	280	0	0	0
Added Vol:	0	0	0	18	78	0	0	158	42	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	174	332	0	0	2144	322	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	174	332	0	0	2144	322	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	174	332	0	0	2144	322	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	174	332	0	0	2144	322	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	0.82	1.00	1.00	0.80	0.80	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00
Final Sat.:	0	0	0	1556	3112	0	0	4575	1525	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.11	0.11	0.00	0.00	0.47	0.21	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.33	0.33	0.00	0.00	0.61	0.61	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.34	0.32	0.00	0.00	0.76	0.34	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	27.4	27.2	0.0	0.0	16.7	10.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	27.4	27.2	0.0	0.0	16.7	10.2	0.0	0.0	0.0
HCM2k95th:	0	0	0	9	8	0	0	30	10	0	0	0

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-------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
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-------------------------------------------------------------------------------
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             2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #16 7th St/L St
*******************************************************************************
Cycle (sec):           50                 Critical Vol./Cap. (X):        0.330
Loss Time (sec):        6 (Y+R =  4 sec) Average Delay (sec/veh):        11.5
Optimal Cycle:         56                 Level Of Service:                  B
*******************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0     0     0     0    29    29     0     0     0    21    21     0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Dec 2005 << 8
Base Vol:       0    0     0     0  334   175     0    0     0   188  662     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0  334   175     0    0     0   188  662     0
Added Vol:      0    0     0     0  117     4     0    0     0    74   36     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     0  451   179     0    0     0   262  698     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     0  451   179     0    0     0   262  698     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0     0  451   179     0    0     0   262  698     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0     0     0  451   179     0    0     0   262  698     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  1.00 0.78  0.78  1.00 1.00  1.00  0.90 0.82  1.00
Lanes:       0.00 0.00  0.00  0.00 2.15  0.85  0.00 0.00  0.00  1.00 3.00  0.00
Final Sat.:     0    0     0     0 3198  1269     0    0     0  1710 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.00 0.14  0.14  0.00 0.00  0.00  0.15 0.15  0.00
Crit Moves:                        ****                          ****
Green/Cycle: 0.00 0.00  0.00  0.00 0.52  0.52  0.00 0.00  0.00  0.38 0.38  0.00
Volume/Cap:  0.00 0.00  0.00  0.00 0.27  0.27  0.00 0.00  0.00  0.41 0.40  0.00
Delay/Veh:    0.0  0.0   0.0   0.0  7.9   7.9   0.0  0.0   0.0  14.8 13.5   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   0.0  7.9   7.9   0.0  0.0   0.0  14.8 13.5   0.0
HCM2k95th:      0    0     0     0    5     5     0    0     0     8    7     0
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-------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
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-------------------------------------------------------------------------------
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             2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #17 8th St/I St
*******************************************************************************
Cycle (sec):           50                 Critical Vol./Cap. (X):        0.299
Loss Time (sec):        6 (Y+R =  4 sec) Average Delay (sec/veh):        10.3
Optimal Cycle:         56                 Level Of Service:                  B
*******************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    25    25     0     0     0     0     0     0     0     0    25    25
Lanes:        1  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     121  329     0     0    0     0     0    0     0     0  851   126
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  121  329     0     0    0     0     0    0     0     0  851   126
Added Vol:     32   36     0     0    0     0     0    0     0     0    1     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  153  365     0     0    0     0     0    0     0     0  852   126
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   153  365     0     0    0     0     0    0     0     0  852   126
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  153  365     0     0    0     0     0    0     0     0  852   126
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   153  365     0     0    0     0     0    0     0     0  852   126
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.91 0.91  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 0.89  0.89
Lanes:       1.18 2.82  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 2.61  0.39
Final Sat.:  2043 4873     0     0    0     0     0    0     0     0 4433   656
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.07  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.19  0.19
Crit Moves:  ****                                                     ****
Green/Cycle: 0.45 0.45  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.45  0.45
Volume/Cap:  0.17 0.17  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.43  0.43
Delay/Veh:    9.3  9.3   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 10.8  10.8
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   9.3  9.3   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 10.8  10.8
HCM2k95th:      3    3     0     0    0     0     0    0     0     0    8     8
*******************************************************************************
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Intersection #18 8th S/tJ St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.374
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 18.0
Optimal Cycle: 106 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	35	35	0	0	0	65	65	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module: >> Count Date: 7 Dec 2005 << 7:45												
Base Vol:	0	304	151	0	0	0	256	1880	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	304	151	0	0	0	256	1880	0	0	0	0
Added Vol:	0	63	119	0	0	0	5	171	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	367	270	0	0	0	261	2051	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	367	270	0	0	0	261	2051	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	367	270	0	0	0	261	2051	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	367	270	0	0	0	261	2051	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.77	0.77	1.00	1.00	1.00	0.82	0.82	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	0.00	0.00	0.00	1.00	3.00	0.00	0.00	0.00	0.00
Final Sat.:	0	2913	1457	0	0	0	1556	4668	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.19	0.00	0.00	0.00	0.17	0.44	0.00	0.00	0.00	0.00
Crit Moves:			****				****					
Green/Cycle:	0.00	0.33	0.33	0.00	0.00	0.00	0.61	0.61	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.38	0.56	0.00	0.00	0.00	0.27	0.72	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	27.9	31.2	0.0	0.0	0.0	9.6	15.5	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	27.9	31.2	0.0	0.0	0.0	9.6	15.5	0.0	0.0	0.0	0.0
HCM2k95th:	0	9	14	0	0	0	8	26	0	0	0	0

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Intersection #19 8th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.295
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.5
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	29	29	0	0	0	0	0	0	0	0	21	21
Lanes:	1 0 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 1		
Volume Module: >> Count Date: 7 Dec 2005 << 7:45												
Base Vol:	111	308	0	0	0	0	0	0	0	0	740	165
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	111	308	0	0	0	0	0	0	0	0	740	165
Added Vol:	0	81	0	0	0	0	0	0	0	0	110	170
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	389	0	0	0	0	0	0	0	0	850	335
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	111	389	0	0	0	0	0	0	0	0	850	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	389	0	0	0	0	0	0	0	0	850	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	111	389	0	0	0	0	0	0	0	0	850	335
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.78	0.78
Lanes:	1.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.87	1.13
Final Sat.:	1710	3249	0	0	0	0	0	0	0	0	4277	1686
Capacity Analysis Module:												
Vol/Sat:	0.06	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20
Crit Moves:	****										****	
Green/Cycle:	0.52	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38
Volume/Cap:	0.13	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.53
Delay/Veh:	7.3	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.6	14.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.3	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.6	14.6
HCM2k95th:	2	4	0	0	0	0	0	0	0	0	9	9

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Intersection #20 9th St/I St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.334
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 13.0
Optimal Cycle: 62 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	22	22	0	0	0	28	28	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			1 0 3 0 0		
Volume Module: >> Count Date: 12 Jan 2006 << 7:45												
Base Vol:	0	0	0	0	214	192	0	0	0	137	853	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	214	192	0	0	0	137	853	0
Added Vol:	0	0	0	0	124	0	0	0	0	101	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	338	192	0	0	0	238	854	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	338	192	0	0	0	238	854	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	338	192	0	0	0	238	854	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	338	192	0	0	0	238	854	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.77	0.77	1.00	1.00	1.00	0.90	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	2944	1472	0	0	0	1710	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.11	0.13	0.00	0.00	0.00	0.14	0.18	0.00
Crit Moves:						****				****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.35	0.35	0.00	0.00	0.00	0.45	0.45	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.32	0.37	0.00	0.00	0.00	0.31	0.41	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	15.1	15.6	0.0	0.0	0.0	11.9	12.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	15.1	15.6	0.0	0.0	0.0	11.9	12.0	0.0
HCM2k95th:	0	0	0	0	6	6	0	0	0	6	8	0

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Intersection #21 9th St/J St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.595
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 21.0
Optimal Cycle: 106 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	40	40	0	0	60	60	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module: >> Count Date: 12 Jan 2005 << 7:45												
Base Vol:	0	0	0	71	278	0	0	1527	179	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	71	278	0	0	1527	179	0	0	0
Added Vol:	0	0	0	0	225	0	0	132	158	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	71	503	0	0	1659	337	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	71	503	0	0	1659	337	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	71	503	0	0	1659	337	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	71	503	0	0	1659	337	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	0.82	1.00	1.00	0.80	0.80	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.37	2.63	0.00	0.00	2.49	0.51	0.00	0.00	0.00
Final Sat.:	0	0	0	577	4091	0	0	3783	768	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.12	0.00	0.00	0.44	0.44	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.57	0.57	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.33	0.33	0.00	0.00	0.77	0.77	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	23.9	23.9	0.0	0.0	20.1	20.1	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	23.9	23.9	0.0	0.0	20.1	20.1	0.0	0.0	0.0
HCM2k95th:	0	0	0	9	9	0	0	28	28	0	0	0

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Intersection #22 9th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.314
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.4
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	21	21	0	0	0	29	29	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			1 0 3 0 0		
Volume Module: >> Count Date: 6 Dec 2005 << 7:45												
Base Vol:	0	0	0	0	255	146	0	0	0	264	969	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	255	146	0	0	0	264	969	0
Added Vol:	0	0	0	0	151	10	0	0	0	0	270	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	406	156	0	0	0	264	1239	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	406	156	0	0	0	264	1239	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	406	156	0	0	0	264	1239	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	406	156	0	0	0	264	1239	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.78	0.78	1.00	1.00	1.00	0.90	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.17	0.83	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	3231	1241	0	0	0	1710	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.13	0.13	0.00	0.00	0.00	0.15	0.27	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.00	0.52	0.52	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.34	0.34	0.00	0.00	0.00	0.30	0.51	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	13.0	13.0	0.0	0.0	0.0	8.6	9.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	13.0	13.0	0.0	0.0	0.0	8.6	9.6	0.0
HCM2k95th:	0	0	0	0	6	6	0	0	0	6	9	0

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Intersection #23 9th St/P St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.370
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 9.5
Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	10	0	0	0	0	0	10	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			0 1 2 0 0		
Volume Module:												
Base Vol:	0	0	0	0	458	133	0	0	0	108	592	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	458	133	0	0	0	108	592	0
Added Vol:	0	0	0	0	262	6	0	0	0	45	63	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	720	139	0	0	0	153	655	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	720	139	0	0	0	153	655	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	720	139	0	0	0	153	655	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	720	139	0	0	0	153	655	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.89	0.89	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	2.51	0.49	0.00	0.00	0.00	0.57	2.43	0.00
Final Sat.:	0	0	0	0	4243	819	0	0	0	982	4205	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.16	0.16	0.00
Crit Moves:					****						****	
Green/Cycle:	0.00	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.42	0.42	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.37	0.37	0.00	0.00	0.00	0.37	0.37	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	8.9	8.9	0.0	0.0	0.0	10.0	10.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	8.9	8.9	0.0	0.0	0.0	10.0	10.0	0.0
HCM2k95th:	0	0	0	0	6	6	0	0	0	6	6	0

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-----------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
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-----------------------------------------------------------------------------
                   Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*****************************************************************************
Intersection #24 9th St/Q St
*****************************************************************************
Cycle (sec):         50               Critical Vol./Cap. (X):        0.510
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        11.5
Optimal Cycle:       56               Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:         Include          Include          Include          Include
Min. Green:    0    0     0   25   25     0    0   25    25    0    0     0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  3  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0     0  169  391     0    0 1288   113    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0     0  169  391     0    0 1288   113    0    0     0
Added Vol:     0    0     0   12  294     0    0   11   366    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   0    0     0  181  685     0    0 1299   479    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0    0     0  181  685     0    0 1299   479    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0     0  181  685     0    0 1299   479    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0    0     0  181  685     0    0 1299   479    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.87  0.87 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.63 2.37  0.00 0.00 3.00  1.00 0.00 0.00  0.00
Final Sat.:    0    0     0 1084 4103     0    0 4980  1660    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.17 0.17  0.00 0.00 0.26  0.29 0.00 0.00  0.00
Crit Moves:                  ****                       ****
Green/Cycle: 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.37 0.37  0.00 0.00 0.58  0.65 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 10.4 10.4   0.0  0.0 11.9  12.6  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 10.4 10.4   0.0  0.0 11.9  12.6  0.0  0.0   0.0
HCM2k95th:     0    0     0    6    6     0    0   12    14    0    0     0
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-----------------------------------------------------------------------------
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-----------------------------------------------------------------------------
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          2000 HCM Operations Method (Future Volume Alternative)
*****************************************************************************
Intersection #25 10th St/I St
*****************************************************************************
Cycle (sec):         50               Critical Vol./Cap. (X):        0.461
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):        14.9
Optimal Cycle:       62               Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:         Include          Include          Include          Include
Min. Green:   26   26     0    0    0     0    0    0     0    0   24    24
Lanes:       0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Dec 2005 << 7:45
Base Vol:    176  510     0    0    0     0    0    0     0    0  787   130
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse: 176  510     0    0    0     0    0    0     0    0  787   130
Added Vol:     0   10     0    0    0     0    0    0     0    0  101     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut: 176  520     0    0    0     0    0    0     0    0  888   130
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:  176  520     0    0    0     0    0    0     0    0  888   130
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol: 176  520     0    0    0     0    0    0     0    0  888   130
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:  176  520     0    0    0     0    0    0     0    0  888   130
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  0.82 0.82  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.80  0.80
Lanes:       0.76 2.24  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 2.62  0.38
Final Sat.: 1180 3488     0    0    0     0    0    0     0    0 3995   585
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.15 0.15  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.22  0.22
Crit Moves:  ****                                                ****
Green/Cycle: 0.42 0.42  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.39  0.39
Volume/Cap:  0.36 0.36  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.57  0.57
Delay/Veh:   12.8 12.8   0.0  0.0  0.0   0.0  0.0  0.0   0.0  0.0 16.3  16.3
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:  12.8 12.8   0.0  0.0  0.0   0.0  0.0  0.0   0.0  0.0 16.3  16.3
HCM2k95th:     7    7     0    0    0     0    0    0     0    0   11    11
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Intersection #26 10th St/J St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.526
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 22.0
Optimal Cycle: 112 Level Of Service: C

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	0 0 2 1 1	0 0 0 0 0	0 1 2 0 0	0 0 0 0 0

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	40	40	0	0	0	60	60	0	0	0	0
Volume Module: >> Count Date: 8 Dec 2005 << 8												
Base Vol:	0	464	200	0	0	0	278	1254	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	464	200	0	0	0	278	1254	0	0	0	0
Added Vol:	0	10	0	0	0	0	0	132	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	474	200	0	0	0	278	1386	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	474	200	0	0	0	278	1386	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	474	200	0	0	0	278	1386	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	474	200	0	0	0	278	1386	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.78	0.78	1.00	1.00	1.00	0.82	0.82	1.00	1.00	1.00	1.00
Lanes:	0.00	2.81	1.19	0.00	0.00	0.00	0.50	2.50	0.00	0.00	0.00	0.00
Final Sat.:	0	4180	1764	0	0	0	780	3888	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.11	0.00	0.00	0.00	0.36	0.36	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.36	0.36	0.00	0.00	0.00	0.54	0.54	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.32	0.32	0.00	0.00	0.00	0.67	0.67	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	26.5	26.5	0.0	0.0	0.0	20.2	20.2	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	26.5	26.5	0.0	0.0	0.0	20.2	20.2	0.0	0.0	0.0	0.0
HCM2k95th:	0	9	9	0	0	0	23	23	0	0	0	0

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Intersection #27 10th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.610
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.7
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	0 1 2 0 0	0 0 0 0 0	0 0 0 0 0	0 0 2 1 0

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	21	21	0	0	0	0	0	0	0	0	29	29
Volume Module: >> Count Date: 6 Dec 2005 << 8												
Base Vol:	244	685	0	0	0	0	0	0	0	0	1020	271
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	244	685	0	0	0	0	0	0	0	0	1020	271
Added Vol:	54	10	0	0	0	0	0	0	0	0	216	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	298	695	0	0	0	0	0	0	0	0	1236	271
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	298	695	0	0	0	0	0	0	0	0	1236	271
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	298	695	0	0	0	0	0	0	0	0	1236	271
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	298	695	0	0	0	0	0	0	0	0	1236	271
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.80
Lanes:	0.90	2.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.46	0.54
Final Sat.:	1401	3267	0	0	0	0	0	0	0	0	3725	817
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.33
Crit Moves:	****										****	
Green/Cycle:	0.38	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.52
Volume/Cap:	0.57	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.64
Delay/Veh:	15.2	15.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	11.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.2	15.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	11.1
HCM2k95th:	10	10	0	0	0	0	0	0	0	0	13	13

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Intersection #28 10th St/P St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.495
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.8
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	25	25	0	0	0	0	0	0	0	0	25	25
Lanes:		0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0	
Volume Module:												
Base Vol:	130	1243	0	0	0	0	0	0	0	0	519	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1243	0	0	0	0	0	0	0	0	519	202
Added Vol:	38	57	0	0	0	0	0	0	0	0	70	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	168	1300	0	0	0	0	0	0	0	0	589	202
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	168	1300	0	0	0	0	0	0	0	0	589	202
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	168	1300	0	0	0	0	0	0	0	0	589	202
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	168	1300	0	0	0	0	0	0	0	0	589	202
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.88	0.88
Lanes:	0.34	2.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.23	0.77
Final Sat.:	594	4593	0	0	0	0	0	0	0	0	3716	1274
Capacity Analysis Module:												
Vol/Sat:	0.28	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.16
Crit Moves:	****										****	
Green/Cycle:	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Volume/Cap:	0.63	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.36
Delay/Veh:	12.5	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	10.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.5	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	10.3
HCM2k95th:	13	13	0	0	0	0	0	0	0	0	6	6

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Intersection #29 10th St/Q St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.472
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.0
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	25	25	0	0	0	25	25	0	0	0	0
Lanes:		0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0	
Volume Module:												
Base Vol:	0	876	91	0	0	0	375	1083	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	876	91	0	0	0	375	1083	0	0	0	0
Added Vol:	0	94	0	0	0	0	0	23	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	970	91	0	0	0	375	1106	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	970	91	0	0	0	375	1106	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	970	91	0	0	0	375	1106	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	970	91	0	0	0	375	1106	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.74	0.26	0.00	0.00	0.00	1.01	2.99	0.00	0.00	0.00	0.00
Final Sat.:	0	4680	439	0	0	0	1751	5165	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.00	0.00	0.00	0.21	0.21	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.46	0.46	0.00	0.00	0.00	0.48	0.48	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	11.0	11.0	0.0	0.0	0.0	11.0	11.0	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	11.0	11.0	0.0	0.0	0.0	11.0	11.0	0.0	0.0	0.0	0.0
HCM2k95th:	0	9	9	0	0	0	9	9	0	0	0	0

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-------------------------------------------------------------------------------
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-------------------------------------------------------------------------------
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           2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #30 12th St/H St
*******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.460
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      18.1
Optimal Cycle:        66              Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0    0    27   27    0     0   33   33     0    0    0
Lanes:        0  0  0  0  0    0  1  2  0  0    0  0  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 23 Mar 2005 << 7:30
Base Vol:       0    0    0   288 1260    0     0  419   40     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0   288 1260    0     0  419   40     0    0    0
Added Vol:      0    0    0     0  155    0     0    0    0     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    0    0    0   288 1415    0     0  419   40     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0   288 1415    0     0  419   40     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0   288 1415    0     0  419   40     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0   288 1415    0     0  419   40     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.91 0.91 1.00  1.00 0.90 0.90  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  0.51 2.49 0.00  0.00 2.74 0.26  0.00 0.00 0.00
Final Sat.:     0    0    0   877 4310    0     0 4673  446     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.33 0.33 0.00  0.00 0.09 0.09  0.00 0.00 0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00 0.00  0.41 0.41 0.00  0.00 0.50 0.50  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.80 0.80 0.00  0.00 0.18 0.18  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0  20.5 20.5  0.0   0.0  9.2  9.2   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  20.5 20.5  0.0   0.0  9.2  9.2   0.0  0.0  0.0
HCM2k95th:      0    0    0    21   21    0     0    4    4     0    0    0
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-------------------------------------------------------------------------------
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           2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #31 12th St/I St
*******************************************************************************
Cycle (sec):           0              Critical Vol./Cap. (X):        0.549
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       6.6
Optimal Cycle:        24              Level Of Service:                  A
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0    0     0    7    7     0    0    0     3    7    0
Lanes:        0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 8 Dec 2005 << 7:45
Base Vol:       0    0    0     0  804  356     0    0    0    61  627    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0     0  804  356     0    0    0    61  627    0
Added Vol:      0    0    0     0   55  101     0    0    0     0    1    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    0    0    0     0  859  457     0    0    0    61  628    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0     0  859  457     0    0    0    61  628    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0     0  859  457     0    0    0    61  628    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0     0  859  457     0    0    0    61  628    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  1.00 0.86 0.86  1.00 1.00 1.00  0.91 0.91 1.00
Lanes:       0.00 0.00 0.00  0.00 2.00 1.00  0.00 0.00 0.00  0.27 2.73 0.00
Final Sat.:     0    0    0     0 3278 1639     0    0    0   459 4728    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.00 0.26 0.28  0.00 0.00 0.00  0.13 0.13 0.00
Crit Moves:                             ****                        ****
Green/Cycle: 0.00 0.00 0.00  0.00 0.46 0.46  0.00 0.00 0.00  0.29 0.29 0.00
Volume/Cap:  0.00 0.00 0.00  0.00 0.57 0.61  0.00 0.00 0.00  0.46 0.46 0.00
Delay/Veh:    0.0  0.0  0.0   0.0  5.8  6.2   0.0  0.0  0.0   7.9  7.9  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0   0.0  5.8  6.2   0.0  0.0  0.0   7.9  7.9  0.0
HCM2k95th:      0    0    0     0    7    8     0    0    0     5    5    0
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Intersection #32 12th St/J St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.599
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	18.8
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	31	31	31	31	0	19	19	0	0	0
Lanes:	0 0 0 0 1			1 0 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module: >> Count Date: 8 Dec 2005 << 8												
Base Vol:	0	0	114	323	503	0	0	1292	149	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	114	323	503	0	0	1292	149	0	0	0
Added Vol:	0	0	0	9	46	0	0	132	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	114	332	549	0	0	1424	149	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	114	332	549	0	0	1424	149	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	114	332	549	0	0	1424	149	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	114	332	549	0	0	1424	149	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.77	0.95	1.00	1.00	0.90	0.90	1.00	1.00	1.00
Lanes:	0.00	0.00	1.00	1.00	2.00	0.00	0.00	2.72	0.28	0.00	0.00	0.00
Final Sat.:	0	0	1644	1461	3610	0	0	4630	484	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.07	0.23	0.15	0.00	0.00	0.31	0.31	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.55	0.55	0.55	0.00	0.00	0.34	0.34	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.13	0.41	0.27	0.00	0.00	0.91	0.91	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	6.3	8.8	6.9	0.0	0.0	26.0	26.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	6.3	8.8	6.9	0.0	0.0	26.0	26.0	0.0	0.0	0.0
HCM2k95th:	0	0	2	9	6	0	0	22	22	0	0	0

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Intersection #33 12th St/L St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.471
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	13.2
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	25	25	0	0	0	25	25	25
Lanes:	0 1 0 0 0			0 0 0 1 1			0 0 0 0 0			0 1 1 1 0		
Volume Module: >> Count Date: 6 Dec 2005 << 8												
Base Vol:	5	1	0	0	1	549	0	0	0	3	743	152
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	1	0	0	1	549	0	0	0	3	743	152
Added Vol:	0	0	0	0	0	46	0	0	0	0	170	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	1	0	0	1	595	0	0	0	3	913	152
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	1	0	0	1	595	0	0	0	3	913	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	1	0	0	1	595	0	0	0	3	913	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	1	0	0	1	595	0	0	0	3	913	152
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	1.00	1.00	0.85	0.85	1.00	1.00	1.00	0.87	0.87	0.87
Lanes:	0.83	0.17	0.00	0.00	0.01	1.99	0.00	0.00	0.00	0.01	2.56	0.43
Final Sat.:	1454	291	0	0	5	3225	0	0	0	14	4250	708
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.18	0.18	0.00	0.00	0.00	0.21	0.21	0.21
Crit Moves:					****					****		
Green/Cycle:	0.42	0.42	0.00	0.00	0.42	0.42	0.00	0.00	0.00	0.42	0.42	0.42
Volume/Cap:	0.01	0.01	0.00	0.00	0.44	0.44	0.00	0.00	0.00	0.51	0.51	0.51
Delay/Veh:	9.9	9.9	0.0	0.0	13.0	13.0	0.0	0.0	0.0	13.4	13.4	13.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.9	9.9	0.0	0.0	13.0	13.0	0.0	0.0	0.0	13.4	13.4	13.4
HCM2k95th:	0	0	0	0	8	8	0	0	0	10	10	10

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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
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-------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #34 15th St/H St
*******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):         0.271
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        9.7
Optimal Cycle:        56              Level Of Service:                   A
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0    0    25   25    0     0   25   25     0    0    0
Lanes:        0  0  0  0  0    0  1  2  0  0    0  0  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Dec 2005 << 7:30
Base Vol:       0    0    0    31  559    0     0  346  209     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0    31  559    0     0  346  209     0    0    0
Added Vol:      0    0    0     0    0    0     0    0    0     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    0    0    0    31  559    0     0  346  209     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0    31  559    0     0  346  209     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0    31  559    0     0  346  209     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0    31  559    0     0  346  209     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.91 0.91 1.00  1.00 0.86 0.86  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  0.16 2.84 0.00  0.00 2.00 1.00  0.00 0.00 0.00
Final Sat.:     0    0    0   273 4914    0     0 3261 1630     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.11 0.11 0.00  0.00 0.11 0.13  0.00 0.00 0.00
Crit Moves:                  ****                       ****
Green/Cycle: 0.00 0.00 0.00  0.45 0.45 0.00  0.00 0.45 0.45  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.25 0.25 0.00  0.00 0.24 0.29  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0   9.7  9.7  0.0   0.0  9.7  9.9   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0   9.7  9.7  0.0   0.0  9.7  9.9   0.0  0.0  0.0
HCM2k95th:      0    0    0     5    5    0     0    4    5     0    0    0
*******************************************************************************
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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
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-------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #35 15th St/J St
*******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):         0.468
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       11.6
Optimal Cycle:        56              Level Of Service:                   B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0    0    25   25    0     0   25   25     0    0    0
Lanes:        0  0  0  0  0    0  1  2  0  0    0  0  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Dec 2005 << 8
Base Vol:       0    0    0   140  604    0     0  896  328     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0   140  604    0     0  896  328     0    0    0
Added Vol:      0    0    0     0    0    0     0   94   47     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    0    0    0   140  604    0     0  990  375     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0   140  604    0     0  990  375     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0   140  604    0     0  990  375     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0   140  604    0     0  990  375     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.91 0.91 1.00  1.00 0.87 0.87  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  0.56 2.44 0.00  0.00 2.18 0.82  0.00 0.00 0.00
Final Sat.:     0    0    0   976 4211    0     0 3608 1367     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.14 0.14 0.00  0.00 0.27 0.27  0.00 0.00 0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00 0.00  0.45 0.45 0.00  0.00 0.45 0.45  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.32 0.32 0.00  0.00 0.61 0.61  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0  10.1 10.1  0.0   0.0 12.3 12.3   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  10.1 10.1  0.0   0.0 12.3 12.3   0.0  0.0  0.0
HCM2k95th:      0    0    0     6    6    0     0   13   13     0    0    0
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---------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                           Baseline Conditions
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---------------------------------------------------------------------------
                    Level Of Service Computation Report
         2000 HCM Operations Method (Future Volume Alternative)
***************************************************************************
Intersection #36 15th St/L St
***************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.422
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      11.5
Optimal Cycle:        56              Level Of Service:                  B
***************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   30    30    0    0     0   20   20     0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 14 Dec 2005 << 7:45
Base Vol:       0    0     0    0  635   185    0    0     0   59  834     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  635   185    0    0     0   59  834     0
Added Vol:      0    0     0    0   42     5    0    0     0    0  165     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0    0  677   190    0    0     0   59  999     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  677   190    0    0     0   59  999     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  677   190    0    0     0   59  999     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  677   190    0    0     0   59  999     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.88  0.88 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 2.34  0.66 0.00 0.00  0.00 0.17 2.83  0.00
Final Sat.:     0    0     0    0 3917  1099    0    0     0  289 4898     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.17  0.17 0.00 0.00  0.00 0.20 0.20  0.00
Crit Moves:                       ****                        ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.54  0.54 0.00 0.00  0.00 0.36 0.36  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.32  0.32 0.00 0.00  0.00 0.57 0.57  0.00
Delay/Veh:    0.0  0.0   0.0  0.0  7.4   7.4  0.0  0.0   0.0 15.0 15.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0  7.4   7.4  0.0  0.0   0.0 15.0 15.0   0.0
HCM2k95th:      0    0     0    0    6     6    0    0     0   10   10     0
***************************************************************************
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---------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
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---------------------------------------------------------------------------
                    Level Of Service Computation Report
         2000 HCM Operations Method (Future Volume Alternative)
***************************************************************************
Intersection #37 15th St/P St
***************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.407
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      11.4
Optimal Cycle:        56              Level Of Service:                  B
***************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   28    28    0    0     0   22   22     0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0  530   168    0    0     0  107  943     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  530   168    0    0     0  107  943     0
Added Vol:      0    0     0    0   41     2    0    0     0    0   69     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0    0  571   170    0    0     0  107 1012     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  571   170    0    0     0  107 1012     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  571   170    0    0     0  107 1012     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  571   170    0    0     0  107 1012     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.88  0.88 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 2.31  0.69 0.00 0.00  0.00 0.29 2.71  0.00
Final Sat.:     0    0     0    0 3861  1150    0    0     0  496 4691     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.15  0.15 0.00 0.00  0.00 0.22 0.22  0.00
Crit Moves:                       ****                        ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.50  0.50 0.00 0.00  0.00 0.39 0.39  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.30  0.30 0.00 0.00  0.00 0.55 0.55  0.00
Delay/Veh:    0.0  0.0   0.0  0.0  8.3   8.3  0.0  0.0   0.0 13.5 13.5   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0  8.3   8.3  0.0  0.0   0.0 13.5 13.5   0.0
HCM2k95th:      0    0     0    0    5     5    0    0     0   10   10     0
***************************************************************************
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--------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                           Baseline Conditions
                              AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #38 15th St/Q St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):         0.309
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        10.1
Optimal Cycle:        56              Level Of Service:                   B
********************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Protected        Protected
Rights:           Include          Include           Include          Include
Min. Green:     0    0     0    27   27     0     0   23    23     0    0     0
Lanes:        0  0  0  0  0    0  1  2  0  0    0  0  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0   108  553     0     0  571   117     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0   108  553     0     0  571   117     0    0     0
Added Vol:      0    0     0     4   37     0     0   23     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0   112  590     0     0  594   117     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0   112  590     0     0  594   117     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0   112  590     0     0  594   117     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0     0   112  590     0     0  594   117     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  0.91 0.91  1.00  1.00 0.89  0.89  1.00 1.00  1.00
Lanes:       0.00 0.00  0.00  0.48 2.52  0.00  0.00 2.51  0.49  0.00 0.00  0.00
Final Sat.:     0    0     0   828 4359     0     0 4225   832     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.14 0.14  0.00  0.00 0.14  0.14  0.00 0.00  0.00
Crit Moves:                   ****                  ****
Green/Cycle: 0.00 0.00  0.00  0.48 0.48  0.00  0.00 0.41  0.41  0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00  0.28 0.28  0.00  0.00 0.34  0.34  0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0   8.7  8.7   0.0   0.0 11.4  11.4   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   8.7  8.7   0.0   0.0 11.4  11.4   0.0  0.0   0.0
HCM2k95th:      0    0     0     5    5     0     0    5     5     0    0     0
********************************************************************************
```



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--------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                           Baseline Conditions
                              AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #39 15th St/W St
********************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):         0.230
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        12.4
Optimal Cycle:        76              Level Of Service:                   B
********************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Protected        Protected
Rights:           Include          Include           Include          Include
Min. Green:     0    0     0     0   32    32     0    0     0    38   38     0
Lanes:        0  0  0  0  0    0  0  3  1  0    0  0  0  0  0    1  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Dec 2005 << 7:45
Base Vol:       0    0     0     0  585    19     0    0     0   205  871     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0  585    19     0    0     0   205  871     0
Added Vol:      0    0     0     0   32     5     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     0  617    24     0    0     0   205  871     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     0  617    24     0    0     0   205  871     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0     0  617    24     0    0     0   205  871     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0     0     0  617    24     0    0     0   205  871     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  1.00 0.90  0.90  1.00 1.00  1.00  0.91 0.91  1.00
Lanes:       0.00 0.00  0.00  0.00 3.85  0.15  0.00 0.00  0.00  1.00 3.00  0.00
Final Sat.:     0    0     0     0 6617   257     0    0     0  1729 5187     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.00 0.09  0.09  0.00 0.00  0.00  0.12 0.17  0.00
Crit Moves:                        ****                         ****
Green/Cycle: 0.00 0.00  0.00  0.00 0.42  0.42  0.00 0.00  0.00  0.50 0.50  0.00
Volume/Cap:  0.00 0.00  0.00  0.00 0.22  0.22  0.00 0.00  0.00  0.24 0.34  0.00
Delay/Veh:    0.0  0.0   0.0   0.0 14.1  14.1   0.0  0.0   0.0  10.8 11.5   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   0.0 14.1  14.1   0.0  0.0   0.0  10.8 11.5   0.0
HCM2k95th:      0    0     0     0    5     5     0    0     0     6    8     0
********************************************************************************
```

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---------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                          Baseline Conditions
                             AM Peak Hour
---------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
***************************************************************************
Intersection #40 15th St/X St
***************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.438
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):       22.5
Optimal Cycle:        79              Level Of Service:                  C
***************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Split Phase      Split Phase       Protected        Protected
Rights:            Include          Include          Include          Include
Min. Green:     0    14    14    24    24     0     0    32    32     0     0     0
Lanes:        0  0  2  1  0    1  1  2  0  0    0  0  1  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Dec 2005 << 7:45
Base Vol:       0   483    23   317   369     0     0   558    91     0     0     0
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:    0   483    23   317   369     0     0   558    91     0     0     0
Added Vol:      0     0     0    32     0     0     0     0     0     0     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:    0   483    23   349   369     0     0   558    91     0     0     0
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:     0   483    23   349   369     0     0   558    91     0     0     0
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:    0   483    23   349   369     0     0   558    91     0     0     0
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Final Vol.:     0   483    23   349   369     0     0   558    91     0     0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900  1900  1900  1900  1900  1900  1900  1900  1900  1900  1900  1900
Adjustment:  1.00  0.90  0.90  0.89  0.89  1.00  1.00  0.93  0.93  1.00  1.00  1.00
Lanes:       0.00  2.86  0.14  1.94  2.06  0.00  0.00  1.72  0.28  0.00  0.00  0.00
Final Sat.:     0  4917   234  3281  3469     0     0  3039   496     0     0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00  0.10  0.10  0.11  0.11  0.00  0.00  0.18  0.18  0.00  0.00  0.00
Crit Moves:        ****              ****              ****
Green/Cycle: 0.00  0.18  0.18  0.30  0.30  0.00  0.00  0.41  0.41  0.00  0.00  0.00
Volume/Cap:  0.00  0.55  0.55  0.35  0.35  0.00  0.00  0.45  0.45  0.00  0.00  0.00
Delay/Veh:    0.0  30.4  30.4  21.5  21.5   0.0   0.0  17.4  17.4   0.0   0.0   0.0
User DelAdj: 1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
AdjDel/Veh:   0.0  30.4  30.4  21.5  21.5   0.0   0.0  17.4  17.4   0.0   0.0   0.0
HCM2k95th:      0     9     9     7     7     0     0    12    12     0     0     0
***************************************************************************
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---------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                          Baseline Conditions
                             AM Peak Hour
---------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
***************************************************************************
Intersection #41 16th St/H St
***************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.386
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       11.5
Optimal Cycle:        56              Level Of Service:                  B
***************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Protected        Protected        Protected        Protected
Rights:            Include          Include          Include          Include
Min. Green:     0    25    25     0     0     0    16    25     0     0     0     9
Lanes:        0  0  2  1  0    0  0  0  0  0    2  1  0  0  0    0  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 6 Dec 2005 << 7:30
Base Vol:       0   995    22     0     0     0   144   254     0     0     0    39
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:    0   995    22     0     0     0   144   254     0     0     0    39
Added Vol:      0    63     0     0     0     0     0     0     0     0     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:    0  1058    22     0     0     0   144   254     0     0     0    39
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:     0  1058    22     0     0     0   144   254     0     0     0    39
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:    0  1058    22     0     0     0   144   254     0     0     0    39
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Final Vol.:     0  1058    22     0     0     0   144   254     0     0     0    39
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900  1900  1900  1900  1900  1900  1900  1900  1900  1900  1900  1900
Adjustment:  1.00  0.91  0.91  1.00  1.00  1.00  0.95  0.98  1.00  1.00  1.00  0.87
Lanes:       0.00  2.94  0.06  0.00  0.00  0.00  2.00  1.00  0.00  0.00  0.00  1.00
Final Sat.:     0  5066   105     0     0     0  3620  1866     0     0     0  1644
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00  0.21  0.21  0.00  0.00  0.00  0.04  0.14  0.00  0.00  0.00  0.02
Crit Moves:        ****                                ****        ****
Green/Cycle: 0.00  0.45  0.45  0.00  0.00  0.00  0.29  0.45  0.00  0.00  0.00  0.16
Volume/Cap:  0.00  0.47  0.47  0.00  0.00  0.00  0.14  0.30  0.00  0.00  0.00  0.15
Delay/Veh:    0.0  11.0  11.0   0.0   0.0   0.0  14.9  10.1   0.0   0.0   0.0  20.5
User DelAdj: 1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
AdjDel/Veh:   0.0  11.0  11.0   0.0   0.0   0.0  14.9  10.1   0.0   0.0   0.0  20.5
HCM2k95th:      0     8     8     0     0     0     2     6     0     0     0     1
***************************************************************************
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #42 16th St/I St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.375
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.4
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	0	0	0	0	0	0	25	25
Lanes:	1 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module: >> Count Date: 6 Dec 2005 << 7:45												
Base Vol:	314	828	0	0	0	0	0	0	0	0	637	168
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	314	828	0	0	0	0	0	0	0	0	637	168
Added Vol:	1	63	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	315	891	0	0	0	0	0	0	0	0	637	168
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	315	891	0	0	0	0	0	0	0	0	637	168
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	315	891	0	0	0	0	0	0	0	0	637	168
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	315	891	0	0	0	0	0	0	0	0	637	168
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.88	0.88
Lanes:	1.04	2.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.37	0.63
Final Sat.:	1806	5110	0	0	0	0	0	0	0	0	3977	1049
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.16
Crit Moves:	****										****	
Green/Cycle:	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Volume/Cap:	0.39	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.36
Delay/Veh:	10.5	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	10.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.5	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	10.3
HCM2k95th:	7	7	0	0	0	0	0	0	0	0	7	7

Downtown Sacramento Traffic Study
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2000 HCM Operations Method (Future Volume Alternative)

Intersection #43 16th St/J St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.479
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.7
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	25	25	0	0	0	25	25	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module: >> Count Date: 30 Sep 2004 << 7:45												
Base Vol:	0	1299	136	0	0	0	194	1003	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1299	136	0	0	0	194	1003	0	0	0	0
Added Vol:	0	6	3	0	0	0	57	37	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1305	139	0	0	0	251	1040	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1305	139	0	0	0	251	1040	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1305	139	0	0	0	251	1040	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1305	139	0	0	0	251	1040	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.71	0.29	0.00	0.00	0.00	1.00	3.00	0.00	0.00	0.00	0.00
Final Sat.:	0	4622	492	0	0	0	1729	5187	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.28	0.00	0.00	0.00	0.15	0.20	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.63	0.63	0.00	0.00	0.00	0.33	0.45	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	12.5	12.5	0.0	0.0	0.0	10.1	10.8	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.5	12.5	0.0	0.0	0.0	10.1	10.8	0.0	0.0	0.0	0.0
HCM2k95th:	0	14	14	0	0	0	5	8	0	0	0	0

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Intersection #44 16th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.381
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.0
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	0	0	0	0	0	0	25	25
Lanes:	1 0 3 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module: >> Count Date: 20 Jan 2005 << 7:45												
Base Vol:	242	1214	0	0	0	0	0	0	0	0	628	128
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	242	1214	0	0	0	0	0	0	0	0	628	128
Added Vol:	92	24	0	0	0	0	0	0	0	0	73	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	334	1238	0	0	0	0	0	0	0	0	701	133
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	334	1238	0	0	0	0	0	0	0	0	701	133
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	334	1238	0	0	0	0	0	0	0	0	701	133
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	334	1238	0	0	0	0	0	0	0	0	701	133
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89
Lanes:	1.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.52	0.48
Final Sat.:	1900	5187	0	0	0	0	0	0	0	0	4255	807
Capacity Analysis Module:												
Vol/Sat:	0.18	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.16
Crit Moves:	****										****	
Green/Cycle:	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Volume/Cap:	0.39	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.37
Delay/Veh:	10.7	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4	10.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.7	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4	10.4
HCM2k95th:	8	11	0	0	0	0	0	0	0	0	7	7

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Intersection #45 16th St/P St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.599
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.8
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	29	29	0	0	0	0	0	0	0	0	21	21
Lanes:	0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	192	1355	0	0	0	0	0	0	0	0	875	149
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	192	1355	0	0	0	0	0	0	0	0	875	149
Added Vol:	0	93	0	0	0	0	0	0	0	0	69	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	192	1448	0	0	0	0	0	0	0	0	944	167
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	192	1448	0	0	0	0	0	0	0	0	944	167
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	192	1448	0	0	0	0	0	0	0	0	944	167
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	192	1448	0	0	0	0	0	0	0	0	944	167
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89
Lanes:	0.35	2.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.55	0.45
Final Sat.:	607	4580	0	0	0	0	0	0	0	0	4310	763
Capacity Analysis Module:												
Vol/Sat:	0.32	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.22
Crit Moves:	****										****	
Green/Cycle:	0.52	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38
Volume/Cap:	0.61	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.58
Delay/Veh:	9.9	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.5	14.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.9	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.5	14.5
HCM2k95th:	13	13	0	0	0	0	0	0	0	0	12	12

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********************************************************************************
Intersection #46 16th St/Q St
********************************************************************************
Cycle (sec):         50             Critical Vol./Cap. (X):        0.555
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):     11.9
Optimal Cycle:       56             Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0   25   25    0    0    0   25   25    0    0    0    0
Lanes:        0  0  2  1  0   0  0  0  0  0   0  1  1  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1273   42    0    0    0  272  506    0    0    0    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0 1273   42    0    0    0  272  506    0    0    0    0
Added Vol:      0   92    0    0    0    0    2   25    0    0    0    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:    0 1365   42    0    0    0  274  531    0    0    0    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0 1365   42    0    0    0  274  531    0    0    0    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0 1365   42    0    0    0  274  531    0    0    0    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0 1365   42    0    0    0  274  531    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 0.91 0.91 1.00 1.00 1.00 0.95 0.95 1.00 1.00 1.00 1.00
Lanes:       0.00 2.91 0.09 0.00 0.00 0.00 0.68 1.32 0.00 0.00 0.00 0.00
Final Sat.:     0 5012  154    0    0    0 1229 2381    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.27 0.27 0.00 0.00 0.00 0.22 0.22 0.00 0.00 0.00 0.00
Crit Moves:       ****                     ****
Green/Cycle: 0.00 0.45 0.45 0.00 0.00 0.00 0.45 0.45 0.00 0.00 0.00 0.00
Volume/Cap:  0.00 0.61 0.61 0.00 0.00 0.00 0.50 0.50 0.00 0.00 0.00 0.00
Delay/Veh:    0.0 12.3 12.3  0.0  0.0  0.0 11.3 11.3  0.0  0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0 12.3 12.3  0.0  0.0  0.0 11.3 11.3  0.0  0.0  0.0  0.0
HCM2k95th:      0   13   13    0    0    0   10   10    0    0    0    0
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********************************************************************************
Intersection #47 16th St/W St
********************************************************************************
Cycle (sec):         70             Critical Vol./Cap. (X):        0.415
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):     24.0
Optimal Cycle:       79             Level Of Service:                  C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected       Split Phase      Split Phase
Rights:          Include          Include          Include          Include
Min. Green:    30   30    0    0    0    0    0   16   16    0   24   24
Lanes:        1  1  2  0  0   0  0  0  0  0   0  0  2  1  0   0  0  1  1  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 14 Dec 2005 << 7:45
Base Vol:      97 1007    0    0    0    0    0  515  157    0  286  594
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   97 1007    0    0    0    0    0  515  157    0  286  594
Added Vol:      0    0    0    0    0    0    0    0    0    0    0   92
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:   97 1007    0    0    0    0    0  515  157    0  286  686
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    97 1007    0    0    0    0    0  515  157    0  286  686
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   97 1007    0    0    0    0    0  515  157    0  286  686
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    97 1007    0    0    0    0    0  515  157    0  286  686
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.91 0.91 1.00 1.00 1.00 1.00 1.00 0.88 0.88 1.00 0.85 0.85
Lanes:       1.00 3.00 0.00 0.00 0.00 0.00 0.00 2.30 0.70 0.00 1.00 2.00
Final Sat.:  1729 5187    0    0    0    0    0 3836 1169    0 1614 3227
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.06 0.19 0.00 0.00 0.00 0.00 0.00 0.13 0.13 0.00 0.18 0.21
Crit Moves:  ****                               ****                ****
Green/Cycle: 0.38 0.38 0.00 0.00 0.00 0.00 0.00 0.20 0.20 0.00 0.30 0.30
Volume/Cap:  0.15 0.51 0.00 0.00 0.00 0.00 0.00 0.66 0.66 0.00 0.58 0.70
Delay/Veh:   16.1 19.1  0.0  0.0  0.0  0.0  0.0 30.7 30.7  0.0 23.8 25.9
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  16.1 19.1  0.0  0.0  0.0  0.0  0.0 30.7 30.7  0.0 23.8 25.9
HCM2k95th:      3   12    0    0    0    0    0   12   12    0   13   16
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Intersection #48 16th St/X St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.385
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 13.8
Optimal Cycle: 76 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	35	35	0	0	0	35	35	0	0	0	0
Lanes:	0 0 3 1 0			0 0 0 0 0			2 0 2 0 0			0 0 0 0 0		

Volume Module: >> Count Date: 14 Dec 2005 << 7:30

Base Vol:	0	1243	62	0	0	0	606	732	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1243	62	0	0	0	606	732	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	32	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1243	62	0	0	0	606	764	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1243	62	0	0	0	606	764	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1243	62	0	0	0	606	764	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1243	62	0	0	0	606	764	0	0	0	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	1.00	1.00	1.00	0.97	0.95	1.00	1.00	1.00	1.00
Lanes:	0.00	3.81	0.19	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00
Final Sat.:	0	6541	326	0	0	0	3686	3610	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.19	0.19	0.00	0.00	0.00	0.16	0.21	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.46	0.46	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.41	0.41	0.00	0.00	0.00	0.36	0.46	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	13.7	13.7	0.0	0.0	0.0	13.4	14.2	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.7	13.7	0.0	0.0	0.0	13.4	14.2	0.0	0.0	0.0	0.0
HCM2k95th:	0	10	10	0	0	0	9	11	0	0	0	0

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Intersection #49 29th St/J St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.625
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 34.1
Optimal Cycle: 79 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	18	18	0	26	26	0	0	26	26	0	0	0
Lanes:	0 1 2 0 0			0 1 1 0 0			0 0 2 1 0			0 0 0 0 0		

Volume Module: >> Count Date: 7 Jun 2005 << 7:30

Base Vol:	47	271	0	426	595	0	0	568	250	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	47	271	0	426	595	0	0	568	250	0	0	0
Added Vol:	0	16	0	0	104	0	0	30	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	287	0	426	699	0	0	598	250	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	47	287	0	426	699	0	0	598	250	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	287	0	426	699	0	0	598	250	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	47	287	0	426	699	0	0	598	250	0	0	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.90	1.00	0.93	0.93	1.00	1.00	0.87	0.87	1.00	1.00	1.00
Lanes:	0.42	2.58	0.00	0.76	1.24	0.00	0.00	2.12	0.88	0.00	0.00	0.00
Final Sat.:	725	4426	0	1341	2200	0	0	3497	1462	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.06	0.06	0.00	0.32	0.32	0.00	0.00	0.17	0.17	0.00	0.00	0.00
Crit Moves:		****		****				****				
Green/Cycle:	0.23	0.23	0.00	0.33	0.33	0.00	0.00	0.33	0.33	0.00	0.00	0.00
Volume/Cap:	0.28	0.28	0.00	0.97	0.97	0.00	0.00	0.52	0.52	0.00	0.00	0.00
Delay/Veh:	25.8	25.8	0.0	45.3	45.3	0.0	0.0	22.6	22.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.8	25.8	0.0	45.3	45.3	0.0	0.0	22.6	22.6	0.0	0.0	0.0
HCM2k95th:	5	5	0	32	32	0	0	12	12	0	0	0

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--------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                              Baseline Conditions
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #50 30th St/J St
********************************************************************************
Cycle (sec):        70                 Critical Vol./Cap. (X):        0.298
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        12.6
Optimal Cycle:      76                 Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   31    31    0    0     0   39   39     0    0    0     0
Lanes:        0  0  2  1  0    0  0  0  0  0    1  1  2  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Jun 2005 << 7:45
Base Vol:       0  395   173    0    0     0  242  812     0    0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  395   173    0    0     0  242  812     0    0    0     0
Added Vol:      0   67    32    0    0     0    0   30     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0  462   205    0    0     0  242  842     0    0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  462   205    0    0     0  242  842     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0  462   205    0    0     0  242  842     0    0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0  462   205    0    0     0  242  842     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.87  0.87  1.00 1.00  1.00  0.91 0.91  1.00  1.00 1.00  1.00
Lanes:       0.00 2.08  0.92  0.00 0.00  0.00  1.00 3.00  0.00  0.00 0.00  0.00
Final Sat.:     0 3428  1521    0    0     0  1729 5187     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.13  0.13  0.00 0.00  0.00  0.14 0.16  0.00  0.00 0.00  0.00
Crit Moves:       ****                         ****
Green/Cycle: 0.00 0.41  0.41  0.00 0.00  0.00  0.51 0.51  0.00  0.00 0.00  0.00
Volume/Cap:  0.00 0.33  0.33  0.00 0.00  0.00  0.27 0.32  0.00  0.00 0.00  0.00
Delay/Veh:    0.0 15.5  15.5   0.0  0.0   0.0  10.5 10.8   0.0   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 15.5  15.5   0.0  0.0   0.0  10.5 10.8   0.0   0.0  0.0   0.0
HCM2k95th:      0    7     7    0    0     0    6    7     0    0    0     0
********************************************************************************
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Downtown Sacramento Traffic Study
Baseline Conditions
PM Peak Hour

Scenario Report

Scenario:	PM Baseline
Command:	Base PM
Volume:	Baseline PM
Geometry:	Baseline PM
Impact Fee:	Default Impact Fee
Trip Generation:	PM Baseline Projects
Trip Distribution:	Project
Paths:	Project
Routes:	Default Routes
Configuration:	Default Configuration

Downtown Sacramento Traffic Study
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 3rd St/J St

Cycle (sec):	0	Critical Vol./Cap. (X):	0.742
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	18.2
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	4	4	4	0	4	4	4	4	4	4
Lanes:	0 0 0 0 2			2 0 1 0 0			0 1 2 1 0			0 1 1 1 0		
Volume Module: >> Count Date: 28 Sep 2004 << 4:45												
Base Vol:	0	0	184	219	318	0	2	353	59	10	858	407
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	184	219	318	0	2	353	59	10	858	407
Added Vol:	0	0	0	0	9	0	0	119	43	0	110	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	184	219	327	0	2	472	102	10	968	407
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	184	219	327	0	2	472	102	10	968	407
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	184	219	327	0	2	472	102	10	968	407
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	184	219	327	0	2	472	102	10	968	407
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.67	0.56	0.90	1.00	0.80	0.80	0.80	0.78	0.78	0.78
Lanes:	0.00	0.00	2.00	2.00	1.00	0.00	0.01	3.28	0.71	0.02	2.10	0.88
Final Sat.:	0	0	2558	2117	1710	0	21	4963	1072	32	3119	1311
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.07	0.10	0.19	0.00	0.10	0.10	0.10	0.31	0.31	0.31
Crit Moves:					****		****					****
Green/Cycle:	0.00	0.00	0.26	0.26	0.26	0.00	0.13	0.13	0.13	0.42	0.42	0.42
Volume/Cap:	0.00	0.00	0.28	0.40	0.74	0.00	0.74	0.74	0.74	0.74	0.74	0.74
Delay/Veh:	0.0	0.0	14.7	16.3	26.4	0.0	25.6	25.6	25.6	14.0	14.0	14.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	14.7	16.3	26.4	0.0	25.6	25.6	25.6	14.0	14.0	14.0
HCM2k95th:	0	0	3	5	12	0	8	8	8	14	14	14

Downtown Sacramento Traffic Study
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 3rd St/L St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.902
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	43.8
Optimal Cycle:	85	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	0	0	20	20	0	0	0	40	40	0
Lanes:	1 0 2 0 0			0 0 2 1 0			0 0 0 0 0			1 1 1 0 1		
Volume Module: >> Count Date: 28 Sep 2004 << 4:45												
Base Vol:	0	0	0	0	445	306	0	0	0	360	1353	99
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	445	306	0	0	0	360	1353	99
Added Vol:	82	0	0	0	89	0	0	0	0	83	139	0
2-way Adj:	0	70	0	0	0	0	0	0	0	0	0	-70
Initial Fut:	82	70	0	0	534	306	0	0	0	443	1492	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	82	70	0	0	534	306	0	0	0	443	1492	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	70	0	0	534	306	0	0	0	443	1492	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	82	70	0	0	534	306	0	0	0	443	1492	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	1.00	1.00	0.77	0.77	1.00	1.00	1.00	0.73	0.73	0.77
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	2.00	1.00
Final Sat.:	1625	3249	0	0	2941	1471	0	0	0	1381	2762	1454
Capacity Analysis Module:												
Vol/Sat:	0.05	0.02	0.00	0.00	0.18	0.21	0.00	0.00	0.00	0.32	0.54	0.02
Crit Moves:	****					****					****	
Green/Cycle:	0.13	0.38	0.00	0.00	0.25	0.25	0.00	0.00	0.00	0.51	0.51	0.51
Volume/Cap:	0.40	0.06	0.00	0.00	0.72	0.82	0.00	0.00	0.00	0.63	1.07	0.04
Delay/Veh:	37.4	15.6	0.0	0.0	30.7	35.3	0.0	0.0	0.0	15.2	61.1	9.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.4	15.6	0.0	0.0	30.7	35.3	0.0	0.0	0.0	15.2	61.1	9.9
HCM2k95th:	5	1	0	0	14	17	0	0	0	17	54	1

Downtown Sacramento Traffic Study
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 3rd St/Capitol Mall

Cycle (sec):	70	Critical Vol./Cap. (X):	0.631
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	23.2
Optimal Cycle:	79	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	29	29	0	14	21	0	20	27	0
Lanes:	0 0 0 0 0			0 1 1 1 1			1 0 3 0 0			1 0 1 1 0		
Volume Module: >> Count Date: 28 Sep 2004 << 4:45												
Base Vol:	0	0	0	43	760	0	0	466	0	167	467	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	43	760	0	0	466	0	167	467	0
Added Vol:	0	0	0	95	103	89	106	66	0	194	170	98
2-way Adj:	0	0	0	0	0	0	70	-70	0	0	0	0
Initial Fut:	0	0	0	138	863	89	176	462	0	361	637	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	138	863	89	176	462	0	361	637	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	138	863	89	176	462	0	361	637	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	138	863	89	176	462	0	361	637	98
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.80	0.80	0.80	0.86	0.82	1.00	0.86	0.84	0.84
Lanes:	0.00	0.00	0.00	0.41	2.59	1.00	1.00	3.00	0.00	1.00	1.73	0.27
Final Sat.:	0	0	0	628	3929	1519	1625	4668	0	1625	2759	425
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.22	0.22	0.06	0.11	0.10	0.00	0.22	0.23	0.23
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.37	0.37	0.37	0.18	0.27	0.00	0.56	0.34	0.34
Volume/Cap:	0.00	0.00	0.00	0.60	0.60	0.16	0.61	0.37	0.00	0.60	0.68	0.68
Delay/Veh:	0.0	0.0	0.0	21.7	21.7	16.9	39.3	24.5	0.0	14.7	25.6	25.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	21.7	21.7	16.9	39.3	24.5	0.0	14.7	25.6	25.6
HCM2k95th:	0	0	0	14	14	4	10	7	0	13	16	16

Downtown Sacramento Traffic Study
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 3rd St/N St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.485
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	19.6
Optimal Cycle:	79	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	16	16	36	36	0	0	18	18	0	0	0
Lanes:	0 0 0 1 0			0 1 2 0 0			0 0 1 1 0			0 0 0 0 0		
Volume Module: >> Count Date: 28 Sep 2004 << 4:45												
Base Vol:	0	79	25	128	898	0	0	129	184	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	79	25	128	898	0	0	129	184	0	0	0
Added Vol:	0	0	0	12	285	0	0	9	9	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	79	25	140	1183	0	0	138	193	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	79	25	140	1183	0	0	138	193	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	79	25	140	1183	0	0	138	193	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	79	25	140	1183	0	0	138	193	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.97	0.97	0.91	0.91	1.00	1.00	0.87	0.87	1.00	1.00	1.00
Lanes:	0.00	0.76	0.24	0.32	2.68	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	0	1397	442	546	4615	0	0	1648	1648	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.06	0.26	0.26	0.00	0.00	0.08	0.12	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green/Cycle:	0.00	0.20	0.20	0.46	0.46	0.00	0.00	0.23	0.23	0.00	0.00	0.00
Volume/Cap:	0.00	0.28	0.28	0.56	0.56	0.00	0.00	0.37	0.51	0.00	0.00	0.00
Delay/Veh:	0.0	28.5	28.5	16.7	16.7	0.0	0.0	26.9	29.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	28.5	28.5	16.7	16.7	0.0	0.0	26.9	29.6	0.0	0.0	0.0
HCM2k95th:	0	5	5	14	14	0	0	7	9	0	0	0

Downtown Sacramento Traffic Study
Baseline Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 3rd St/P St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.862
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	27.6
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	19	19	0	0	0	31	31	0
Lanes:	0 0 0 0 0			0 0 1 1 2			0 0 0 0 0			0 1 2 0 0		
Volume Module: >> Count Date: 28 Sep 2004 << 4:30												
Base Vol:	0	0	0	0	417	677	0	0	0	151	2129	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	417	677	0	0	0	151	2129	0
Added Vol:	0	0	0	0	0	156	0	0	0	0	624	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	417	833	0	0	0	151	2753	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	417	833	0	0	0	151	2753	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	417	833	0	0	0	151	2753	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	417	833	0	0	0	151	2753	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.86	0.75	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	1.22	2.78	0.00	0.00	0.00	0.16	2.84	0.00
Final Sat.:	0	0	0	0	1987	3970	0	0	0	270	4917	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.21	0.21	0.00	0.00	0.00	0.56	0.56	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.34	0.34	0.00	0.00	0.00	0.55	0.55	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.62	0.62	0.00	0.00	0.00	1.01	1.01	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	16.9	16.9	0.0	0.0	0.0	32.1	32.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	16.9	16.9	0.0	0.0	0.0	32.1	32.1	0.0
HCM2k95th:	0	0	0	0	11	11	0	0	0	35	35	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 3rd St/Q St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.279
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 9.7
Optimal Cycle: 56 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	19	19	0	0	31	31	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 3 1 0			0 0 0 0 0		
Volume Module: >> Count Date: 28 Sep 2004 << 4:45												
Base Vol:	0	0	0	160	442	0	0	525	72	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	160	442	0	0	525	72	0	0	0
Added Vol:	0	0	0	0	0	0	0	314	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	160	442	0	0	839	72	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	160	442	0	0	839	72	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	160	442	0	0	839	72	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	160	442	0	0	839	72	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.90	0.90	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.80	2.20	0.00	0.00	3.68	0.32	0.00	0.00	0.00
Final Sat.:	0	0	0	1379	3808	0	0	6293	540	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.12	0.00	0.00	0.13	0.13	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.34	0.34	0.00	0.00	0.55	0.55	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.34	0.34	0.00	0.00	0.24	0.24	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	14.4	14.4	0.0	0.0	6.6	6.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	14.4	14.4	0.0	0.0	6.6	6.6	0.0	0.0	0.0
HCM2k95th:	0	0	0	6	6	0	0	5	5	0	0	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 5th St/I St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.592
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 20.6
Optimal Cycle: 106 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	21	21	0	0	0	21	0	0	0	0	79	79
Lanes:	2 0 2 0 0			0 0 0 0 2			0 0 0 0 0			0 0 3 1 0		
Volume Module: >> Count Date: 20 Jan 2005 << 4:45												
Base Vol:	419	347	0	0	0	0	0	0	0	0	2640	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	419	347	0	0	0	0	0	0	0	0	2640	55
Added Vol:	0	3	0	0	0	0	0	0	0	0	103	0
5th St Conv:	0	0	0	0	0	46	0	0	0	0	0	0
Initial Fut:	419	350	0	0	0	46	0	0	0	0	2743	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	419	350	0	0	0	46	0	0	0	0	2743	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	419	350	0	0	0	46	0	0	0	0	2743	55
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	419	350	0	0	0	46	0	0	0	0	2743	55
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.54	0.86	1.00	1.00	1.00	0.67	1.00	1.00	1.00	1.00	0.82	0.82
Lanes:	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	3.92	0.08
Final Sat.:	2063	3249	0	0	0	2558	0	0	0	0	6084	122
Capacity Analysis Module:												
Vol/Sat:	0.20	0.11	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.45	0.45
Crit Moves:		****		****							****	
Green/Cycle:	0.20	0.20	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.75	0.75
Volume/Cap:	1.03	0.54	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.60	0.60
Delay/Veh:	93.6	41.5	0.0	0.0	0.0	35.1	0.0	0.0	0.0	0.0	6.9	6.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	93.6	41.5	0.0	0.0	0.0	35.1	0.0	0.0	0.0	0.0	6.9	6.9
HCM2k95th:	18	10	0	0	0	2	0	0	0	0	19	19

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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                            Baseline Conditions
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-------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #8 5th St/J St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.469
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        11.6
Optimal Cycle:        56               Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   25    25    0    0     0   25   25    25    0    0     0
Lanes:       0  0  1  1  1    0  0  0  0  0    1  1  3  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 20 Jan 2005 << 4:45
Base Vol:      0  449   407    0    0     0  324 1112   130    0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0  449   407    0    0     0  324 1112   130    0    0     0
Added Vol:     0    3     0    0    0     0    0   78   113    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   0  452   407    0    0     0  324 1190   243    0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0  452   407    0    0     0  324 1190   243    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0  452   407    0    0     0  324 1190   243    0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0  452   407    0    0     0  324 1190   243    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.79  0.79  1.00 1.00  1.00  0.70 0.70  0.77  1.00 1.00  1.00
Lanes:       0.00 1.58  1.42  0.00 0.00  0.00  1.07 3.93  1.00  0.00 0.00  0.00
Final Sat.:    0 2382  2145    0    0     0 1415 5198  1454    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.19  0.19  0.00 0.00  0.00  0.23 0.23  0.17  0.00 0.00  0.00
Crit Moves:       ****                         ****
Green/Cycle: 0.00 0.45  0.45  0.00 0.00  0.00  0.45 0.45  0.45  0.00 0.00  0.00
Volume/Cap:  0.00 0.42  0.42  0.00 0.00  0.00  0.51 0.51  0.37  0.00 0.00  0.00
Delay/Veh:    0.0 11.2  11.2   0.0  0.0   0.0  11.8 11.8  12.0   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 11.2  11.2   0.0  0.0   0.0  11.8 11.8  12.0   0.0  0.0   0.0
HCM2k95th:      0    7     7     0    0     0    10   10     7     0    0     0
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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                            Baseline Conditions
                               PM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #9 5th St/L St
*******************************************************************************
Cycle (sec):          70               Critical Vol./Cap. (X):        0.547
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):        24.3
Optimal Cycle:        79               Level Of Service:                  C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:   45   45     0    0    0    45    0    0     0    0   25    25
Lanes:       1  0  3  0  0    0  0  0  0  2    0  0  0  0  0    0  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Jan 2005 << 4:45
Base Vol:    320  664     0    0    0    59    0    0     0    0 1484   140
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse: 320  664     0    0    0    59    0    0     0    0 1484   140
Added Vol:     9    3     0    0    0   113    0    0     0    0  147     0
2-way Adj:   -70    0     0    0    0     0    0    0     0    0    0     0
Initial Fut: 259  667     0    0    0   172    0    0     0    0 1631   140
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:  259  667     0    0    0   172    0    0     0    0 1631   140
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol: 259  667     0    0    0   172    0    0     0    0 1631   140
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:  259  667     0    0    0   172    0    0     0    0 1631   140
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.69 0.82  1.00  1.00 1.00  0.67  1.00 1.00  1.00  1.00 0.81  0.81
Lanes:       1.00 3.00  0.00  0.00 0.00  2.00  0.00 0.00  0.00  0.00 3.68  0.32
Final Sat.:  1315 4668     0    0    0  2558    0    0     0    0 5664   486
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.20 0.14  0.00  0.00 0.00  0.07  0.00 0.00  0.00  0.00 0.29  0.29
Crit Moves:  ****                                                    ****
Green/Cycle: 0.57 0.57  0.00  0.00 0.00  0.57  0.00 0.00  0.00  0.00 0.32  0.32
Volume/Cap:  0.35 0.25  0.00  0.00 0.00  0.12  0.00 0.00  0.00  0.00 0.91  0.91
Delay/Veh:   10.4  8.8   0.0   0.0  0.0   8.0   0.0  0.0   0.0   0.0 33.8  33.8
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  10.4  8.8   0.0   0.0  0.0   8.0   0.0  0.0   0.0   0.0 33.8  33.8
HCM2k95th:      9    6     0     0    0     2     0    0     0     0   24    24
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 5th St/Capitol Mall

Cycle (sec):	70	Critical Vol./Cap. (X):	0.276
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	19.0
Optimal Cycle:	76	Level Of Service:	B

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	2 0 2 1 0	0 0 0 0 0	2 0 2 0 0	0 0 2 1 0

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	35	35	0	0	0	0	17	35	0	0	18	18
Volume Module: >> Count Date: 13 Jan 2005 << 4:45												
Base Vol:	244	626	43	0	0	0	340	262	0	0	329	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	244	626	43	0	0	0	340	262	0	0	329	55
Added Vol:	166	9	21	0	0	0	3	158	0	0	296	0
2-way Adj:	0	0	0	0	0	0	-70	0	0	0	0	0
Initial Fut:	410	635	64	0	0	0	273	420	0	0	625	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	410	635	64	0	0	0	273	420	0	0	625	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	410	635	64	0	0	0	273	420	0	0	625	55
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	410	635	64	0	0	0	273	420	0	0	625	55
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.81	0.81	1.00	1.00	1.00	0.83	0.86	1.00	1.00	0.81	0.81
Lanes:	2.00	2.73	0.27	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.76	0.24
Final Sat.:	3271	4182	421	0	0	0	3152	3249	0	0	4239	373
Capacity Analysis Module:												
Vol/Sat:	0.13	0.15	0.15	0.00	0.00	0.00	0.09	0.13	0.00	0.00	0.15	0.15
Crit Moves:	****							****		****		
Green/Cycle:	0.46	0.46	0.46	0.00	0.00	0.00	0.22	0.46	0.00	0.00	0.24	0.24
Volume/Cap:	0.27	0.33	0.33	0.00	0.00	0.00	0.39	0.28	0.00	0.00	0.62	0.62
Delay/Veh:	13.1	13.5	13.5	0.0	0.0	0.0	26.7	13.2	0.0	0.0	28.6	28.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.1	13.5	13.5	0.0	0.0	0.0	26.7	13.2	0.0	0.0	28.6	28.6
HCM2k95th:	7	8	8	0	0	0	7	7	0	0	11	11

Downtown Sacramento Traffic Study
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Intersection #11 5th St/N St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.328
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	13.8
Optimal Cycle:	76	Level Of Service:	B

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	0 0 2 1 0	0 0 0 0 0	0 1 2 0 0	0 0 0 0 0

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	35	35	0	0	0	35	35	0	0	0	0
Volume Module: >> Count Date: 13 Jan 2005 << 4:45												
Base Vol:	0	710	124	0	0	0	72	427	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	710	124	0	0	0	72	427	0	0	0	0
Added Vol:	0	195	0	0	0	0	0	21	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	905	124	0	0	0	72	448	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	905	124	0	0	0	72	448	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	905	124	0	0	0	72	448	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	905	124	0	0	0	72	448	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.89	0.89	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.64	0.36	0.00	0.00	0.00	0.42	2.58	0.00	0.00	0.00	0.00
Final Sat.:	0	4480	614	0	0	0	718	4469	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.00	0.00	0.00	0.10	0.10	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.46	0.46	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.44	0.44	0.00	0.00	0.00	0.22	0.22	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	14.5	14.5	0.0	0.0	0.0	12.5	12.5	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	14.5	14.5	0.0	0.0	0.0	12.5	12.5	0.0	0.0	0.0	0.0
HCM2k95th:	0	11	11	0	0	0	5	5	0	0	0	0

Downtown Sacramento Traffic Study
Baseline Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 5th St/P St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.742
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 16.1
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	21	21	0	0	0	0	0	0	0	0	29	29
Lanes:	0 1	2	0 0	0 0	0	0 0	0 0	0	0 0	0 0	2	1 0
Volume Module: >> Count Date: 21 Apr 2005 << 4:30												
Base Vol:	336	551	0	0	0	0	0	0	0	0	1392	288
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	336	551	0	0	0	0	0	0	0	0	1392	288
Added Vol:	15	163	0	0	0	0	0	0	0	0	609	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	351	714	0	0	0	0	0	0	0	0	2001	321
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	351	714	0	0	0	0	0	0	0	0	2001	321
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	351	714	0	0	0	0	0	0	0	0	2001	321
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	351	714	0	0	0	0	0	0	0	0	2001	321
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89
Lanes:	0.99	2.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.59	0.41
Final Sat.:	1710	3477	0	0	0	0	0	0	0	0	4376	702
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.46
Crit Moves:	****										****	
Green/Cycle:	0.38	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.52
Volume/Cap:	0.55	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.88
Delay/Veh:	14.9	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	16.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.9	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	16.7
HCM2k95th:	10	10	0	0	0	0	0	0	0	0	26	26

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 5th St/Q St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.308
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 9.8
Optimal Cycle: 56 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	21	21	0	0	0	29	29	0	0	0	0
Lanes:	0 0	2	1 0	0 0	0	0 0	1 1	2	0 0	0 0	0	0 0
Volume Module: >> Count Date: 26 Apr 2005 << 4:30												
Base Vol:	0	550	73	0	0	0	259	484	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	550	73	0	0	0	259	484	0	0	0	0
Added Vol:	0	0	0	0	0	0	178	136	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	550	73	0	0	0	437	620	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	550	73	0	0	0	437	620	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	550	73	0	0	0	437	620	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	550	73	0	0	0	437	620	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.89	0.89	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.65	0.35	0.00	0.00	0.00	1.65	2.35	0.00	0.00	0.00	0.00
Final Sat.:	0	4497	597	0	0	0	2859	4057	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.12	0.00	0.00	0.00	0.15	0.15	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.38	0.38	0.00	0.00	0.00	0.52	0.52	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.33	0.33	0.00	0.00	0.00	0.30	0.30	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	12.9	12.9	0.0	0.0	0.0	7.9	7.9	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.9	12.9	0.0	0.0	0.0	7.9	7.9	0.0	0.0	0.0	0.0
HCM2k95th:	0	6	6	0	0	0	6	6	0	0	0	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 7th St/I St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.339
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	18.6
Optimal Cycle:	106	Level Of Service:	B

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	0 0 2 0 2	0 0 0 0 0	1 1 2 0 0

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	34	34	0	0	0	66	66	0

Volume Module: >> Count Date: 30 Sep 2004 << 4:45

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Base Vol:	0	0	0	0	368	496	0	0	0	191	1618	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	368	496	0	0	0	191	1618	0
Added Vol:	0	0	0	0	40	9	0	0	0	0	94	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	408	505	0	0	0	191	1712	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	408	505	0	0	0	191	1712	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	408	505	0	0	0	191	1712	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	408	505	0	0	0	191	1712	0

Saturation Flow Module:

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.86	0.67	1.00	1.00	1.00	0.82	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	3249	2558	0	0	0	1556	4668	0

Capacity Analysis Module:

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Vol/Sat:	0.00	0.00	0.00	0.00	0.13	0.20	0.00	0.00	0.00	0.12	0.37	0.00
Crit Moves:						****				****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.32	0.32	0.00	0.00	0.00	0.62	0.62	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.39	0.62	0.00	0.00	0.00	0.20	0.59	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	29.1	33.9	0.0	0.0	0.0	8.6	12.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	29.1	33.9	0.0	0.0	0.0	8.6	12.7	0.0
HCM2k95th:	0	0	0	0	10	14	0	0	0	6	19	0

Downtown Sacramento Traffic Study
Baseline Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #15 7th St/J St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.575
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	13.6
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	0 1 2 0 0	0 0 2 1 0	0 0 0 0 0

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	22	22	0	0	28	28	0	0	0

Volume Module: >> Count Date: 7 Dec 2005 << 4:45

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Base Vol:	0	0	0	83	471	0	0	1289	294	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	83	471	0	0	1289	294	0	0	0
Added Vol:	0	0	0	7	32	0	0	150	21	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	90	503	0	0	1439	315	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	90	503	0	0	1439	315	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	90	503	0	0	1439	315	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	90	503	0	0	1439	315	0	0	0

Saturation Flow Module:

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	0.82	1.00	1.00	0.80	0.80	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.46	2.54	0.00	0.00	2.46	0.54	0.00	0.00	0.00
Final Sat.:	0	0	0	709	3960	0	0	3727	816	0	0	0

Capacity Analysis Module:

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Vol/Sat:	0.00	0.00	0.00	0.13	0.13	0.00	0.00	0.39	0.39	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.50	0.50	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.32	0.32	0.00	0.00	0.77	0.77	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	12.3	12.3	0.0	0.0	14.0	14.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	12.3	12.3	0.0	0.0	14.0	14.0	0.0	0.0	0.0
HCM2k95th:	0	0	0	5	5	0	0	18	18	0	0	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 7th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.289
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.4
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	29	29	0	0	0	21	21	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			1 0 3 0 0		
Volume Module: >> Count Date: 7 Dec 2005 << 4:45												
Base Vol:	0	0	0	0	469	214	0	0	0	121	1306	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	469	214	0	0	0	121	1306	0
Added Vol:	0	0	0	0	43	11	0	0	0	37	92	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	512	225	0	0	0	158	1398	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	512	225	0	0	0	158	1398	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	512	225	0	0	0	158	1398	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	512	225	0	0	0	158	1398	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.78	0.78	1.00	1.00	1.00	0.90	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.08	0.92	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	3094	1360	0	0	0	1710	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.09	0.30	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.52	0.52	0.00	0.00	0.00	0.38	0.38	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.32	0.32	0.00	0.00	0.00	0.25	0.80	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	8.2	8.2	0.0	0.0	0.0	13.0	19.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	8.2	8.2	0.0	0.0	0.0	13.0	19.5	0.0
HCM2k95th:	0	0	0	0	6	6	0	0	0	5	17	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 8th St/I St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.527
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 18.4
Optimal Cycle: 106 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	34	34	0	0	0	0	0	0	0	0	66	66
Lanes:	1 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	359	472	0	0	0	0	0	0	0	0	1666	83
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	359	472	0	0	0	0	0	0	0	0	1666	83
Added Vol:	93	165	0	0	0	0	0	0	0	0	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	452	637	0	0	0	0	0	0	0	0	1667	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	452	637	0	0	0	0	0	0	0	0	1667	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	452	637	0	0	0	0	0	0	0	0	1667	83
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	452	637	0	0	0	0	0	0	0	0	1667	83
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	0.90
Lanes:	1.66	2.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.86	0.14
Final Sat.:	2871	4045	0	0	0	0	0	0	0	0	4906	244
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.34
Crit Moves:	****										****	
Green/Cycle:	0.32	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.62
Volume/Cap:	0.49	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.55
Delay/Veh:	29.2	29.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6	11.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.2	29.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6	11.6
HCM2k95th:	14	14	0	0	0	0	0	0	0	0	19	19

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 8th S/tJ St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.510
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 14.6
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	25	25	0	0	0	25	25	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module: >> Count Date: 7 Dec 2005 << 5												
Base Vol:	0	417	208	0	0	0	108	1297	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	417	208	0	0	0	108	1297	0	0	0	0
Added Vol:	0	243	338	0	0	0	15	143	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	660	546	0	0	0	123	1440	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	660	546	0	0	0	123	1440	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	660	546	0	0	0	123	1440	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	660	546	0	0	0	123	1440	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.76	0.76	1.00	1.00	1.00	0.82	0.82	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	0.00	0.00	0.00	1.00	3.00	0.00	0.00	0.00	0.00
Final Sat.:	0	2901	1450	0	0	0	1556	4668	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.38	0.00	0.00	0.00	0.08	0.31	0.00	0.00	0.00	0.00
Crit Moves:			****				****					
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.51	0.84	0.00	0.00	0.00	0.18	0.69	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	11.9	20.0	0.0	0.0	0.0	9.4	14.2	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	11.9	20.0	0.0	0.0	0.0	9.4	14.2	0.0	0.0	0.0	0.0
HCM2k95th:	0	9	20	0	0	0	3	13	0	0	0	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #19 8th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.456
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 16.3
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	29	29	0	0	0	0	0	0	0	0	21	21
Lanes:	1 0 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 1		
Volume Module: >> Count Date: 7 Dec 2005 << 4:45												
Base Vol:	158	335	0	0	0	0	0	0	0	0	1319	81
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	158	335	0	0	0	0	0	0	0	0	1319	81
Added Vol:	0	175	0	0	0	0	0	0	0	0	129	77
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	158	510	0	0	0	0	0	0	0	0	1448	158
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	158	510	0	0	0	0	0	0	0	0	1448	158
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	158	510	0	0	0	0	0	0	0	0	1448	158
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	158	510	0	0	0	0	0	0	0	0	1448	158
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81	0.81
Lanes:	1.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	1.00
Final Sat.:	1710	3249	0	0	0	0	0	0	0	0	4598	1533
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.10
Crit Moves:	****										****	
Green/Cycle:	0.52	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38
Volume/Cap:	0.18	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.27
Delay/Veh:	7.6	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.6	12.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.6	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.6	12.3
HCM2k95th:	4	6	0	0	0	0	0	0	0	0	18	5

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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                              Baseline Conditions
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-------------------------------------------------------------------------------
                       Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #20 9th St/I St
*******************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.426
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):       20.8
Optimal Cycle:      112              Level Of Service:                 C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   35    35    0    0     0   65   65     0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jan 2006 << 4:30
Base Vol:       0    0     0    0  385   330    0    0     0  223 1445     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  385   330    0    0     0  223 1445     0
Added Vol:      0    0     0    0   30     0    0    0     0   39    1     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0    0  415   330    0    0     0  262 1446     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  415   330    0    0     0  262 1446     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  415   330    0    0     0  262 1446     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  415   330    0    0     0  262 1446     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.76  0.76 1.00 1.00  1.00 0.90 0.82  1.00
Lanes:       0.00 0.00  0.00 0.00 2.00  1.00 0.00 0.00  0.00 1.00 3.00  0.00
Final Sat.:     0    0     0    0 2907  1453    0    0     0 1710 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.14  0.23 0.00 0.00  0.00 0.15 0.31  0.00
Crit Moves:                             ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.31  0.31 0.00 0.00  0.00 0.58 0.58  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.46  0.73 0.00 0.00  0.00 0.26 0.53  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 31.8  38.7  0.0  0.0   0.0 12.3 15.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 31.8  38.7  0.0  0.0   0.0 12.3 15.0   0.0
HCM2k95th:      0    0     0    0   11    19    0    0     0    9   18     0
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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                              Baseline Conditions
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-------------------------------------------------------------------------------
                       Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #21 9th St/J St
*******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.590
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       17.0
Optimal Cycle:       56              Level Of Service:                 B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   25   25     0    0   25    25    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jan 2006 << 4:45
Base Vol:       0    0     0   93  480     0    0 1159   129    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0   93  480     0    0 1159   129    0    0     0
Added Vol:      0    0     0    0   70     0    0  316   165    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0   93  550     0    0 1475   294    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0   93  550     0    0 1475   294    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0   93  550     0    0 1475   294    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0   93  550     0    0 1475   294    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.82 0.82  1.00 1.00 0.80  0.80 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.43 2.57  0.00 0.00 2.50  0.50 0.00 0.00  0.00
Final Sat.:     0    0     0  675 3993     0    0 3795   756    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.14 0.14  0.00 0.00 0.39  0.39 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.31 0.31  0.00 0.00 0.87  0.87 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 10.3 10.3   0.0  0.0 19.5  19.5  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 10.3 10.3   0.0  0.0 19.5  19.5  0.0  0.0   0.0
HCM2k95th:      0    0     0    5    5     0    0   18    18    0    0     0
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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                            Baseline Conditions
                               PM Peak Hour
-------------------------------------------------------------------------------

                       Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #22 9th St/L St
*******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.580
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       12.0
Optimal Cycle:        56              Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   21    21    0    0     0   29   29     0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 6 Dec 2005 << 4:45
Base Vol:       0    0     0    0  564   127    0    0     0  569 1123     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  564   127    0    0     0  569 1123     0
Added Vol:      0    0     0    0  115    32    0    0     0    0  173     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0    0  679   159    0    0     0  569 1296     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  679   159    0    0     0  569 1296     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  679   159    0    0     0  569 1296     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  679   159    0    0     0  569 1296     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.80  0.80 1.00 1.00  1.00 0.90 0.82  1.00
Lanes:       0.00 0.00  0.00 0.00 2.43  0.57 0.00 0.00  0.00 1.00 3.00  0.00
Final Sat.:     0    0     0    0 3677   861    0    0     0 1710 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.18  0.18 0.00 0.00  0.00 0.33 0.28  0.00
Crit Moves:                       ****                        ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.38  0.38 0.00 0.00  0.00 0.52 0.52  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.49  0.49 0.00 0.00  0.00 0.64 0.54  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 14.4  14.4  0.0  0.0   0.0 13.3  9.9   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 14.4  14.4  0.0  0.0   0.0 13.3  9.9   0.0
HCM2k95th:      0    0     0    0    9     9    0    0     0   13   10     0
*******************************************************************************
```



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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                            Baseline Conditions
                               PM Peak Hour
-------------------------------------------------------------------------------

                       Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #23 9th St/P St
*******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.626
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       11.4
Optimal Cycle:        32              Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   10     0    0    0     0    0   10     0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0 1015   240    0    0     0  200 1090     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0 1015   240    0    0     0  200 1090     0
Added Vol:      0    0     0    0  182    20    0    0     0   12   57     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0    0 1197   260    0    0     0  212 1147     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0 1197   260    0    0     0  212 1147     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0 1197   260    0    0     0  212 1147     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0 1197   260    0    0     0  212 1147     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.89  0.89 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 2.46  0.54 0.00 0.00  0.00 0.47 2.53  0.00
Final Sat.:     0    0     0    0 4146   901    0    0     0  809 4378     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.29  0.29 0.00 0.00  0.00 0.26 0.26  0.00
Crit Moves:                       ****                        ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.46  0.46 0.00 0.00  0.00 0.42 0.42  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.63  0.63 0.00 0.00  0.00 0.63 0.63  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 10.7  10.7  0.0  0.0   0.0 12.0 12.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 10.7  10.7  0.0  0.0   0.0 12.0 12.0   0.0
HCM2k95th:      0    0     0    0   13    13    0    0     0   11   11     0
*******************************************************************************
```

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------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                              Baseline Conditions
                                 PM Peak Hour
------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #24 9th St/Q St
********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.455
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      11.6
Optimal Cycle:       56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0    0    25   25    0     0   25   25     0    0    0
Lanes:        0  0  0  0  0    0  1  2  0  0    0  0  3  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0   159 1116    0     0  569  103     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0   159 1116    0     0  569  103     0    0    0
Added Vol:      0    0    0    29  165    0     0   58   90     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    0    0    0   188 1281    0     0  627  193     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0   188 1281    0     0  627  193     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0   188 1281    0     0  627  193     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0   188 1281    0     0  627  193     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.91 0.91 1.00  1.00 0.88 0.88  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  0.38 2.62 0.00  0.00 3.06 0.94  0.00 0.00 0.00
Final Sat.:     0    0    0   664 4523    0     0 5103 1571     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.28 0.28 0.00  0.00 0.12 0.12  0.00 0.00 0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00 0.00  0.45 0.45 0.00  0.00 0.45 0.45  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.63 0.63 0.00  0.00 0.28 0.28  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0  12.6 12.6  0.0   0.0  9.8  9.8   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  12.6 12.6  0.0   0.0  9.8  9.8   0.0  0.0  0.0
HCM2k95th:      0    0    0    12   12    0     0    5    5     0    0    0
********************************************************************************
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------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                              Baseline Conditions
                                 PM Peak Hour
------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #25 10th St/I St
********************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.592
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):      21.9
Optimal Cycle:      112              Level Of Service:                  C
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    35   35    0     0    0    0     0    0    0     0   65   65
Lanes:        0  1  2  0  0    0  0  0  0  0    0  0  0  0  0    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Dec 2005 << 4:30
Base Vol:     246  477    0     0    0    0     0    0    0     0 1552   77
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:  246  477    0     0    0    0     0    0    0     0 1552   77
Added Vol:      0   62    0     0    0    0     0    0    0     0   40    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:  246  539    0     0    0    0     0    0    0     0 1592   77
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:   246  539    0     0    0    0     0    0    0     0 1592   77
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:  246  539    0     0    0    0     0    0    0     0 1592   77
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:   246  539    0     0    0    0     0    0    0     0 1592   77
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  0.82 0.82 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 0.81 0.81
Lanes:       0.94 2.06 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 2.86 0.14
Final Sat.:  1463 3205    0     0    0    0     0    0    0     0 4422  214
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.17 0.17 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.36 0.36
Crit Moves:  ****                                                  ****
Green/Cycle: 0.31 0.31 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.58 0.58
Volume/Cap:  0.54 0.54 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.62 0.62
Delay/Veh:   33.2 33.2  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0 16.5 16.5
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:  33.2 33.2  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0 16.5 16.5
HCM2k95th:     14   14    0     0    0    0     0    0    0     0   22   22
********************************************************************************
```

Downtown Sacramento Traffic Study
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 10th St/J St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.642
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 21.0
Optimal Cycle: 62 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	26	26	0	0	0	24	24	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			0 1 2 0 0			0 0 0 0 0		

Volume Module: >> Count Date: 8 Dec 2005 << 5

Base Vol:	0	571	151	0	0	0	129	1163	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	571	151	0	0	0	129	1163	0	0	0	0
Added Vol:	0	62	0	0	0	0	0	316	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	633	151	0	0	0	129	1479	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	633	151	0	0	0	129	1479	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	633	151	0	0	0	129	1479	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	633	151	0	0	0	129	1479	0	0	0	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.80	0.80	1.00	1.00	1.00	0.82	0.82	1.00	1.00	1.00	1.00
Lanes:	0.00	2.42	0.58	0.00	0.00	0.00	0.24	2.76	0.00	0.00	0.00	0.00
Final Sat.:	0	3660	873	0	0	0	375	4294	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.17	0.17	0.00	0.00	0.00	0.34	0.34	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.42	0.42	0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.41	0.41	0.00	0.00	0.00	0.89	0.89	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	13.3	13.3	0.0	0.0	0.0	24.8	24.8	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.3	13.3	0.0	0.0	0.0	24.8	24.8	0.0	0.0	0.0	0.0
HCM2k95th:	0	8	8	0	0	0	18	18	0	0	0	0

Downtown Sacramento Traffic Study
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #27 10th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.698
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 14.8
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	21	21	0	0	0	0	0	0	0	0	29	29
Lanes:	0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		

Volume Module: >> Count Date: 30 Apr 2000 <<

Base Vol:	181	641	0	0	0	0	0	0	0	0	1490	313
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	181	641	0	0	0	0	0	0	0	0	1490	313
Added Vol:	21	62	0	0	0	0	0	0	0	0	152	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	202	703	0	0	0	0	0	0	0	0	1642	313
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	202	703	0	0	0	0	0	0	0	0	1642	313
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	202	703	0	0	0	0	0	0	0	0	1642	313
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	202	703	0	0	0	0	0	0	0	0	1642	313

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.80
Lanes:	0.67	2.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.52	0.48
Final Sat.:	1042	3626	0	0	0	0	0	0	0	0	3827	729

Capacity Analysis Module:

Vol/Sat:	0.19	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.43
Crit Moves:	****										****	
Green/Cycle:	0.38	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.52
Volume/Cap:	0.52	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.83
Delay/Veh:	14.7	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.9	14.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.7	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.9	14.9
HCM2k95th:	9	9	0	0	0	0	0	0	0	0	21	21

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-------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                           Baseline Conditions
                              PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #28 10th St/P St
*******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.438
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        8.9
Optimal Cycle:       26              Level Of Service:                  A
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   10    0    0    0    0    0    0    0    0   10    0
Lanes:       0  1  2  0  0    0  0  0  0  0    0  0  0  0  0    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:    155  472    0    0    0    0    0    0    0    0 1131  130
Growth Adj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse: 155  472    0    0    0    0    0    0    0    0 1131  130
Added Vol:    33   23    0    0    0    0    0    0    0    0   36    0
PasserByVol:   0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut: 188  495    0    0    0    0    0    0    0    0 1167  130
User Adj:   1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:  188  495    0    0    0    0    0    0    0    0 1167  130
Reduct Vol:    0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol: 188  495    0    0    0    0    0    0    0    0 1167  130
PCE Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:  188  495    0    0    0    0    0    0    0    0 1167  130
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment: 0.91 0.91 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 0.90 0.90
Lanes:      0.83 2.17 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 2.70 0.30
Final Sat.: 1428 3759    0    0    0    0    0    0    0    0 4597  512
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.13 0.13 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.25 0.25
Crit Moves:      ****                                                ****
Green/Cycle: 0.30 0.30 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.58 0.58
Volume/Cap: 0.44 0.44 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.44 0.44
Delay/Veh:  14.3 14.3  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0  6.0  6.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh: 14.3 14.3  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0  6.0  6.0
HCM2k95th:     6    6    0    0    0    0    0    0    0    0    7    7
*******************************************************************************
```



```
-------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                           Baseline Conditions
                              PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #29 10th St/Q St
*******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.303
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        8.8
Optimal Cycle:       26              Level Of Service:                  A
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   10    0    0    0    0    0   10    0    0    0    0
Lanes:       0  0  2  1  0    0  0  0  0  0    0  1  2  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0  619  125    0    0    0   40  437    0    0    0    0
Growth Adj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   0  619  125    0    0    0   40  437    0    0    0    0
Added Vol:     0   56    0    0    0    0    0   87    0    0    0    0
PasserByVol:   0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:   0  675  125    0    0    0   40  524    0    0    0    0
User Adj:   1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    0  675  125    0    0    0   40  524    0    0    0    0
Reduct Vol:    0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   0  675  125    0    0    0   40  524    0    0    0    0
PCE Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:    0  675  125    0    0    0   40  524    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment: 1.00 0.89 0.89  1.00 1.00 1.00  0.91 0.91 1.00  1.00 1.00 1.00
Lanes:      0.00 2.53 0.47  0.00 0.00 0.00  0.21 2.79 0.00  0.00 0.00 0.00
Final Sat.:    0 4276  792    0    0    0  368 4819    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.00 0.16 0.16  0.00 0.00 0.00  0.11 0.11 0.00  0.00 0.00 0.00
Crit Moves:      ****                            ****
Green/Cycle: 0.00 0.52 0.52  0.00 0.00 0.00  0.36 0.36 0.00  0.00 0.00 0.00
Volume/Cap: 0.00 0.30 0.30  0.00 0.00 0.00  0.30 0.30 0.00  0.00 0.00 0.00
Delay/Veh:   0.0  6.9  6.9   0.0  0.0  0.0  11.6 11.6  0.0   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:  0.0  6.9  6.9   0.0  0.0  0.0  11.6 11.6  0.0   0.0  0.0  0.0
HCM2k95th:     0    5    5    0    0    0    4    4    0    0    0    0
*******************************************************************************
```

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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                              Baseline Conditions
                                 PM Peak Hour
-------------------------------------------------------------------------------
                        Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #30 12th St/H St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.470
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       13.7
Optimal Cycle:        66              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0    0    27   27    0     0   33   33     0    0    0
Lanes:        0  0  0  0  0    0  1  2  0  0    0  0  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 23 Mar 2005 << 4:30
Base Vol:       0    0    0   231  897    0     0  969   27     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0   231  897    0     0  969   27     0    0    0
Added Vol:      0    0    0     0   87    0     0    0    0     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    0    0    0   231  984    0     0  969   27     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0   231  984    0     0  969   27     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0   231  984    0     0  969   27     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0   231  984    0     0  969   27     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.91 0.91 1.00  1.00 0.91 0.91  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  0.57 2.43 0.00  0.00 2.92 0.08  0.00 0.00 0.00
Final Sat.:     0    0    0   986 4201    0     0 5026  140     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.23 0.23 0.00  0.00 0.19 0.19  0.00 0.00 0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00 0.00  0.41 0.41 0.00  0.00 0.50 0.50  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.57 0.57 0.00  0.00 0.39 0.39  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0  16.2 16.2  0.0   0.0 10.7 10.7   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  16.2 16.2  0.0   0.0 10.7 10.7   0.0  0.0  0.0
HCM2k95th:      0    0    0    13   13    0     0    9    9     0    0    0
********************************************************************************
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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                              Baseline Conditions
                                 PM Peak Hour
-------------------------------------------------------------------------------
                        Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #31 12th St/I St
********************************************************************************
Cycle (sec):           0              Critical Vol./Cap. (X):        0.582
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        7.6
Optimal Cycle:        26              Level Of Service:                  A
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0    0     0    7    7     0    0    0     3    7    0
Lanes:        0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 8 Dec 2005 << 4:45
Base Vol:       0    0    0     0  774  268     0    0    0    66 1077    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0     0  774  268     0    0    0    66 1077    0
Added Vol:      0    0    0     0   48   39     0    0    0     0    1    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    0    0    0     0  822  307     0    0    0    66 1078    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0     0  822  307     0    0    0    66 1078    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0     0  822  307     0    0    0    66 1078    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0     0  822  307     0    0    0    66 1078    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  1.00 0.87 0.87  1.00 1.00 1.00  0.91 0.91 1.00
Lanes:       0.00 0.00 0.00  0.00 2.18 0.82  0.00 0.00 0.00  0.17 2.83 0.00
Final Sat.:     0    0    0     0 3622 1353     0    0    0   299 4888    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.00 0.23 0.23  0.00 0.00 0.00  0.22 0.22 0.00
Crit Moves:                       ****                             ****
Green/Cycle: 0.00 0.00 0.00  0.00 0.39 0.39  0.00 0.00 0.00  0.38 0.38 0.00
Volume/Cap:  0.00 0.00 0.00  0.00 0.58 0.58  0.00 0.00 0.00  0.58 0.58 0.00
Delay/Veh:    0.0  0.0  0.0   0.0  7.5  7.5   0.0  0.0  0.0   7.7  7.7  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0   0.0  7.5  7.5   0.0  0.0  0.0   7.7  7.7  0.0
HCM2k95th:      0    0    0     0    7    7     0    0    0     7    7    0
********************************************************************************
```

Downtown Sacramento Traffic Study
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #32 12th St/J St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.610
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 21.2
Optimal Cycle: 56 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	31	31	31	31	0	19	19	0	0	0
Lanes:	0 0 0 0 1			1 0 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module: >> Count Date: 8 Dec 2005 << 5												
Base Vol:	0	0	243	318	516	0	0	1203	131	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	243	318	516	0	0	1203	131	0	0	0
Added Vol:	0	0	0	7	40	0	0	316	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	243	325	556	0	0	1519	131	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	243	325	556	0	0	1519	131	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	243	325	556	0	0	1519	131	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	243	325	556	0	0	1519	131	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.77	0.95	1.00	1.00	0.90	0.90	1.00	1.00	1.00
Lanes:	0.00	0.00	1.00	1.00	2.00	0.00	0.00	2.76	0.24	0.00	0.00	0.00
Final Sat.:	0	0	1644	1461	3610	0	0	4718	407	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.15	0.22	0.15	0.00	0.00	0.32	0.32	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.55	0.55	0.55	0.00	0.00	0.34	0.34	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.27	0.40	0.28	0.00	0.00	0.95	0.95	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	7.3	8.7	6.9	0.0	0.0	30.5	30.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	7.3	8.7	6.9	0.0	0.0	30.5	30.5	0.0	0.0	0.0
HCM2k95th:	0	0	5	9	6	0	0	25	25	0	0	0

Downtown Sacramento Traffic Study
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #33 12th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.587
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 14.6
Optimal Cycle: 59 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	25	25	0	0	0	25	25	25
Lanes:	1 0 0 0 0			0 0 0 1 1			0 0 0 0 0			0 1 1 1 0		
Volume Module: >> Count Date: 6 Dec 2005 << 4:45												
Base Vol:	5	0	0	0	0	712	0	0	0	1	1082	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	0	0	0	0	712	0	0	0	1	1082	136
Added Vol:	0	0	0	0	0	40	0	0	0	0	111	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	0	0	0	752	0	0	0	1	1193	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	0	0	0	0	752	0	0	0	1	1193	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	0	0	0	0	752	0	0	0	1	1193	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	0	0	0	0	752	0	0	0	1	1193	136
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	1.00	1.00	1.00	1.00	0.85	1.00	1.00	1.00	0.88	0.88	0.88
Lanes:	1.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.01	2.69	0.30
Final Sat.:	1758	0	0	0	0	3230	0	0	0	4	4514	515
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.26	0.26	0.26
Crit Moves:						****				****		
Green/Cycle:	0.42	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.42	0.42	0.42
Volume/Cap:	0.01	0.00	0.00	0.00	0.00	0.55	0.00	0.00	0.00	0.62	0.62	0.62
Delay/Veh:	9.8	0.0	0.0	0.0	0.0	14.4	0.0	0.0	0.0	14.7	14.7	14.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.8	0.0	0.0	0.0	0.0	14.4	0.0	0.0	0.0	14.7	14.7	14.7
HCM2k95th:	0	0	0	0	0	10	0	0	0	12	12	12

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------------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                          Baseline Conditions
                             PM Peak Hour
------------------------------------------------------------------------------
                   Level Of Service Computation Report
         2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #34 15th St/H St
******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.467
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        11.9
Optimal Cycle:        56               Level Of Service:                 B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   25   25     0    0   25    25    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Dec 2005 << 4:30
Base Vol:       0    0     0   69  585     0    0 1151   310    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0   69  585     0    0 1151   310    0    0     0
Added Vol:      0    0     0    0    0     0    0    0     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0   69  585     0    0 1151   310    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0   69  585     0    0 1151   310    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0   69  585     0    0 1151   310    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0   69  585     0    0 1151   310    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.88  0.88 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.32 2.68  0.00 0.00 2.36  0.64 0.00 0.00  0.00
Final Sat.:     0    0     0  547 4640     0    0 3956  1065    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.13 0.13  0.00 0.00 0.29  0.29 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.28 0.28  0.00 0.00 0.65  0.65 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0  9.9  9.9   0.0  0.0 12.8  12.8  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  9.9  9.9   0.0  0.0 12.8  12.8  0.0  0.0   0.0
HCM2k95th:      0    0     0    5    5     0    0   15    15    0    0     0
******************************************************************************
```



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------------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                          Baseline Conditions
                             PM Peak Hour
------------------------------------------------------------------------------
                   Level Of Service Computation Report
         2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #35 15th St/J St
******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.760
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        49.2
Optimal Cycle:        56               Level Of Service:                 D
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   25   25     0    0   25    25    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Dec 2005 << 4:45
Base Vol:       0    0     0  229  764     0    0 1605   507    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  229  764     0    0 1605   507    0    0     0
Added Vol:      0    0     0    0    0     0    0  227    96    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0  229  764     0    0 1832   603    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  229  764     0    0 1832   603    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  229  764     0    0 1832   603    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  229  764     0    0 1832   603    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.88  0.88 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.69 2.31  0.00 0.00 2.26  0.74 0.00 0.00  0.00
Final Sat.:     0    0     0 1196 3991     0    0 3758  1237    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.19 0.19  0.00 0.00 0.49  0.49 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.43 0.43  0.00 0.00 1.09  1.09 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 10.7 10.7   0.0  0.0 64.9  64.9  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 10.7 10.7   0.0  0.0 64.9  64.9  0.0  0.0   0.0
HCM2k95th:      0    0     0    8    8     0    0   45    45    0    0     0
******************************************************************************
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Downtown Sacramento Traffic Study
Baseline Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #36 15th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.605
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.7
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	30	30	0	0	0	20	20	0
Lanes:	0 0	0 0	0	0 0	2 1	0	0 0	0 0	0	0 1	2 0	0
Volume Module: >> Count Date: 14 Dec 2005 << 4:45												
Base Vol:	0	0	0	0	1285	293	0	0	0	155	809	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	1285	293	0	0	0	155	809	0
Added Vol:	0	0	0	0	101	7	0	0	0	0	104	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	1386	300	0	0	0	155	913	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	1386	300	0	0	0	155	913	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1386	300	0	0	0	155	913	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	1386	300	0	0	0	155	913	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.89	0.89	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	2.47	0.53	0.00	0.00	0.00	0.44	2.56	0.00
Final Sat.:	0	0	0	0	4149	898	0	0	0	753	4434	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.33	0.33	0.00	0.00	0.00	0.21	0.21	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.54	0.54	0.00	0.00	0.00	0.36	0.36	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.62	0.62	0.00	0.00	0.00	0.58	0.58	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	9.5	9.5	0.0	0.0	0.0	15.0	15.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	9.5	9.5	0.0	0.0	0.0	15.0	15.0	0.0
HCM2k95th:	0	0	0	0	15	15	0	0	0	10	10	0

Downtown Sacramento Traffic Study
Baseline Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #37 15th St/P St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.538
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.3
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	28	28	0	0	0	22	22	0
Lanes:	0 0	0 0	0	0 0	2 1	0	0 0	0 0	0	0 1	2 0	0
Volume Module:												
Base Vol:	0	0	0	0	1188	224	0	0	0	163	746	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	1188	224	0	0	0	163	746	0
Added Vol:	0	0	0	0	99	2	0	0	0	0	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	1287	226	0	0	0	163	780	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	1287	226	0	0	0	163	780	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1287	226	0	0	0	163	780	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	1287	226	0	0	0	163	780	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.89	0.89	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	2.55	0.45	0.00	0.00	0.00	0.52	2.48	0.00
Final Sat.:	0	0	0	0	4315	758	0	0	0	897	4290	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.30	0.30	0.00	0.00	0.00	0.18	0.18	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.50	0.50	0.00	0.00	0.00	0.39	0.39	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.60	0.60	0.00	0.00	0.00	0.46	0.46	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	10.4	10.4	0.0	0.0	0.0	12.8	12.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	10.4	10.4	0.0	0.0	0.0	12.8	12.8	0.0
HCM2k95th:	0	0	0	0	13	13	0	0	0	8	8	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

```
*****************************************************************************
Intersection #38 15th St/Q St
*****************************************************************************
Cycle (sec):        50              Critical Vol./Cap. (X):        0.536
Loss Time (sec):     6 (Y+R =  4 sec) Average Delay (sec/veh):      11.4
Optimal Cycle:      56              Level Of Service:                 B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   27   27     0    0   23    23    0    0     0
Lanes:       0  0  0  0  0    0  1  2  0  0    0  0  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  139 1203     0    0  802   132    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  139 1203     0    0  802   132    0    0     0
Added Vol:      0    0     0    5   94     0    0   87     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0  144 1297     0    0  889   132    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  144 1297     0    0  889   132    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  144 1297     0    0  889   132    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  144 1297     0    0  889   132    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.89  0.89 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.30 2.70  0.00 0.00 2.61  0.39 0.00 0.00  0.00
Final Sat.:     0    0     0  518 4669     0    0 4431   658    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.28 0.28  0.00 0.00 0.20  0.20 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.48 0.48  0.00 0.00 0.41  0.41 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.58 0.58  0.00 0.00 0.49  0.49 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 10.7 10.7   0.0  0.0 12.3  12.3  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 10.7 10.7   0.0  0.0 12.3  12.3  0.0  0.0   0.0
HCM2k95th:      0    0     0   11   11     0    0    8     8    0    0     0
*****************************************************************************
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

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*****************************************************************************
Intersection #39 15th St/W St
*****************************************************************************
Cycle (sec):        70              Critical Vol./Cap. (X):        0.519
Loss Time (sec):     6 (Y+R =  4 sec) Average Delay (sec/veh):      14.5
Optimal Cycle:      76              Level Of Service:                 B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   38    38    0    0     0   32   32     0
Lanes:       0  0  0  0  0    0  0  3  1  0    0  0  0  0  0    1  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Dec 2005 << 4:45
Base Vol:       0    0     0    0 1604   148    0    0     0  361 1074     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0 1604   148    0    0     0  361 1074     0
Added Vol:      0    0     0    0   87     7    0    0     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0    0 1691   155    0    0     0  361 1074     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0 1691   155    0    0     0  361 1074     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0 1691   155    0    0     0  361 1074     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0 1691   155    0    0     0  361 1074     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.90  0.90 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 3.66  0.34 0.00 0.00  0.00 1.01 2.99  0.00
Final Sat.:     0    0     0    0 6253   573    0    0     0 1740 5176     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.27  0.27 0.00 0.00  0.00 0.21 0.21  0.00
Crit Moves:                       ****                       ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.50  0.50 0.00 0.00  0.00 0.42 0.42  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.54  0.54 0.00 0.00  0.00 0.49 0.49  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 13.2  13.2  0.0  0.0   0.0 16.2 16.2   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 13.2  13.2  0.0  0.0   0.0 16.2 16.2   0.0
HCM2k95th:      0    0     0    0   15    15    0    0     0   12   12     0
*****************************************************************************
```

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------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                            Baseline Conditions
                               PM Peak Hour
------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #40 15th St/X St
******************************************************************************
Cycle (sec):         70              Critical Vol./Cap. (X):         0.661
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):       32.1
Optimal Cycle:       82              Level Of Service:                   C
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase       Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   17    17    24   24    0     0   32    32     0    0     0
Lanes:        0  0  2  1  0    1  1  2  0  0    0  0  1  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Dec 2005 << 4:45
Base Vol:       0  535    67   766 1001    0     0  459   217     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  535    67   766 1001    0     0  459   217     0    0     0
Added Vol:      0    0     0    87    0    0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0    0     0    0     0     0    0     0
Initial Fut:    0  535    67   853 1001    0     0  459   217     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  535    67   853 1001    0     0  459   217     0    0     0
Reduct Vol:     0    0     0     0    0    0     0    0     0     0    0     0
Reduced Vol:    0  535    67   853 1001    0     0  459   217     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0  535    67   853 1001    0     0  459   217     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.89  0.89  0.89 0.89  1.00  1.00 0.90  0.90  1.00 1.00  1.00
Lanes:       0.00 2.67  0.33  1.84 2.16  0.00  0.00 1.36  0.64  0.00 0.00  0.00
Final Sat.:     0 4531   567  3112 3652     0     0 2334  1103     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.12  0.12  0.27 0.27  0.00  0.00 0.20  0.20  0.00 0.00  0.00
Crit Moves:       ****             ****              ****
Green/Cycle: 0.00 0.21  0.21  0.29 0.29  0.00  0.00 0.39  0.39  0.00 0.00  0.00
Volume/Cap:  0.00 0.57  0.57  0.94 0.94  0.00  0.00 0.50  0.50  0.00 0.00  0.00
Delay/Veh:    0.0 30.0  30.0  37.4 37.4   0.0   0.0 19.3  19.3   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 30.0  30.0  37.4 37.4   0.0   0.0 19.3  19.3   0.0  0.0   0.0
HCM2k95th:      0   10    10    24   24     0     0   13    13     0    0     0
******************************************************************************
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------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
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                               PM Peak Hour
------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #41 16th St/H St
******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):         0.758
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       21.6
Optimal Cycle:       56              Level Of Service:                   C
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   25    25     0    0     0    19   25     0     0    0     6
Lanes:        0  0  2  1  0    0  0  0  0  0    2  1  0  0  0    0  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 6 Dec 2005 << 4:45
Base Vol:       0 2028    20     0    0     0   794  413     0     0    0    46
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0 2028    20     0    0     0   794  413     0     0    0    46
Added Vol:      0  163     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0 2191    20     0    0     0   794  413     0     0    0    46
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0 2191    20     0    0     0   794  413     0     0    0    46
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 2191    20     0    0     0   794  413     0     0    0    46
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0 2191    20     0    0     0   794  413     0     0    0    46
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.91  0.91  1.00 1.00  1.00  0.94 0.97  1.00  1.00 1.00  0.87
Lanes:       0.00 2.97  0.03  0.00 0.00  0.00  2.00 1.00  0.00  0.00 0.00  1.00
Final Sat.:     0 5135    47     0    0     0  3568 1839     0     0    0  1644
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.43  0.43  0.00 0.00  0.00  0.22 0.22  0.00  0.00 0.00  0.03
Crit Moves:       ****                         ****                          ****
Green/Cycle: 0.00 0.45  0.45  0.00 0.00  0.00  0.34 0.45  0.00  0.00 0.00  0.11
Volume/Cap:  0.00 0.96  0.96  0.00 0.00  0.00  0.66 0.50  0.00  0.00 0.00  0.26
Delay/Veh:    0.0 25.3  25.3   0.0  0.0   0.0  16.6 11.2   0.0   0.0  0.0  23.8
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 25.3  25.3   0.0  0.0   0.0  16.6 11.2   0.0   0.0  0.0  23.8
HCM2k95th:      0   26    26     0    0     0    11   10     0     0    0     2
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-------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                               Baseline Conditions
                                  PM Peak Hour
-------------------------------------------------------------------------------
                        Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #42 16th St/I St
*******************************************************************************
Cycle (sec):         50             Critical Vol./Cap. (X):        0.389
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       11.7
Optimal Cycle:       56             Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:   30   30    0    0    0    0    0    0    0    0   20   20
Lanes:       1  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 6 Dec 2005 << 4:45
Base Vol:     179 1647    0    0    0    0    0    0    0    0  708  398
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  179 1647    0    0    0    0    0    0    0    0  708  398
Added Vol:      1  163    0    0    0    0    0    0    0    0    0    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:  180 1810    0    0    0    0    0    0    0    0  708  398
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   180 1810    0    0    0    0    0    0    0    0  708  398
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  180 1810    0    0    0    0    0    0    0    0  708  398
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   180 1810    0    0    0    0    0    0    0    0  708  398
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.91 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.86 0.86
Lanes:       1.00 3.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.00 1.00
Final Sat.:  1729 5187    0    0    0    0    0    0    0    0 3271 1636
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.10 0.35 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.22 0.24
Crit Moves:  ****                                                        ****
Green/Cycle: 0.54 0.54 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.36 0.36
Volume/Cap:  0.19 0.65 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.61 0.68
Delay/Veh:    6.7  9.8  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 15.4 16.5
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   6.7  9.8  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 15.4 16.5
HCM2k95th:      3   14    0    0    0    0    0    0    0    0   12   14
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-------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
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-------------------------------------------------------------------------------
                        Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #43 16th St/J St
*******************************************************************************
Cycle (sec):         50             Critical Vol./Cap. (X):        0.694
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       13.5
Optimal Cycle:       56             Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   25   25    0    0    0   25   25    0    0    0    0
Lanes:       0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 30 Sep 2004 << 4:15
Base Vol:       0 1627  136    0    0    0  379 1287    0    0    0    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0 1627  136    0    0    0  379 1287    0    0    0    0
Added Vol:      0    8    4    0    0    0  156   71    0    0    0    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:    0 1635  140    0    0    0  535 1358    0    0    0    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0 1635  140    0    0    0  535 1358    0    0    0    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0 1635  140    0    0    0  535 1358    0    0    0    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0 1635  140    0    0    0  535 1358    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 0.90 0.90 1.00 1.00 1.00 0.91 0.91 1.00 1.00 1.00 1.00
Lanes:       0.00 2.76 0.24 0.00 0.00 0.00 1.13 2.87 0.00 0.00 0.00 0.00
Final Sat.:     0 4721  404    0    0    0 1955 4961    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.35 0.35 0.00 0.00 0.00 0.27 0.27 0.00 0.00 0.00 0.00
Crit Moves:       ****                      ****
Green/Cycle: 0.00 0.45 0.45 0.00 0.00 0.00 0.45 0.45 0.00 0.00 0.00 0.00
Volume/Cap:  0.00 0.78 0.78 0.00 0.00 0.00 0.61 0.61 0.00 0.00 0.00 0.00
Delay/Veh:    0.0 14.9 14.9  0.0  0.0  0.0 12.2 12.2  0.0  0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0 14.9 14.9  0.0  0.0  0.0 12.2 12.2  0.0  0.0  0.0  0.0
HCM2k95th:      0   20   20    0    0    0   11   11    0    0    0    0
*******************************************************************************
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Downtown Sacramento Traffic Study
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Intersection #44 16th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.378
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.9
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	25	25	0	0	0	0	0	0	0	0	25	25
Lanes:	1 0 3 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module: >> Count Date: 20 Jan 2005 << 4:45												
Base Vol:	260	1515	0	0	0	0	0	0	0	0	645	195
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	260	1515	0	0	0	0	0	0	0	0	645	195
Added Vol:	36	20	0	0	0	0	0	0	0	0	69	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	296	1535	0	0	0	0	0	0	0	0	714	199
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	296	1535	0	0	0	0	0	0	0	0	714	199
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	296	1535	0	0	0	0	0	0	0	0	714	199
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	296	1535	0	0	0	0	0	0	0	0	714	199
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.88	0.88
Lanes:	1.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.35	0.65
Final Sat.:	1900	5187	0	0	0	0	0	0	0	0	3923	1093
Capacity Analysis Module:												
Vol/Sat:	0.16	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18
Crit Moves:	****										****	
Green/Cycle:	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Volume/Cap:	0.35	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.41
Delay/Veh:	10.4	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	10.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.4	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	10.6
HCM2k95th:	7	15	0	0	0	0	0	0	0	0	8	8

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Intersection #45 16th St/P St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.490
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.9
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	29	29	0	0	0	0	0	0	0	0	21	21
Lanes:	0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	125	1105	0	0	0	0	0	0	0	0	770	159
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	125	1105	0	0	0	0	0	0	0	0	770	159
Added Vol:	0	42	0	0	0	0	0	0	0	0	34	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	125	1147	0	0	0	0	0	0	0	0	804	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	125	1147	0	0	0	0	0	0	0	0	804	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	1147	0	0	0	0	0	0	0	0	804	169
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	125	1147	0	0	0	0	0	0	0	0	804	169
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89
Lanes:	0.29	2.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.48	0.52
Final Sat.:	510	4677	0	0	0	0	0	0	0	0	4175	878
Capacity Analysis Module:												
Vol/Sat:	0.25	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.19
Crit Moves:	****										****	
Green/Cycle:	0.52	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38
Volume/Cap:	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.51
Delay/Veh:	8.8	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8	13.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.8	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8	13.8
HCM2k95th:	9	9	0	0	0	0	0	0	0	0	10	10

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------------------------------------------------------------------------------
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------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #46 16th St/Q St
******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.507
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       10.2
Optimal Cycle:       26              Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   10    0    0    0    0    0   10    0    0    0    0
Lanes:        0  0  2  1  0   0  0  0  0  0   1  1  1  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1028   63    0    0    0  204  726    0    0    0    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0 1028   63    0    0    0  204  726    0    0    0    0
Added Vol:      0   41    0    0    0    0    1   90    0    0    0    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:    0 1069   63    0    0    0  205  816    0    0    0    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0 1069   63    0    0    0  205  816    0    0    0    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0 1069   63    0    0    0  205  816    0    0    0    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0 1069   63    0    0    0  205  816    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 0.90 0.90 1.00 1.00 1.00 0.95 0.95 1.00 1.00 1.00 1.00
Lanes:       0.00 2.83 0.17 0.00 0.00 0.00 1.00 2.00 0.00 0.00 0.00 0.00
Final Sat.:     0 4859  286    0    0    0 1805 3610    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.22 0.22 0.00 0.00 0.00 0.11 0.23 0.00 0.00 0.00 0.00
Crit Moves:       ****                           ****
Green/Cycle: 0.00 0.43 0.43 0.00 0.00 0.00 0.45 0.45 0.00 0.00 0.00 0.00
Volume/Cap:  0.00 0.51 0.51 0.00 0.00 0.00 0.25 0.51 0.00 0.00 0.00 0.00
Delay/Veh:    0.0 10.5 10.5  0.0  0.0  0.0  8.7 10.1  0.0  0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0 10.5 10.5  0.0  0.0  0.0  8.7 10.1  0.0  0.0  0.0  0.0
HCM2k95th:      0    9    9    0    0    0    4    9    0    0    0    0
******************************************************************************
```



```
------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                            Baseline Conditions
                               PM Peak Hour
------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #47 16th St/W St
******************************************************************************
Cycle (sec):         70              Critical Vol./Cap. (X):        0.458
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):       24.1
Optimal Cycle:       79              Level Of Service:                  C
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:    31   31    0    0    0    0    0   23   23    0   16   16
Lanes:        1  1  2  0  0   0  0  0  0  0   0  0  2  1  0   0  0  1  1  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 14 Dec 2005 << 5
Base Vol:     151  644    0    0    0    0    0  786  105    0  287  380
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  151  644    0    0    0    0    0  786  105    0  287  380
Added Vol:      0    0    0    0    0    0    0    0    0    0    0   41
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:  151  644    0    0    0    0    0  786  105    0  287  421
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   151  644    0    0    0    0    0  786  105    0  287  421
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  151  644    0    0    0    0    0  786  105    0  287  421
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   151  644    0    0    0    0    0  786  105    0  287  421
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.91 0.91 1.00 1.00 1.00 1.00 1.00 0.89 0.89 1.00 0.87 0.87
Lanes:       1.00 3.00 0.00 0.00 0.00 0.00 0.00 2.65 0.35 0.00 1.22 1.78
Final Sat.:  1729 5187    0    0    0    0    0 4493  600    0 2000 2933
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.09 0.12 0.00 0.00 0.00 0.00 0.00 0.17 0.17 0.00 0.14 0.14
Crit Moves:  ****                                ****                ****
Green/Cycle: 0.39 0.39 0.00 0.00 0.00 0.00 0.00 0.29 0.29 0.00 0.20 0.20
Volume/Cap:  0.22 0.32 0.00 0.00 0.00 0.00 0.00 0.60 0.60 0.00 0.71 0.71
Delay/Veh:   16.0 16.7  0.0  0.0  0.0  0.0  0.0 24.8 24.8  0.0 31.7 31.7
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  16.0 16.7  0.0  0.0  0.0  0.0  0.0 24.8 24.8  0.0 31.7 31.7
HCM2k95th:      5    7    0    0    0    0    0   13   13    0   13   13
******************************************************************************
```

Downtown Sacramento Traffic Study
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #48 16th St/X St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.478
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	16.3
Optimal Cycle:	76	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	35	35	0	0	0	35	35	0	0	0	0
Lanes:	0 0 3 1 0			0 0 0 0 0			1 0 2 0 1			0 0 0 0 0		
Volume Module: >> Count Date: 14 Dec 2005 << 5												
Base Vol:	0	656	66	0	0	0	540	1066	265	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	656	66	0	0	0	540	1066	265	0	0	0
Added Vol:	0	0	0	0	0	0	0	87	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	656	66	0	0	0	540	1153	265	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	656	66	0	0	0	540	1153	265	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	656	66	0	0	0	540	1153	265	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	656	66	0	0	0	540	1153	265	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	1.00	1.00	1.00	0.85	0.95	0.85	1.00	1.00	1.00
Lanes:	0.00	3.63	0.37	0.00	0.00	0.00	1.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	6196	623	0	0	0	1615	3610	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.11	0.00	0.00	0.00	0.33	0.32	0.16	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.46	0.46	0.00	0.00	0.00	0.46	0.46	0.46	0.00	0.00	0.00
Volume/Cap:	0.00	0.23	0.23	0.00	0.00	0.00	0.73	0.69	0.36	0.00	0.00	0.00
Delay/Veh:	0.0	12.4	12.4	0.0	0.0	0.0	20.2	17.5	13.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.4	12.4	0.0	0.0	0.0	20.2	17.5	13.5	0.0	0.0	0.0
HCM2k95th:	0	5	5	0	0	0	22	20	8	0	0	0

Downtown Sacramento Traffic Study
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #49 29th St/J St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.596
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	22.8
Optimal Cycle:	79	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	18	18	0	18	18	0	0	34	34	0	0	0
Lanes:	0 1 2 0 0			0 1 1 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module: >> Count Date: 7 Jun 2005 << 5												
Base Vol:	55	303	0	217	274	0	0	1089	349	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	55	303	0	217	274	0	0	1089	349	0	0	0
Added Vol:	0	9	0	0	59	0	0	70	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	55	312	0	217	333	0	0	1159	349	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	55	312	0	217	333	0	0	1159	349	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	312	0	217	333	0	0	1159	349	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	55	312	0	217	333	0	0	1159	349	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.90	1.00	0.93	0.93	1.00	1.00	0.88	0.88	1.00	1.00	1.00
Lanes:	0.45	2.55	0.00	0.79	1.21	0.00	0.00	2.31	0.69	0.00	0.00	0.00
Final Sat.:	772	4379	0	1397	2144	0	0	3847	1158	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.00	0.16	0.16	0.00	0.00	0.30	0.30	0.00	0.00	0.00
Crit Moves:	****				****			****				
Green/Cycle:	0.23	0.23	0.00	0.23	0.23	0.00	0.00	0.43	0.43	0.00	0.00	0.00
Volume/Cap:	0.31	0.31	0.00	0.68	0.68	0.00	0.00	0.70	0.70	0.00	0.00	0.00
Delay/Veh:	25.5	25.5	0.0	30.3	30.3	0.0	0.0	19.4	19.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.5	25.5	0.0	30.3	30.3	0.0	0.0	19.4	19.4	0.0	0.0	0.0
HCM2k95th:	5	5	0	14	14	0	0	20	20	0	0	0

```
-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                              Baseline Conditions
                                 PM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #50 30th St/J St
*******************************************************************************
Cycle (sec):         70              Critical Vol./Cap. (X):        0.504
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       14.8
Optimal Cycle:       76              Level Of Service:                 B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   31    31    0    0     0   39   39     0    0    0     0
Lanes:       0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 7 Jun 2005 << 5
Base Vol:       0  927   182    0    0     0  383  978     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0  927   182    0    0     0  383  978     0    0    0     0
Added Vol:      0  128    61    0    0     0    0   70     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0 1055   243    0    0     0  383 1048     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0 1055   243    0    0     0  383 1048     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0 1055   243    0    0     0  383 1048     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0 1055   243    0    0     0  383 1048     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.88  0.88 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.44  0.56 0.00 0.00  0.00 1.07 2.93  0.00 0.00 0.00  0.00
Final Sat.:     0 4098   944    0    0     0 1851 5065     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.26  0.26 0.00 0.00  0.00 0.21 0.21  0.00 0.00 0.00  0.00
Crit Moves:       ****                        ****
Green/Cycle: 0.00 0.41  0.41 0.00 0.00  0.00 0.51 0.51  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.63  0.63 0.00 0.00  0.00 0.40 0.40  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 18.6  18.6  0.0  0.0   0.0 11.4 11.4   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 18.6  18.6  0.0  0.0   0.0 11.4 11.4   0.0  0.0  0.0   0.0
HCM2k95th:      0   17    17    0    0     0   10   10     0    0    0     0
*******************************************************************************
```

Downtown Sacramento Traffic Study
2013 Cumulative Conditions
AM Peak Hour

Scenario Report

Scenario:	2013 AM Project
Command:	2013 AM PROJ
Volume:	2013AM NO Project
Geometry:	Cumulative AM
Impact Fee:	Default Impact Fee
Trip Generation:	AM Add Projects
Trip Distribution:	Project
Paths:	Project
Routes:	Default Routes
Configuration:	Default Configuration

```
------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                AM Peak Hour
------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #1 3rd St/J St
******************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        1.111
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):      104.5
Optimal Cycle:      109              Level Of Service:                  F
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:          Permitted        Permitted       Split Phase      Split Phase
Rights:            Include          Include          Include          Include
Min. Green:     0    0    15    15   15     0    35   35    35    50   50    50
Lanes:        0  0  0  0  2    2  0  1  0  0    0  1  2  1  0    0  1  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    99   118  200     0     4 1747   635    11 1698   449
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0    99   118  200     0     4 1747   635    11 1698   449
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0    99   118  200     0     4 1747   635    11 1698   449
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0    99   118  200     0     4 1747   635    11 1698   449
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0    99   118  200     0     4 1747   635    11 1698   449
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  0.67  0.55 0.90  1.00  0.79 0.79  0.79  0.79 0.79  0.79
Lanes:       0.00 0.00  2.00  2.00 1.00  0.00  0.01 2.99  1.00  0.02 2.36  0.62
Final Sat.:     0    0  2558  2093 1710     0    10 4471  1494    23 3559   941
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.04  0.06 0.12  0.00  0.39 0.39  0.43  0.48 0.48  0.48
Crit Moves:                        ****                    ****  ****
Green/Cycle: 0.00 0.00  0.14  0.14 0.14  0.00  0.32 0.32  0.32  0.46 0.46  0.46
Volume/Cap:  0.00 0.00  0.28  0.41 0.85  0.00  1.22 1.22  1.32  1.04 1.04  1.04
Delay/Veh:    0.0  0.0  44.2  47.2 75.9   0.0 139.5  139 186.7  60.6 60.6  60.6
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0  44.2  47.2 75.9   0.0 139.5  139 186.7  60.6 60.6  60.6
HCM2k95th:      0    0     4     7   16     0    56   56    67    53   53    53
******************************************************************************
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------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                AM Peak Hour
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #1 3rd St/J St
******************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        1.194
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):      139.2
Optimal Cycle:      109              Level Of Service:                  F
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:          Permitted        Permitted       Split Phase      Split Phase
Rights:            Include          Include          Include          Include
Min. Green:     0    0    15    15   15     0    35   35    35    50   50    50
Lanes:        0  0  0  0  2    2  0  1  0  0    0  1  2  1  0    0  1  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    99   118  200     0     4 1747   635    11 1698   449
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0    99   118  200     0     4 1747   635    11 1698   449
Added Vol:      0    0     0     0    7     0     0  157    93     0   41     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0    99   118  207     0     4 1904   728    11 1739   449
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0    99   118  207     0     4 1904   728    11 1739   449
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0    99   118  207     0     4 1904   728    11 1739   449
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0    99   118  207     0     4 1904   728    11 1739   449
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  0.67  0.55 0.90  1.00  0.79 0.79  0.79  0.79 0.79  0.79
Lanes:       0.00 0.00  2.00  2.00 1.00  0.00  0.01 2.99  1.00  0.02 2.37  0.61
Final Sat.:     0    0  2558  2093 1710     0     9 4468  1492    23 3577   924
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.04  0.06 0.12  0.00  0.43 0.43  0.49  0.49 0.49  0.49
Crit Moves:                        ****                    ****              ****
Green/Cycle: 0.00 0.00  0.14  0.14 0.14  0.00  0.32 0.32  0.32  0.46 0.46  0.46
Volume/Cap:  0.00 0.00  0.28  0.41 0.88  0.00  1.33 1.33  1.52  1.06 1.06  1.06
Delay/Veh:    0.0  0.0  44.2  47.2 80.4   0.0 187.9  188 273.7  67.3 67.3  67.3
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0  44.2  47.2 80.4   0.0 187.9  188 273.7  67.3 67.3  67.3
HCM2k95th:      0    0     4     7   17     0    68   68    89    56   56    56
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 3rd St/L St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.472
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 19.7
Optimal Cycle: 79 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	44	0	0	34	34	0	0	0	26	26	26
Lanes:	1 0	2	0 0	0 0	2	1 0	0 0	0	0 0	1 1	1	0 1
Volume Module:												
Base Vol:	43	30	0	0	845	312	0	0	0	184	381	45
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	43	30	0	0	845	312	0	0	0	184	381	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	43	30	0	0	845	312	0	0	0	184	381	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	30	0	0	845	312	0	0	0	184	381	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	43	30	0	0	845	312	0	0	0	184	381	45
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	1.00	1.00	0.79	0.79	1.00	1.00	1.00	0.73	0.73	0.77
Lanes:	1.00	2.00	0.00	0.00	2.19	0.81	0.00	0.00	0.00	1.00	2.00	1.00
Final Sat.:	1625	3249	0	0	3273	1209	0	0	0	1381	2762	1454
Capacity Analysis Module:												
Vol/Sat:	0.03	0.01	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.13	0.14	0.03
Crit Moves:	****				****					****		
Green/Cycle:	0.13	0.56	0.00	0.00	0.43	0.43	0.00	0.00	0.00	0.33	0.33	0.33
Volume/Cap:	0.21	0.02	0.00	0.00	0.60	0.60	0.00	0.00	0.00	0.40	0.42	0.09
Delay/Veh:	33.3	7.8	0.0	0.0	18.7	18.7	0.0	0.0	0.0	21.4	21.6	18.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.3	7.8	0.0	0.0	18.7	18.7	0.0	0.0	0.0	21.4	21.6	18.7
HCM2k95th:	3	0	0	0	14	14	0	0	0	9	9	2

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Intersection #2 3rd St/L St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.497
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.7
Optimal Cycle: 79 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	44	0	0	34	34	0	0	0	26	26	26
Lanes:	1 0	2	0 0	0 0	2	1 0	0 0	0	0 0	1 1	1	0 1
Volume Module:												
Base Vol:	43	30	0	0	845	312	0	0	0	184	381	45
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	43	30	0	0	845	312	0	0	0	184	381	45
Added Vol:	0	0	0	0	99	0	0	0	0	2	109	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	43	30	0	0	944	312	0	0	0	186	490	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	43	30	0	0	944	312	0	0	0	186	490	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	30	0	0	944	312	0	0	0	186	490	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	43	30	0	0	944	312	0	0	0	186	490	45
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	1.00	1.00	0.79	0.79	1.00	1.00	1.00	0.73	0.73	0.77
Lanes:	1.00	2.00	0.00	0.00	2.25	0.75	0.00	0.00	0.00	1.00	2.00	1.00
Final Sat.:	1625	3249	0	0	3379	1117	0	0	0	1381	2762	1454
Capacity Analysis Module:												
Vol/Sat:	0.03	0.01	0.00	0.00	0.28	0.28	0.00	0.00	0.00	0.13	0.18	0.03
Crit Moves:	****				****					****		
Green/Cycle:	0.13	0.56	0.00	0.00	0.43	0.43	0.00	0.00	0.00	0.33	0.33	0.33
Volume/Cap:	0.21	0.02	0.00	0.00	0.65	0.65	0.00	0.00	0.00	0.41	0.54	0.09
Delay/Veh:	33.3	7.8	0.0	0.0	19.5	19.5	0.0	0.0	0.0	21.3	23.3	18.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.3	7.8	0.0	0.0	19.5	19.5	0.0	0.0	0.0	21.3	23.3	18.7
HCM2k95th:	3	0	0	0	16	16	0	0	0	9	12	2

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Intersection #3 3rd St/Capitol Mall

Cycle (sec): 70 Critical Vol./Cap. (X): 0.523
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 21.1
Optimal Cycle: 79 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	29	29	0	14	25	0	16	27	0
Lanes:	0 0 0 0 0			0 1 1 1 1			1 0 3 0 0			1 0 1 1 0		
Volume Module:												
Base Vol:	0	0	0	320	529	130	66	809	0	124	164	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	320	529	130	66	809	0	124	164	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	320	529	130	66	809	0	124	164	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	320	529	130	66	809	0	124	164	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	320	529	130	66	809	0	124	164	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.79	0.79	0.79	0.86	0.82	1.00	0.85	0.83	0.83
Lanes:	0.00	0.00	0.00	1.00	2.00	1.00	1.00	3.00	0.00	1.00	1.66	0.34
Final Sat.:	0	0	0	1494	2989	1494	1625	4668	0	1624	2637	531
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.18	0.09	0.04	0.17	0.00	0.08	0.06	0.06
Crit Moves:				****				****		****		
Green/Cycle:	0.00	0.00	0.00	0.37	0.37	0.37	0.18	0.32	0.00	0.56	0.34	0.34
Volume/Cap:	0.00	0.00	0.00	0.58	0.48	0.24	0.23	0.55	0.00	0.27	0.18	0.18
Delay/Veh:	0.0	0.0	0.0	21.6	20.0	17.5	29.7	23.8	0.0	10.6	18.6	18.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	21.6	20.0	17.5	29.7	23.8	0.0	10.6	18.6	18.6
HCM2k95th:	0	0	0	13	11	5	4	11	0	4	4	4

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Intersection #3 3rd St/Capitol Mall

Cycle (sec): 70 Critical Vol./Cap. (X): 0.587
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 21.8
Optimal Cycle: 79 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	29	29	0	14	25	0	16	27	0
Lanes:	0 0 0 0 0			0 1 1 1 1			1 0 3 0 0			1 0 1 1 0		
Volume Module:												
Base Vol:	0	0	0	320	529	130	66	809	0	124	164	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	320	529	130	66	809	0	124	164	33
Added Vol:	0	0	0	0	102	0	0	106	0	56	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	320	631	130	66	915	0	180	180	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	320	631	130	66	915	0	180	180	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	320	631	130	66	915	0	180	180	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	320	631	130	66	915	0	180	180	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.79	0.79	0.79	0.86	0.82	1.00	0.86	0.84	0.84
Lanes:	0.00	0.00	0.00	1.00	2.00	1.00	1.00	3.00	0.00	1.00	1.69	0.31
Final Sat.:	0	0	0	1501	3001	1501	1625	4668	0	1625	2682	492
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.21	0.09	0.04	0.20	0.00	0.11	0.07	0.07
Crit Moves:				****				****		****		
Green/Cycle:	0.00	0.00	0.00	0.37	0.37	0.37	0.18	0.32	0.00	0.56	0.34	0.34
Volume/Cap:	0.00	0.00	0.00	0.58	0.57	0.24	0.23	0.62	0.00	0.41	0.20	0.20
Delay/Veh:	0.0	0.0	0.0	21.4	21.3	17.4	29.7	24.9	0.0	12.9	18.7	18.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	21.4	21.3	17.4	29.7	24.9	0.0	12.9	18.7	18.7
HCM2k95th:	0	0	0	13	13	5	4	13	0	7	4	4

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Intersection #4 3rd St/N St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.618
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	26.7
Optimal Cycle:	79	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	16	16	33	33	0	0	21	21	0	0	0
Lanes:	0 0 0 1 0			0 1 2 0 0			0 0 1 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	64	4	630	358	0	0	334	135	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	64	4	630	358	0	0	334	135	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	64	4	630	358	0	0	334	135	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	64	4	630	358	0	0	334	135	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	64	4	630	358	0	0	334	135	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.99	0.99	0.88	0.88	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Lanes:	0.00	0.94	0.06	1.00	2.00	0.00	0.00	1.42	0.58	0.00	0.00	0.00
Final Sat.:	0	1774	111	1675	3351	0	0	2460	994	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.04	0.04	0.38	0.11	0.00	0.00	0.14	0.14	0.00	0.00	0.00
Crit Moves:		****		****				****				
Green/Cycle:	0.00	0.20	0.20	0.42	0.42	0.00	0.00	0.27	0.27	0.00	0.00	0.00
Volume/Cap:	0.00	0.18	0.18	0.90	0.26	0.00	0.00	0.51	0.51	0.00	0.00	0.00
Delay/Veh:	0.0	27.1	27.1	33.2	15.2	0.0	0.0	26.7	26.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	27.1	27.1	33.2	15.2	0.0	0.0	26.7	26.7	0.0	0.0	0.0
HCM2k95th:	0	3	3	29	6	0	0	10	10	0	0	0

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Intersection #4 3rd St/N St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.700
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	37.7
Optimal Cycle:	79	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	16	16	33	33	0	0	21	21	0	0	0
Lanes:	0 0 0 1 0			0 1 2 0 0			0 0 1 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	64	4	630	358	0	0	334	135	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	64	4	630	358	0	0	334	135	0	0	0
Added Vol:	0	0	0	93	65	0	0	62	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	64	4	723	423	0	0	396	135	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	64	4	723	423	0	0	396	135	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	64	4	723	423	0	0	396	135	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	64	4	723	423	0	0	396	135	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.99	0.99	0.88	0.88	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Lanes:	0.00	0.94	0.06	1.00	2.00	0.00	0.00	1.49	0.51	0.00	0.00	0.00
Final Sat.:	0	1774	111	1675	3351	0	0	2590	883	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.04	0.04	0.43	0.13	0.00	0.00	0.15	0.15	0.00	0.00	0.00
Crit Moves:		****		****				****				
Green/Cycle:	0.00	0.20	0.20	0.42	0.42	0.00	0.00	0.27	0.27	0.00	0.00	0.00
Volume/Cap:	0.00	0.18	0.18	1.03	0.30	0.00	0.00	0.58	0.58	0.00	0.00	0.00
Delay/Veh:	0.0	27.1	27.1	58.9	15.5	0.0	0.0	27.7	27.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	27.1	27.1	58.9	15.5	0.0	0.0	27.7	27.7	0.0	0.0	0.0
HCM2k95th:	0	3	3	42	7	0	0	12	12	0	0	0

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---------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
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                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
***************************************************************************
Intersection #5 3rd St/P St
***************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.291
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        9.4
Optimal Cycle:        56              Level Of Service:                 A
***************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   19    19    0    0     0   31   31     0
Lanes:        0  0  0  0  0    0  0  1  1  1    0  0  0  0  0    0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0  257   220    0    0     0  188  669     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  257   220    0    0     0  188  669     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  257   220    0    0     0  188  669     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  257   220    0    0     0  188  669     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  257   220    0    0     0  188  669     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.88  0.88 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 1.62  1.38 0.00 0.00  0.00 0.66 2.34  0.00
Final Sat.:     0    0     0    0 2716  2325    0    0     0 1138 4049     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.09  0.09 0.00 0.00  0.00 0.17 0.17  0.00
Crit Moves:                       ****                          ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.34  0.34 0.00 0.00  0.00 0.55 0.55  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.28  0.28 0.00 0.00  0.00 0.30 0.30  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 13.9  13.9  0.0  0.0   0.0  7.0  7.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 13.9  13.9  0.0  0.0   0.0  7.0  7.0   0.0
HCM2k95th:      0    0     0    0    5     5    0    0     0    6    6     0
***************************************************************************
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---------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                       2013 Cumulative Conditions
                              AM Peak Hour
---------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
***************************************************************************
Intersection #5 3rd St/P St
***************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.312
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        9.7
Optimal Cycle:        56              Level Of Service:                 A
***************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   19    19    0    0     0   31   31     0
Lanes:        0  0  0  0  0    0  0  1  1  1    0  0  0  0  0    0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0  257   220    0    0     0  188  669     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  257   220    0    0     0  188  669     0
Added Vol:      0    0     0    0    0    65    0    0     0    0   25     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0    0  257   285    0    0     0  188  694     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  257   285    0    0     0  188  694     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  257   285    0    0     0  188  694     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  257   285    0    0     0  188  694     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.87  0.87 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 1.42  1.58 0.00 0.00  0.00 0.64 2.36  0.00
Final Sat.:     0    0     0    0 2365  2622    0    0     0 1106 4081     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.11  0.11 0.00 0.00  0.00 0.17 0.17  0.00
Crit Moves:                       ****                          ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.34  0.34 0.00 0.00  0.00 0.55 0.55  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.32  0.32 0.00 0.00  0.00 0.31 0.31  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 14.2  14.2  0.0  0.0   0.0  7.0  7.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 14.2  14.2  0.0  0.0   0.0  7.0  7.0   0.0
HCM2k95th:      0    0     0    0    6     6    0    0     0    6    6     0
***************************************************************************
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-------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                          2013 Cumulative Conditions
                                 AM Peak Hour
-------------------------------------------------------------------------------

                       Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #6 3rd St/Q St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):         0.628
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        12.8
Optimal Cycle:        56               Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   19   19     0     0   31    31    0    0     0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  3  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  174  290     0     0 2608   495    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  174  290     0     0 2608   495    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  174  290     0     0 2608   495    0    0     0
Reduct Vol:     0    0     0    0    0     0     0    0     0    0    0     0
Reduced Vol:    0    0     0  174  290     0     0 2608   495    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  174  290     0     0 2608   495    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900  1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00  1.00 0.89  0.89 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 1.00 2.00  0.00  0.00 3.36  0.64 0.00 0.00  0.00
Final Sat.:     0    0     0 1729 3458     0     0 5673  1077    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.10 0.08  0.00  0.00 0.46  0.46 0.00 0.00  0.00
Crit Moves:                  ****                    ****
Green/Cycle: 0.00 0.00  0.00 0.34 0.34  0.00  0.00 0.55  0.55 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.30 0.25  0.00  0.00 0.83  0.83 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 14.1 13.7   0.0   0.0 12.6  12.6  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 14.1 13.7   0.0   0.0 12.6  12.6  0.0  0.0   0.0
HCM2k95th:      0    0     0    5    4     0     0   23    23    0    0     0
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-------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                          2013 Cumulative Conditions
                                 AM Peak Hour
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                       Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #6 3rd St/Q St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):         0.666
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        14.6
Optimal Cycle:        56               Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   19   19     0     0   31    31    0    0     0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  3  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  174  290     0     0 2608   495    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  174  290     0     0 2608   495    0    0     0
Added Vol:      0    0     0    0    0     0     0  240     0    0    0     0
PasserByVol:    0    0     0    0    0     0     0    0     0    0    0     0
Initial Fut:    0    0     0  174  290     0     0 2848   495    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  174  290     0     0 2848   495    0    0     0
Reduct Vol:     0    0     0    0    0     0     0    0     0    0    0     0
Reduced Vol:    0    0     0  174  290     0     0 2848   495    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  174  290     0     0 2848   495    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900  1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00  1.00 0.89  0.89 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 1.00 2.00  0.00  0.00 3.41  0.59 0.00 0.00  0.00
Final Sat.:     0    0     0 1729 3458     0     0 5762  1002    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.10 0.08  0.00  0.00 0.49  0.49 0.00 0.00  0.00
Crit Moves:                  ****                    ****
Green/Cycle: 0.00 0.00  0.00 0.34 0.34  0.00  0.00 0.55  0.55 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.30 0.25  0.00  0.00 0.89  0.89 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 14.1 13.7   0.0   0.0 14.8  14.8  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 14.1 13.7   0.0   0.0 14.8  14.8  0.0  0.0   0.0
HCM2k95th:      0    0     0    5    4     0     0   28    28    0    0     0
*******************************************************************************
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---------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
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---------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
***************************************************************************
Intersection #7 5th St/I St
***************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.463
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       11.3
Optimal Cycle:        56              Level Of Service:                 B
***************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:   30   30    0    0    0   30    0    0    0    0   20   20
Lanes:       2  0  2  0  0   0  0  0  0  2   0  0  0  0  0   0  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     148  867    0    0    0   12    0    0    0    0  814   86
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:  148  867    0    0    0   12    0    0    0    0  814   86
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:   148  867    0    0    0   12    0    0    0    0  814   86
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  148  867    0    0    0   12    0    0    0    0  814   86
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:   148  867    0    0    0   12    0    0    0    0  814   86
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  0.54 0.86  1.00 1.00 1.00  0.67 1.00 1.00  1.00 1.00 0.81  0.81
Lanes:       2.00 2.00  0.00 0.00 0.00  2.00 0.00 0.00  0.00 0.00 3.62  0.38
Final Sat.:  2034 3249     0    0    0  2558    0    0     0    0 5551   586
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.27  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.15  0.15
Crit Moves:       ****       ****                                    ****
Green/Cycle: 0.54 0.54  0.00 0.00 0.00  0.54 0.00 0.00  0.00 0.00 0.36  0.36
Volume/Cap:  0.14 0.50  0.00 0.00 0.00  0.01 0.00 0.00  0.00 0.00 0.41  0.41
Delay/Veh:    6.8  9.3   0.0  0.0  0.0   6.1  0.0  0.0   0.0  0.0 14.1  14.1
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   6.8  9.3   0.0  0.0  0.0   6.1  0.0  0.0   0.0  0.0 14.1  14.1
HCM2k95th:      2   10     0    0    0     0    0    0     0    0    6     6
***************************************************************************
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---------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
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---------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
***************************************************************************
Intersection #7 5th St/I St
***************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.492
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       11.8
Optimal Cycle:        56              Level Of Service:                 B
***************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:   30   30    0    0    0   30    0    0    0    0   20   20
Lanes:       2  0  2  0  0   0  0  0  0  2   0  0  0  0  0   0  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     148  867    0    0    0   12    0    0    0    0  814   86
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:  148  867    0    0    0   12    0    0    0    0  814   86
Added Vol:      8    8    0    0    0    0    0    0    0    0  144    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:  156  875    0    0    0   12    0    0    0    0  958   86
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:   156  875    0    0    0   12    0    0    0    0  958   86
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  156  875    0    0    0   12    0    0    0    0  958   86
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:   156  875    0    0    0   12    0    0    0    0  958   86
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  0.54 0.86  1.00 1.00 1.00  0.67 1.00 1.00  1.00 1.00 0.81  0.81
Lanes:       2.00 2.00  0.00 0.00 0.00  2.00 0.00 0.00  0.00 0.00 3.67  0.33
Final Sat.:  2034 3249     0    0    0  2558    0    0     0    0 5643   507
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.08 0.27  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.17  0.17
Crit Moves:       ****       ****                                    ****
Green/Cycle: 0.54 0.54  0.00 0.00 0.00  0.54 0.00 0.00  0.00 0.00 0.36  0.36
Volume/Cap:  0.14 0.50  0.00 0.00 0.00  0.01 0.00 0.00  0.00 0.00 0.48  0.48
Delay/Veh:    6.8  9.3   0.0  0.0  0.0   6.1  0.0  0.0   0.0  0.0 14.7  14.7
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   6.8  9.3   0.0  0.0  0.0   6.1  0.0  0.0   0.0  0.0 14.7  14.7
HCM2k95th:      2   10     0    0    0     0    0    0     0    0    7     7
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-------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                       2013 Cumulative Conditions
                              AM Peak Hour
-------------------------------------------------------------------------------
                    Level Of Service Computation Report
         2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #8 5th St/J St
*******************************************************************************
Cycle (sec):        100               Critical Vol./Cap. (X):        0.659
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        22.3
Optimal Cycle:      106               Level Of Service:                 C
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0   40    40    0    0     0   60   60    60    0    0     0
Lanes:        0  0  1  1  1   0  0  0  0  0   1  1  3  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  328   274    0    0     0  739 2495   135    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0  328   274    0    0     0  739 2495   135    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0  328   274    0    0     0  739 2495   135    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0  328   274    0    0     0  739 2495   135    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0  328   274    0    0     0  739 2495   135    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.80  0.80 1.00 1.00  1.00 0.70 0.70  0.77 1.00 1.00  1.00
Lanes:       0.00 1.63  1.37 0.00 0.00  0.00 1.14 3.86  1.00 0.00 0.00  0.00
Final Sat.:     0 2475  2067    0    0     0 1511 5102  1454    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.13  0.13 0.00 0.00  0.00 0.49 0.49  0.09 0.00 0.00  0.00
Crit Moves:       ****                        ****
Green/Cycle: 0.00 0.38  0.38 0.00 0.00  0.00 0.57 0.57  0.57 0.00 0.00  0.00
Volume/Cap:  0.00 0.35  0.35 0.00 0.00  0.00 0.86 0.86  0.16 0.00 0.00  0.00
Delay/Veh:    0.0 24.3  24.3  0.0  0.0   0.0 22.4 22.4  11.4  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 24.3  24.3  0.0  0.0   0.0 22.4 22.4  11.4  0.0  0.0   0.0
HCM2k95th:      0    9     9    0    0     0   38   38     5    0    0     0
*******************************************************************************
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-------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                       2013 Cumulative Conditions
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-------------------------------------------------------------------------------
                    Level Of Service Computation Report
         2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #8 5th St/J St
*******************************************************************************
Cycle (sec):        100               Critical Vol./Cap. (X):        0.714
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        24.9
Optimal Cycle:      106               Level Of Service:                 C
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0   40    40    0    0     0   60   60    60    0    0     0
Lanes:        0  0  1  1  1   0  0  0  0  0   1  1  3  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  328   274    0    0     0  739 2495   135    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0  328   274    0    0     0  739 2495   135    0    0     0
Added Vol:      0   16    77    0    0     0    0  198     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0  344   351    0    0     0  739 2693   135    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0  344   351    0    0     0  739 2693   135    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0  344   351    0    0     0  739 2693   135    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0  344   351    0    0     0  739 2693   135    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.79  0.79 1.00 1.00  1.00 0.70 0.70  0.77 1.00 1.00  1.00
Lanes:       0.00 1.48  1.52 0.00 0.00  0.00 1.08 3.92  1.00 0.00 0.00  0.00
Final Sat.:     0 2229  2274    0    0     0 1424 5189  1454    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.15  0.15 0.00 0.00  0.00 0.52 0.52  0.09 0.00 0.00  0.00
Crit Moves:       ****                        ****
Green/Cycle: 0.00 0.38  0.38 0.00 0.00  0.00 0.57 0.57  0.57 0.00 0.00  0.00
Volume/Cap:  0.00 0.41  0.41 0.00 0.00  0.00 0.92 0.92  0.16 0.00 0.00  0.00
Delay/Veh:    0.0 25.0  25.0  0.0  0.0   0.0 25.5 25.5  11.4  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 25.0  25.0  0.0  0.0   0.0 25.5 25.5  11.4  0.0  0.0   0.0
HCM2k95th:      0   11    11    0    0     0   45   45     5    0    0     0
*******************************************************************************
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-----------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2013 Cumulative Conditions
                               AM Peak Hour
-----------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #9 5th St/L St
*****************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.251
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):       13.9
Optimal Cycle:        79              Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    40   40    0     0    0   40     0    0    0     0   30   30
Lanes:        1  0  3  0  0   0  0  0  0  2   0  0  0  0  0   0  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     124  530    0     0    0  137     0    0    0     0  568   93
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:  124  530    0     0    0  137     0    0    0     0  568   93
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:   124  530    0     0    0  137     0    0    0     0  568   93
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:  124  530    0     0    0  137     0    0    0     0  568   93
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:   124  530    0     0    0  137     0    0    0     0  568   93
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  0.69 0.82 1.00  1.00 1.00 0.67  1.00 1.00 1.00  1.00 0.80 0.80
Lanes:       1.00 3.00 0.00  0.00 0.00 2.00  0.00 0.00 0.00  0.00 3.44 0.56
Final Sat.:  1315 4668    0     0    0 2558     0    0    0     0 5236  857
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.09 0.11 0.00  0.00 0.00 0.05  0.00 0.00 0.00  0.00 0.11 0.11
Crit Moves:       ****                                                 ****
Green/Cycle: 0.51 0.51 0.00  0.00 0.00 0.51  0.00 0.00 0.00  0.00 0.38 0.38
Volume/Cap:  0.19 0.22 0.00  0.00 0.00 0.11  0.00 0.00 0.00  0.00 0.29 0.29
Delay/Veh:   11.2 11.1  0.0   0.0  0.0 10.3   0.0  0.0  0.0   0.0 17.4 17.4
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:  11.2 11.1  0.0   0.0  0.0 10.3   0.0  0.0  0.0   0.0 17.4 17.4
HCM2k95th:      5    5    0     0    0    2     0    0    0     0    6    6
*****************************************************************************
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-----------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2013 Cumulative Conditions
                               AM Peak Hour
-----------------------------------------------------------------------------
                      Level Of Service Computation Report
         2000 HCM Operations Method (Future Volume Alternative)
*****************************************************************************
Intersection #9 5th St/L St
*****************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.322
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):       14.9
Optimal Cycle:        79              Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    40   40    0     0    0   40     0    0    0     0   30   30
Lanes:        1  0  3  0  0   0  0  0  0  2   0  0  0  0  0   0  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     124  530    0     0    0  137     0    0    0     0  568   93
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:  124  530    0     0    0  137     0    0    0     0  568   93
Added Vol:     14   84    0     0    0    0     0    0    0     0  271    8
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:  138  614    0     0    0  137     0    0    0     0  839  101
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:   138  614    0     0    0  137     0    0    0     0  839  101
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:  138  614    0     0    0  137     0    0    0     0  839  101
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:   138  614    0     0    0  137     0    0    0     0  839  101
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  0.69 0.82 1.00  1.00 1.00 0.67  1.00 1.00 1.00  1.00 0.81 0.81
Lanes:       1.00 3.00 0.00  0.00 0.00 2.00  0.00 0.00 0.00  0.00 3.57 0.43
Final Sat.:  1315 4668    0     0    0 2558     0    0    0     0 5467  658
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.10 0.13 0.00  0.00 0.00 0.05  0.00 0.00 0.00  0.00 0.15 0.15
Crit Moves:       ****                                                 ****
Green/Cycle: 0.51 0.51 0.00  0.00 0.00 0.51  0.00 0.00 0.00  0.00 0.38 0.38
Volume/Cap:  0.21 0.26 0.00  0.00 0.00 0.11  0.00 0.00 0.00  0.00 0.40 0.40
Delay/Veh:   11.5 11.4  0.0   0.0  0.0 10.3   0.0  0.0  0.0   0.0 18.5 18.5
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:  11.5 11.4  0.0   0.0  0.0 10.3   0.0  0.0  0.0   0.0 18.5 18.5
HCM2k95th:      5    6    0     0    0    2     0    0    0     0    9    9
*****************************************************************************
```

Downtown Sacramento Traffic Study
2013 Cumulative Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #10 5th St/Capitol Mall

Cycle (sec): 70 Critical Vol./Cap. (X): 0.280
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 20.1
Optimal Cycle: 76 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	35	35	0	0	0	0	17	35	0	0	18	18
Lanes:	2 0	2	1 0	0 0	0	0 0	2 0	2	0 0	0 0	2	1 0
Volume Module:												
Base Vol:	151	298	102	0	0	0	516	684	0	0	172	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	298	102	0	0	0	516	684	0	0	172	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	298	102	0	0	0	516	684	0	0	172	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	298	102	0	0	0	516	684	0	0	172	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	151	298	102	0	0	0	516	684	0	0	172	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.84	0.79	0.79	1.00	1.00	1.00	0.83	0.86	1.00	1.00	0.80	0.80
Lanes:	2.00	2.23	0.77	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.45	0.55
Final Sat.:	3191	3346	1145	0	0	0	3152	3249	0	0	3699	839
Capacity Analysis Module:												
Vol/Sat:	0.05	0.09	0.09	0.00	0.00	0.00	0.16	0.21	0.00	0.00	0.05	0.05
Crit Moves:	****							****		****		
Green/Cycle:	0.46	0.46	0.46	0.00	0.00	0.00	0.22	0.46	0.00	0.00	0.24	0.24
Volume/Cap:	0.10	0.19	0.19	0.00	0.00	0.00	0.73	0.46	0.00	0.00	0.20	0.20
Delay/Veh:	11.7	12.3	12.3	0.0	0.0	0.0	34.0	15.0	0.0	0.0	23.6	23.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.7	12.3	12.3	0.0	0.0	0.0	34.0	15.0	0.0	0.0	23.6	23.6
HCM2k95th:	3	4	4	0	0	0	14	11	0	0	3	3

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 5th St/Capitol Mall

Cycle (sec): 70 Critical Vol./Cap. (X): 0.319
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 20.6
Optimal Cycle: 76 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	35	35	0	0	0	0	17	35	0	0	18	18
Lanes:	2 0	2	1 0	0 0	0	0 0	2 0	2	0 0	0 0	2	1 0
Volume Module:												
Base Vol:	151	298	102	0	0	0	516	684	0	0	172	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	298	102	0	0	0	516	684	0	0	172	39
Added Vol:	42	67	17	0	0	0	31	75	0	0	33	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	193	365	119	0	0	0	547	759	0	0	205	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	193	365	119	0	0	0	547	759	0	0	205	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	193	365	119	0	0	0	547	759	0	0	205	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	193	365	119	0	0	0	547	759	0	0	205	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.84	0.79	0.79	1.00	1.00	1.00	0.83	0.86	1.00	1.00	0.80	0.80
Lanes:	2.00	2.26	0.74	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.52	0.48
Final Sat.:	3195	3390	1105	0	0	0	3152	3249	0	0	3828	728
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.11	0.00	0.00	0.00	0.17	0.23	0.00	0.00	0.05	0.05
Crit Moves:	****							****		****		
Green/Cycle:	0.46	0.46	0.46	0.00	0.00	0.00	0.22	0.46	0.00	0.00	0.24	0.24
Volume/Cap:	0.13	0.23	0.23	0.00	0.00	0.00	0.78	0.51	0.00	0.00	0.23	0.23
Delay/Veh:	12.0	12.7	12.7	0.0	0.0	0.0	35.9	15.7	0.0	0.0	23.9	23.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.0	12.7	12.7	0.0	0.0	0.0	35.9	15.7	0.0	0.0	23.9	23.9
HCM2k95th:	3	5	5	0	0	0	15	12	0	0	4	4

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2000 HCM Operations Method (Base Volume Alternative)

Intersection #11 5th St/N St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.391
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 14.0
Optimal Cycle: 76 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	35	35	0	0	0	35	35	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			0 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	687	193	0	0	0	63	894	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	687	193	0	0	0	63	894	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	687	193	0	0	0	63	894	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	687	193	0	0	0	63	894	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	687	193	0	0	0	63	894	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.88	0.88	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.34	0.66	0.00	0.00	0.00	0.20	2.80	0.00	0.00	0.00	0.00
Final Sat.:	0	3916	1100	0	0	0	341	4846	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.18	0.00	0.00	0.00	0.18	0.18	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.46	0.46	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.38	0.38	0.00	0.00	0.00	0.40	0.40	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	13.9	13.9	0.0	0.0	0.0	14.1	14.1	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.9	13.9	0.0	0.0	0.0	14.1	14.1	0.0	0.0	0.0	0.0
HCM2k95th:	0	9	9	0	0	0	10	10	0	0	0	0

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2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 5th St/N St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.549
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.6
Optimal Cycle: 76 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	35	35	0	0	0	35	35	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			0 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	687	193	0	0	0	63	894	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	687	193	0	0	0	63	894	0	0	0	0
Added Vol:	0	100	228	0	0	0	55	279	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	787	421	0	0	0	118	1173	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	787	421	0	0	0	118	1173	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	787	421	0	0	0	118	1173	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	787	421	0	0	0	118	1173	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.86	0.86	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	0.00	0.00	0.00	0.27	2.73	0.00	0.00	0.00	0.00
Final Sat.:	0	3278	1639	0	0	0	474	4713	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.26	0.00	0.00	0.00	0.25	0.25	0.00	0.00	0.00	0.00
Crit Moves:			****				****					
Green/Cycle:	0.00	0.46	0.46	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.52	0.56	0.00	0.00	0.00	0.54	0.54	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	15.4	15.9	0.0	0.0	0.0	15.6	15.6	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	15.4	15.9	0.0	0.0	0.0	15.6	15.6	0.0	0.0	0.0	0.0
HCM2k95th:	0	12	14	0	0	0	14	14	0	0	0	0

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********************************************************************************
Intersection #12 5th St/P St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):         0.390
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):         10.8
Optimal Cycle:        56               Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:   30   30    0    0    0    0    0    0    0    0   20   20
Lanes:       0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     215  763    0    0    0    0    0    0    0    0  545  246
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  215  763    0    0    0    0    0    0    0    0  545  246
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   215  763    0    0    0    0    0    0    0    0  545  246
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  215  763    0    0    0    0    0    0    0    0  545  246
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   215  763    0    0    0    0    0    0    0    0  545  246
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.91 0.91  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 0.87  0.87
Lanes:       0.66 2.34  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 2.07  0.93
Final Sat.:  1140 4047    0    0    0    0    0    0    0    0 3406  1537
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.19 0.19  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.16  0.16
Crit Moves:  ****                                                    ****
Green/Cycle: 0.54 0.54  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.36  0.36
Volume/Cap:  0.35 0.35  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.45  0.45
Delay/Veh:    7.8  7.8   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 14.6  14.6
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   7.8  7.8   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 14.6  14.6
HCM2k95th:      7    7    0    0    0    0    0    0    0    0    8    8
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             2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #12 5th St/P St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):         0.510
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):         11.6
Optimal Cycle:        56               Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:   30   30    0    0    0    0    0    0    0    0   20   20
Lanes:       0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     215  763    0    0    0    0    0    0    0    0  545  246
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  215  763    0    0    0    0    0    0    0    0  545  246
Added Vol:      0  204    0    0    0    0    0    0    0    0   25  124
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:  215  967    0    0    0    0    0    0    0    0  570  370
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   215  967    0    0    0    0    0    0    0    0  570  370
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  215  967    0    0    0    0    0    0    0    0  570  370
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   215  967    0    0    0    0    0    0    0    0  570  370
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.91 0.91  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 0.86  0.86
Lanes:       0.55 2.45  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 2.00  1.00
Final Sat.:   943 4244    0    0    0    0    0    0    0    0 3254  1627
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.23 0.23  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.18  0.23
Crit Moves:  ****                                                          ****
Green/Cycle: 0.54 0.54  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.36  0.36
Volume/Cap:  0.43 0.43  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.49  0.64
Delay/Veh:    8.3  8.3   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 14.9  17.1
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   8.3  8.3   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 14.9  17.1
HCM2k95th:      9    9    0    0    0    0    0    0    0    0    9   12
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #13 5th St/Q St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.525
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.4
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	19	19	0	0	0	31	31	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	471	87	0	0	0	620	2184	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	471	87	0	0	0	620	2184	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	471	87	0	0	0	620	2184	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	471	87	0	0	0	620	2184	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	471	87	0	0	0	620	2184	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.89	0.89	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.53	0.47	0.00	0.00	0.00	1.00	3.00	0.00	0.00	0.00	0.00
Final Sat.:	0	4278	790	0	0	0	1729	5187	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.11	0.00	0.00	0.00	0.36	0.42	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.34	0.34	0.00	0.00	0.00	0.55	0.55	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.32	0.32	0.00	0.00	0.00	0.65	0.76	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	14.2	14.2	0.0	0.0	0.0	9.5	11.2	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	14.2	14.2	0.0	0.0	0.0	9.5	11.2	0.0	0.0	0.0	0.0
HCM2k95th:	0	6	6	0	0	0	13	17	0	0	0	0

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Intersection #13 5th St/Q St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.616
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.1
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	19	19	0	0	0	31	31	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	471	87	0	0	0	620	2184	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	471	87	0	0	0	620	2184	0	0	0	0
Added Vol:	0	0	0	0	0	0	204	36	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	471	87	0	0	0	824	2220	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	471	87	0	0	0	824	2220	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	471	87	0	0	0	824	2220	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	471	87	0	0	0	824	2220	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.89	0.89	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.53	0.47	0.00	0.00	0.00	1.08	2.92	0.00	0.00	0.00	0.00
Final Sat.:	0	4278	790	0	0	0	1872	5044	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.11	0.00	0.00	0.00	0.44	0.44	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.34	0.34	0.00	0.00	0.00	0.55	0.55	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.32	0.32	0.00	0.00	0.00	0.80	0.80	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	14.2	14.2	0.0	0.0	0.0	11.8	11.8	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	14.2	14.2	0.0	0.0	0.0	11.8	11.8	0.0	0.0	0.0	0.0
HCM2k95th:	0	6	6	0	0	0	18	18	0	0	0	0

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------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2013 Cumulative Conditions
                                 AM Peak Hour
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #14 7th St/I St
******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.307
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      10.0
Optimal Cycle:        56              Level Of Service:                 B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   23    23    0    0     0   27   27     0
Lanes:        0  0  0  0  0    0  0  2  0  2    0  0  0  0  0    1  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0  362   225    0    0     0  253  777     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  362   225    0    0     0  253  777     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  362   225    0    0     0  253  777     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  362   225    0    0     0  253  777     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  362   225    0    0     0  253  777     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.86  0.67 1.00 1.00  1.00 0.82 0.82  1.00
Lanes:       0.00 0.00  0.00 0.00 2.00  2.00 0.00 0.00  0.00 1.00 3.00  0.00
Final Sat.:     0    0     0    0 3249  2558    0    0     0 1556 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.11  0.09 0.00 0.00  0.00 0.16 0.17  0.00
Crit Moves:                       ****                        ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.41  0.41 0.00 0.00  0.00 0.48 0.48  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.27  0.21 0.00 0.00  0.00 0.34 0.35  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 11.4  11.1  0.0  0.0   0.0  9.3  9.3   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 11.4  11.1  0.0  0.0   0.0  9.3  9.3   0.0
HCM2k95th:      0    0     0    0    5     3    0    0     0    6    6     0
******************************************************************************
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------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2013 Cumulative Conditions
                                 AM Peak Hour
------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #14 7th St/I St
******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.408
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      10.7
Optimal Cycle:        56              Level Of Service:                 B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   23    23    0    0     0   27   27     0
Lanes:        0  0  0  0  0    0  0  2  0  2    0  0  0  0  0    1  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0  362   225    0    0     0  253  777     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  362   225    0    0     0  253  777     0
Added Vol:      0    0     0    0  161     0    0    0     0   90  144     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0    0  523   225    0    0     0  343  921     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  523   225    0    0     0  343  921     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  523   225    0    0     0  343  921     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  523   225    0    0     0  343  921     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.86  0.67 1.00 1.00  1.00 0.82 0.82  1.00
Lanes:       0.00 0.00  0.00 0.00 2.00  2.00 0.00 0.00  0.00 1.09 2.91  0.00
Final Sat.:     0    0     0    0 3249  2558    0    0     0 1689 4535     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.16  0.09 0.00 0.00  0.00 0.20 0.20  0.00
Crit Moves:                       ****                        ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.41  0.41 0.00 0.00  0.00 0.48 0.48  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.39  0.21 0.00 0.00  0.00 0.42 0.42  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 12.5  11.1  0.0  0.0   0.0  9.9  9.9   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 12.5  11.1  0.0  0.0   0.0  9.9  9.9   0.0
HCM2k95th:      0    0     0    0    7     3    0    0     0    8    8     0
******************************************************************************
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----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                      2013 Cumulative Conditions
                             AM Peak Hour
----------------------------------------------------------------------------
                    Level Of Service Computation Report
       2000 HCM Operations Method (Base Volume Alternative)
****************************************************************************
Intersection #15 7th St/J St
****************************************************************************
Cycle (sec):         100            Critical Vol./Cap. (X):        0.615
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):     17.8
Optimal Cycle:       106            Level Of Service:                 B
****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0    0    35   35    0     0   65   65     0    0    0
Lanes:       0  0  0  0  0    0  1  2  0  0    0  0  2  1  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0    0   174  332    0     0 2144  322     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   0    0    0   174  332    0     0 2144  322     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    0    0    0   174  332    0     0 2144  322     0    0    0
Reduct Vol:    0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   0    0    0   174  332    0     0 2144  322     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:    0    0    0   174  332    0     0 2144  322     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.82 0.82 1.00  1.00 0.80 0.80  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  1.00 2.00 0.00  0.00 3.00 1.00  0.00 0.00 0.00
Final Sat.:    0    0    0  1556 3112    0     0 4575 1525     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.11 0.11 0.00  0.00 0.47 0.21  0.00 0.00 0.00
Crit Moves:                  ****                 ****
Green/Cycle: 0.00 0.00 0.00  0.33 0.33 0.00  0.00 0.61 0.61  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.34 0.32 0.00  0.00 0.76 0.34  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0  27.4 27.2  0.0   0.0 16.7 10.2   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  27.4 27.2  0.0   0.0 16.7 10.2   0.0  0.0  0.0
HCM2k95th:     0    0    0     9    8    0     0   30   10     0    0    0
****************************************************************************
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----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                      2013 Cumulative Conditions
                             AM Peak Hour
----------------------------------------------------------------------------
                    Level Of Service Computation Report
       2000 HCM Operations Method (Future Volume Alternative)
****************************************************************************
Intersection #15 7th St/J St
****************************************************************************
Cycle (sec):         100            Critical Vol./Cap. (X):        0.736
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):     21.4
Optimal Cycle:       106            Level Of Service:                 C
****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0    0    35   35    0     0   65   65     0    0    0
Lanes:       0  0  0  0  0    0  1  2  0  0    0  0  2  1  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0    0   174  332    0     0 2144  322     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   0    0    0   174  332    0     0 2144  322     0    0    0
Added Vol:     0    0    0    82  169    0     0  287    1     0    0    0
PasserByVol:   0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:   0    0    0   256  501    0     0 2431  323     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    0    0    0   256  501    0     0 2431  323     0    0    0
Reduct Vol:    0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   0    0    0   256  501    0     0 2431  323     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:    0    0    0   256  501    0     0 2431  323     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.82 0.82 1.00  1.00 0.80 0.80  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  1.00 2.00 0.00  0.00 3.00 1.00  0.00 0.00 0.00
Final Sat.:    0    0    0  1556 3112    0     0 4584 1528     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.16 0.16 0.00  0.00 0.53 0.21  0.00 0.00 0.00
Crit Moves:                  ****                 ****
Green/Cycle: 0.00 0.00 0.00  0.33 0.33 0.00  0.00 0.61 0.61  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.50 0.49 0.00  0.00 0.86 0.34  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0  29.6 29.4  0.0   0.0 20.3 10.2   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  29.6 29.4  0.0   0.0 20.3 10.2   0.0  0.0  0.0
HCM2k95th:     0    0    0    13   12    0     0   39   10     0    0    0
****************************************************************************
```

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #16 7th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.330
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.5
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	29	29	0	0	0	21	21	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			1 0 3 0 0		
Volume Module:												
Base Vol:	0	0	0	0	451	179	0	0	0	262	698	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	451	179	0	0	0	262	698	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	451	179	0	0	0	262	698	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	451	179	0	0	0	262	698	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	451	179	0	0	0	262	698	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.78	0.78	1.00	1.00	1.00	0.90	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.15	0.85	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	3198	1269	0	0	0	1710	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.14	0.14	0.00	0.00	0.00	0.15	0.15	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.52	0.52	0.00	0.00	0.00	0.38	0.38	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.27	0.27	0.00	0.00	0.00	0.41	0.40	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	7.9	7.9	0.0	0.0	0.0	14.8	13.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	7.9	7.9	0.0	0.0	0.0	14.8	13.5	0.0
HCM2k95th:	0	0	0	0	5	5	0	0	0	8	7	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 7th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.458
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.2
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	29	29	0	0	0	21	21	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			1 0 3 0 0		
Volume Module:												
Base Vol:	0	0	0	0	451	179	0	0	0	262	698	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	451	179	0	0	0	262	698	0
Added Vol:	0	0	0	0	30	145	0	0	0	58	145	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	481	324	0	0	0	320	843	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	481	324	0	0	0	320	843	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	481	324	0	0	0	320	843	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	481	324	0	0	0	320	843	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.77	0.77	1.00	1.00	1.00	0.90	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	2925	1463	0	0	0	1710	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.16	0.22	0.00	0.00	0.00	0.19	0.18	0.00
Crit Moves:						****				****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.52	0.52	0.00	0.00	0.00	0.38	0.38	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.32	0.43	0.00	0.00	0.00	0.50	0.48	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	8.1	9.1	0.0	0.0	0.0	16.2	14.3	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	8.1	9.1	0.0	0.0	0.0	16.2	14.3	0.0
HCM2k95th:	0	0	0	0	6	8	0	0	0	10	9	0

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #17 8th St/I St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.307
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	10.3
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	0	0	0	0	0	0	25	25
Lanes:	1 1	2	0 0	0 0	0	0 0	0 0	0	0 0	0 0	2	1 0
Volume Module:												
Base Vol:	153	395	0	0	0	0	0	0	0	0	857	133
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	395	0	0	0	0	0	0	0	0	857	133
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	153	395	0	0	0	0	0	0	0	0	857	133
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	395	0	0	0	0	0	0	0	0	857	133
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	153	395	0	0	0	0	0	0	0	0	857	133
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89
Lanes:	1.12	2.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.60	0.40
Final Sat.:	1931	4985	0	0	0	0	0	0	0	0	4400	683
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.19
Crit Moves:	****										****	
Green/Cycle:	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Volume/Cap:	0.18	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.44
Delay/Veh:	9.3	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8	10.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.3	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8	10.8
HCM2k95th:	3	3	0	0	0	0	0	0	0	0	8	8

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 8th St/I St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.360
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	10.6
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	0	0	0	0	0	0	25	25
Lanes:	1 1	2	0 0	0 0	0	0 0	0 0	0	0 0	0 0	2	1 0
Volume Module:												
Base Vol:	153	395	0	0	0	0	0	0	0	0	857	133
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	395	0	0	0	0	0	0	0	0	857	133
Added Vol:	103	32	0	0	0	0	0	0	0	0	131	13
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	256	427	0	0	0	0	0	0	0	0	988	146
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	256	427	0	0	0	0	0	0	0	0	988	146
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	256	427	0	0	0	0	0	0	0	0	988	146
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	256	427	0	0	0	0	0	0	0	0	988	146
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89
Lanes:	1.50	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.61	0.39
Final Sat.:	2592	4324	0	0	0	0	0	0	0	0	4433	655
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.22
Crit Moves:	****										****	
Green/Cycle:	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Volume/Cap:	0.22	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.50
Delay/Veh:	9.6	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2	11.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.6	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2	11.2
HCM2k95th:	4	4	0	0	0	0	0	0	0	0	9	9

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Intersection #18 8th S/tJ St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.374
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	18.0
Optimal Cycle:	106	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	35	35	0	0	0	65	65	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	378	270	0	0	0	261	2051	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	378	270	0	0	0	261	2051	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	378	270	0	0	0	261	2051	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	378	270	0	0	0	261	2051	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	378	270	0	0	0	261	2051	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.77	0.77	1.00	1.00	1.00	0.82	0.82	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	0.00	0.00	0.00	1.00	3.00	0.00	0.00	0.00	0.00
Final Sat.:	0	2916	1458	0	0	0	1556	4668	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.19	0.00	0.00	0.00	0.17	0.44	0.00	0.00	0.00	0.00
Crit Moves:			****				****					
Green/Cycle:	0.00	0.33	0.33	0.00	0.00	0.00	0.61	0.61	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.39	0.56	0.00	0.00	0.00	0.27	0.72	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	28.0	31.2	0.0	0.0	0.0	9.6	15.5	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	28.0	31.2	0.0	0.0	0.0	9.6	15.5	0.0	0.0	0.0	0.0
HCM2k95th:	0	10	14	0	0	0	8	26	0	0	0	0

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Intersection #18 8th S/tJ St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.438
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	20.6
Optimal Cycle:	106	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	35	35	0	0	0	65	65	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	378	270	0	0	0	261	2051	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	378	270	0	0	0	261	2051	0	0	0	0
Added Vol:	0	77	43	0	0	0	49	320	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	455	313	0	0	0	310	2371	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	455	313	0	0	0	310	2371	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	455	313	0	0	0	310	2371	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	455	313	0	0	0	310	2371	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.77	0.77	1.00	1.00	1.00	0.82	0.82	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	0.00	0.00	0.00	1.00	3.00	0.00	0.00	0.00	0.00
Final Sat.:	0	2922	1461	0	0	0	1556	4668	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.21	0.00	0.00	0.00	0.20	0.51	0.00	0.00	0.00	0.00
Crit Moves:			****				****					
Green/Cycle:	0.00	0.33	0.33	0.00	0.00	0.00	0.61	0.61	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.47	0.65	0.00	0.00	0.00	0.32	0.83	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	29.1	33.0	0.0	0.0	0.0	10.0	18.7	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	29.1	33.0	0.0	0.0	0.0	10.0	18.7	0.0	0.0	0.0	0.0
HCM2k95th:	0	12	17	0	0	0	9	33	0	0	0	0

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Intersection #19 8th St/L St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.295
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	12.5
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	29	29	0	0	0	0	0	0	0	0	21	21
Lanes:	1 0 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 1		
Volume Module:												
Base Vol:	111	389	0	0	0	0	0	0	0	0	850	335
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	111	389	0	0	0	0	0	0	0	0	850	335
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	111	389	0	0	0	0	0	0	0	0	850	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	389	0	0	0	0	0	0	0	0	850	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	111	389	0	0	0	0	0	0	0	0	850	335
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.78	0.78
Lanes:	1.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.87	1.13
Final Sat.:	1710	3249	0	0	0	0	0	0	0	0	4277	1686
Capacity Analysis Module:												
Vol/Sat:	0.06	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20
Crit Moves:	****										****	
Green/Cycle:	0.52	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38
Volume/Cap:	0.13	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.53
Delay/Veh:	7.3	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.6	14.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.3	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.6	14.6
HCM2k95th:	2	4	0	0	0	0	0	0	0	0	9	9

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Intersection #19 8th St/L St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.467
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	16.2
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	29	29	0	0	0	0	0	0	0	0	21	21
Lanes:	1 0 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 1		
Volume Module:												
Base Vol:	111	389	0	0	0	0	0	0	0	0	850	335
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	111	389	0	0	0	0	0	0	0	0	850	335
Added Vol:	80	68	0	0	0	0	0	0	0	0	374	249
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	191	457	0	0	0	0	0	0	0	0	1224	584
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	191	457	0	0	0	0	0	0	0	0	1224	584
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	191	457	0	0	0	0	0	0	0	0	1224	584
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	191	457	0	0	0	0	0	0	0	0	1224	584
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.78	0.78
Lanes:	1.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.71	1.29
Final Sat.:	1710	3249	0	0	0	0	0	0	0	0	4012	1914
Capacity Analysis Module:												
Vol/Sat:	0.11	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.31
Crit Moves:	****										****	
Green/Cycle:	0.52	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38
Volume/Cap:	0.22	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.81
Delay/Veh:	7.9	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.1	19.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.9	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.1	19.1
HCM2k95th:	4	5	0	0	0	0	0	0	0	0	17	17

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---------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
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---------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
*********************************************************************************
Intersection #20 9th St/I St
*********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.383
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):      13.9
Optimal Cycle:       62              Level Of Service:                  B
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0    0     0    0   22    22    0    0     0   28   28     0
Lanes:       0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0     0    0  523   234    0    0     0  238  868     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0     0    0  523   234    0    0     0  238  868     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0    0     0    0  523   234    0    0     0  238  868     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0     0    0  523   234    0    0     0  238  868     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0    0     0    0  523   234    0    0     0  238  868     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.78  0.78 1.00 1.00  1.00 0.90 0.82  1.00
Lanes:       0.00 0.00  0.00 0.00 2.07  0.93 0.00 0.00  0.00 1.00 3.00  0.00
Final Sat.:    0    0     0    0 3077  1377    0    0     0 1710 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.17  0.17 0.00 0.00  0.00 0.14 0.19  0.00
Crit Moves:                       ****                          ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.35  0.35 0.00 0.00  0.00 0.45 0.45  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.48  0.48 0.00 0.00  0.00 0.31 0.41  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 16.6  16.6  0.0  0.0   0.0 11.9 12.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 16.6  16.6  0.0  0.0   0.0 11.9 12.0   0.0
HCM2k95th:     0    0     0    0    9     9    0    0     0    6    8     0
*********************************************************************************
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---------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
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                               AM Peak Hour
---------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
*********************************************************************************
Intersection #20 9th St/I St
*********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.430
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):      14.1
Optimal Cycle:       62              Level Of Service:                  B
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0    0     0    0   22    22    0    0     0   28   28     0
Lanes:       0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0     0    0  523   234    0    0     0  238  868     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0     0    0  523   234    0    0     0  238  868     0
Added Vol:     0    0     0    0    5     0    0    0     0   63  144     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   0    0     0    0  528   234    0    0     0  301 1012     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0    0     0    0  528   234    0    0     0  301 1012     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0     0    0  528   234    0    0     0  301 1012     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0    0     0    0  528   234    0    0     0  301 1012     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.78  0.78 1.00 1.00  1.00 0.90 0.82  1.00
Lanes:       0.00 0.00  0.00 0.00 2.08  0.92 0.00 0.00  0.00 1.00 3.00  0.00
Final Sat.:    0    0     0    0 3086  1368    0    0     0 1710 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.17  0.17 0.00 0.00  0.00 0.18 0.22  0.00
Crit Moves:                       ****                          ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.35  0.35 0.00 0.00  0.00 0.45 0.45  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.48  0.48 0.00 0.00  0.00 0.39 0.48  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 16.6  16.6  0.0  0.0   0.0 12.8 12.7   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 16.6  16.6  0.0  0.0   0.0 12.8 12.7   0.0
HCM2k95th:     0    0     0    0    9     9    0    0     0    8    9     0
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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
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--------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #21 9th St/J St
********************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.596
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       21.0
Optimal Cycle:      106              Level Of Service:                  C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   40   40     0    0   60    60    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0   74  503     0    0 1659   337    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0   74  503     0    0 1659   337    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0   74  503     0    0 1659   337    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0   74  503     0    0 1659   337    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0   74  503     0    0 1659   337    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.82 0.82  1.00 1.00 0.80  0.80 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.38 2.62  0.00 0.00 2.49  0.51 0.00 0.00  0.00
Final Sat.:     0    0     0  599 4070     0    0 3783   768    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.12 0.12  0.00 0.00 0.44  0.44 0.00 0.00  0.00
Crit Moves:                  ****                 ****
Green/Cycle: 0.00 0.00  0.00 0.38 0.38  0.00 0.00 0.57  0.57 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.33 0.33  0.00 0.00 0.77  0.77 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 23.9 23.9   0.0  0.0 20.1  20.1  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 23.9 23.9   0.0  0.0 20.1  20.1  0.0  0.0   0.0
HCM2k95th:      0    0     0    9    9     0    0   28    28    0    0     0
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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
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                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #21 9th St/J St
********************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.702
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       27.4
Optimal Cycle:      106              Level Of Service:                  C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   40   40     0    0   60    60    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0   74  503     0    0 1659   337    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0   74  503     0    0 1659   337    0    0     0
Added Vol:      0    0     0    0   68     0    0  131   231    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0   74  571     0    0 1790   568    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0   74  571     0    0 1790   568    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0   74  571     0    0 1790   568    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0   74  571     0    0 1790   568    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.82 0.82  1.00 1.00 0.79  0.79 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.34 2.66  0.00 0.00 2.28  0.72 0.00 0.00  0.00
Final Sat.:     0    0     0  536 4133     0    0 3416  1084    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.14 0.14  0.00 0.00 0.52  0.52 0.00 0.00  0.00
Crit Moves:                  ****                 ****
Green/Cycle: 0.00 0.00  0.00 0.38 0.38  0.00 0.00 0.57  0.57 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.37 0.37  0.00 0.00 0.93  0.93 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 24.4 24.4   0.0  0.0 28.2  28.2  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 24.4 24.4   0.0  0.0 28.2  28.2  0.0  0.0   0.0
HCM2k95th:      0    0     0   10   10     0    0   41    41    0    0     0
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------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
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------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #22 9th St/L St
******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.314
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       10.4
Optimal Cycle:        56              Level Of Service:                 B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0   21    21     0    0     0    29   29     0
Lanes:        0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     0  406   156     0    0     0   264 1239     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0  406   156     0    0     0   264 1239     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     0  406   156     0    0     0   264 1239     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0     0  406   156     0    0     0   264 1239     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0     0     0  406   156     0    0     0   264 1239     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  1.00 0.78  0.78  1.00 1.00  1.00  0.90 0.82  1.00
Lanes:       0.00 0.00  0.00  0.00 2.17  0.83  0.00 0.00  0.00  1.00 3.00  0.00
Final Sat.:     0    0     0     0 3231  1241     0    0     0  1710 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.00 0.13  0.13  0.00 0.00  0.00  0.15 0.27  0.00
Crit Moves:                        ****                          ****
Green/Cycle: 0.00 0.00  0.00  0.00 0.38  0.38  0.00 0.00  0.00  0.52 0.52  0.00
Volume/Cap:  0.00 0.00  0.00  0.00 0.34  0.34  0.00 0.00  0.00  0.30 0.51  0.00
Delay/Veh:    0.0  0.0   0.0   0.0 13.0  13.0   0.0  0.0   0.0   8.6  9.6   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   0.0 13.0  13.0   0.0  0.0   0.0   8.6  9.6   0.0
HCM2k95th:      0    0     0     0    6     6     0    0     0     6    9     0
******************************************************************************
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------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
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------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #22 9th St/L St
******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.467
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       13.3
Optimal Cycle:        56              Level Of Service:                 B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0   21    21     0    0     0    29   29     0
Lanes:        0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     0  406   156     0    0     0   264 1239     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0  406   156     0    0     0   264 1239     0
Added Vol:      0    0     0     0   48   222     0    0     0     4  577     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     0  454   378     0    0     0   268 1816     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     0  454   378     0    0     0   268 1816     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0     0  454   378     0    0     0   268 1816     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0     0     0  454   378     0    0     0   268 1816     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  1.00 0.76  0.76  1.00 1.00  1.00  0.90 0.82  1.00
Lanes:       0.00 0.00  0.00  0.00 2.00  1.00  0.00 0.00  0.00  1.00 3.00  0.00
Final Sat.:     0    0     0     0 2901  1450     0    0     0  1710 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.00 0.16  0.26  0.00 0.00  0.00  0.16 0.39  0.00
Crit Moves:                              ****                    ****
Green/Cycle: 0.00 0.00  0.00  0.00 0.38  0.38  0.00 0.00  0.00  0.52 0.52  0.00
Volume/Cap:  0.00 0.00  0.00  0.00 0.42  0.70  0.00 0.00  0.00  0.30 0.75  0.00
Delay/Veh:    0.0  0.0   0.0   0.0 13.6  18.1   0.0  0.0   0.0   8.6 12.9   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   0.0 13.6  18.1   0.0  0.0   0.0   8.6 12.9   0.0
HCM2k95th:      0    0     0     0    7    13     0    0     0     6   15     0
******************************************************************************
```

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-------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2013 Cumulative Conditions
                               AM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
              2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #23 9th St/P St
*******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.385
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        9.5
Optimal Cycle:       26              Level Of Service:                  A
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0    0   10    0    0    0    0    0   10    0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0    0  720  199    0    0    0  153  655    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0    0    0    0  720  199    0    0    0  153  655    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0    0    0    0  720  199    0    0    0  153  655    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0    0    0    0  720  199    0    0    0  153  655    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0    0    0    0  720  199    0    0    0  153  655    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 1.00 0.88 0.88 1.00 1.00 1.00 0.91 0.91 1.00
Lanes:       0.00 0.00 0.00 0.00 2.35 0.65 0.00 0.00 0.00 0.57 2.43 0.00
Final Sat.:     0    0    0    0 3930 1086    0    0    0  982 4205    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.00 0.18 0.18 0.00 0.00 0.00 0.16 0.16 0.00
Crit Moves:                       ****                          ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.48 0.48 0.00 0.00 0.00 0.40 0.40 0.00
Volume/Cap:  0.00 0.00 0.00 0.00 0.39 0.39 0.00 0.00 0.00 0.39 0.39 0.00
Delay/Veh:    0.0  0.0  0.0  0.0  8.5  8.5  0.0  0.0  0.0 10.6 10.6  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  0.0  8.5  8.5  0.0  0.0  0.0 10.6 10.6  0.0
HCM2k95th:      0    0    0    0    7    7    0    0    0    6    6    0
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-------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2013 Cumulative Conditions
                               AM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #23 9th St/P St
*******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.424
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        9.7
Optimal Cycle:       26              Level Of Service:                  A
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0    0   10    0    0    0    0    0   10    0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0    0  720  199    0    0    0  153  655    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0    0    0    0  720  199    0    0    0  153  655    0
Added Vol:      0    0    0    0   74    2    0    0    0    0  103    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:    0    0    0    0  794  201    0    0    0  153  758    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0    0    0    0  794  201    0    0    0  153  758    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0    0    0    0  794  201    0    0    0  153  758    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0    0    0    0  794  201    0    0    0  153  758    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 1.00 0.88 0.88 1.00 1.00 1.00 0.91 0.91 1.00
Lanes:       0.00 0.00 0.00 0.00 2.39 0.61 0.00 0.00 0.00 0.50 2.50 0.00
Final Sat.:     0    0    0    0 4015 1016    0    0    0  871 4316    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.00 0.20 0.20 0.00 0.00 0.00 0.18 0.18 0.00
Crit Moves:                       ****                          ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.47 0.47 0.00 0.00 0.00 0.41 0.41 0.00
Volume/Cap:  0.00 0.00 0.00 0.00 0.42 0.42 0.00 0.00 0.00 0.42 0.42 0.00
Delay/Veh:    0.0  0.0  0.0  0.0  9.0  9.0  0.0  0.0  0.0 10.6 10.6  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  0.0  9.0  9.0  0.0  0.0  0.0 10.6 10.6  0.0
HCM2k95th:      0    0    0    0    8    8    0    0    0    7    7    0
*******************************************************************************
```

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--------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
              2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #24 9th St/Q St
********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.524
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       12.1
Optimal Cycle:       56              Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   25   25     0    0   25    25    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  3  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  181  685     0    0 1528   479    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  181  685     0    0 1528   479    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  181  685     0    0 1528   479    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  181  685     0    0 1528   479    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  181  685     0    0 1528   479    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.88  0.88 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.63 2.37  0.00 0.00 3.05  0.95 0.00 0.00  0.00
Final Sat.:     0    0     0 1084 4103     0    0 5076  1591    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.17 0.17  0.00 0.00 0.30  0.30 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.37 0.37  0.00 0.00 0.67  0.67 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 10.4 10.4   0.0  0.0 12.9  12.9  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 10.4 10.4   0.0  0.0 12.9  12.9  0.0  0.0   0.0
HCM2k95th:      0    0     0    6    6     0    0   15    15    0    0     0
********************************************************************************
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--------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #24 9th St/Q St
********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.540
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       12.2
Optimal Cycle:       56              Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   25   25     0    0   25    25    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  3  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  181  685     0    0 1528   479    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  181  685     0    0 1528   479    0    0     0
Added Vol:      0    0     0    9   65     0    0    2     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0  190  750     0    0 1530   479    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  190  750     0    0 1530   479    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  190  750     0    0 1530   479    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  190  750     0    0 1530   479    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.88  0.88 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.61 2.39  0.00 0.00 3.05  0.95 0.00 0.00  0.00
Final Sat.:     0    0     0 1048 4139     0    0 5077  1590    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.18 0.18  0.00 0.00 0.30  0.30 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.41 0.41  0.00 0.00 0.67  0.67 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 10.6 10.6   0.0  0.0 12.9  12.9  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 10.6 10.6   0.0  0.0 12.9  12.9  0.0  0.0   0.0
HCM2k95th:      0    0     0    7    7     0    0   15    15    0    0     0
********************************************************************************
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Downtown Sacramento Traffic Study
2013 Cumulative Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 10th St/I St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.474
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	15.0
Optimal Cycle:	62	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	26	26	0	0	0	0	0	0	0	0	24	24
Lanes:	0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	176	548	0	0	0	0	0	0	0	0	888	151
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	176	548	0	0	0	0	0	0	0	0	888	151
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	176	548	0	0	0	0	0	0	0	0	888	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	548	0	0	0	0	0	0	0	0	888	151
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	176	548	0	0	0	0	0	0	0	0	888	151
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.80
Lanes:	0.73	2.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.56	0.44
Final Sat.:	1135	3533	0	0	0	0	0	0	0	0	3902	664
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.23
Crit Moves:	****										****	
Green/Cycle:	0.42	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.39
Volume/Cap:	0.37	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.59
Delay/Veh:	12.9	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.5	16.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.9	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.5	16.5
HCM2k95th:	7	7	0	0	0	0	0	0	0	0	12	12

Downtown Sacramento Traffic Study
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AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #25 10th St/I St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.532
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	15.9
Optimal Cycle:	62	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	26	26	0	0	0	0	0	0	0	0	24	24
Lanes:	0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	176	548	0	0	0	0	0	0	0	0	888	151
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	176	548	0	0	0	0	0	0	0	0	888	151
Added Vol:	62	10	0	0	0	0	0	0	0	0	146	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	238	558	0	0	0	0	0	0	0	0	1034	151
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	238	558	0	0	0	0	0	0	0	0	1034	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	238	558	0	0	0	0	0	0	0	0	1034	151
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	238	558	0	0	0	0	0	0	0	0	1034	151
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.80
Lanes:	0.90	2.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.62	0.38
Final Sat.:	1396	3273	0	0	0	0	0	0	0	0	3996	584
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.26
Crit Moves:	****										****	
Green/Cycle:	0.42	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.39
Volume/Cap:	0.41	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.67
Delay/Veh:	13.2	13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.7	17.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.2	13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.7	17.7
HCM2k95th:	8	8	0	0	0	0	0	0	0	0	14	14

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2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 10th St/J St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.577
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 23.1
Optimal Cycle: 112 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	40	40	0	0	0	60	60	0	0	0	0
Lanes:		0 0 2 1 1			0 0 0 0 0			0 1 2 0 0			0 0 0 0 0	
Volume Module:												
Base Vol:	0	586	230	0	0	0	382	1386	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	586	230	0	0	0	382	1386	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	586	230	0	0	0	382	1386	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	586	230	0	0	0	382	1386	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	586	230	0	0	0	382	1386	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.78	0.78	1.00	1.00	1.00	0.82	0.82	1.00	1.00	1.00	1.00
Lanes:	0.00	2.87	1.13	0.00	0.00	0.00	0.65	2.35	0.00	0.00	0.00	0.00
Final Sat.:	0	4282	1681	0	0	0	1009	3660	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.14	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.36	0.36	0.00	0.00	0.00	0.54	0.54	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.38	0.38	0.00	0.00	0.00	0.71	0.71	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	27.3	27.3	0.0	0.0	0.0	21.1	21.1	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	27.3	27.3	0.0	0.0	0.0	21.1	21.1	0.0	0.0	0.0	0.0
HCM2k95th:	0	10	10	0	0	0	25	25	0	0	0	0

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Intersection #26 10th St/J St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.607
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 24.0
Optimal Cycle: 112 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	40	40	0	0	0	60	60	0	0	0	0
Lanes:		0 0 2 1 1			0 0 0 0 0			0 1 2 0 0			0 0 0 0 0	
Volume Module:												
Base Vol:	0	586	230	0	0	0	382	1386	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	586	230	0	0	0	382	1386	0	0	0	0
Added Vol:	0	-11	0	0	0	0	-3	135	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	575	230	0	0	0	379	1521	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	575	230	0	0	0	379	1521	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	575	230	0	0	0	379	1521	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	575	230	0	0	0	379	1521	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.78	0.78	1.00	1.00	1.00	0.82	0.82	1.00	1.00	1.00	1.00
Lanes:	0.00	2.86	1.14	0.00	0.00	0.00	0.60	2.40	0.00	0.00	0.00	0.00
Final Sat.:	0	4255	1702	0	0	0	931	3737	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.14	0.00	0.00	0.00	0.41	0.41	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.36	0.36	0.00	0.00	0.00	0.54	0.54	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.38	0.38	0.00	0.00	0.00	0.76	0.76	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	27.3	27.3	0.0	0.0	0.0	22.6	22.6	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	27.3	27.3	0.0	0.0	0.0	22.6	22.6	0.0	0.0	0.0	0.0
HCM2k95th:	0	10	10	0	0	0	27	27	0	0	0	0

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-------------------------------------------------------------------------------
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-------------------------------------------------------------------------------
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           2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #27 10th St/L St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.644
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        13.3
Optimal Cycle:        56               Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    21   21    0    0    0    0    0    0    0    0   29   29
Lanes:        0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     298  828    0    0    0    0    0    0    0    0 1236  280
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:  298  828    0    0    0    0    0    0    0    0 1236  280
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:   298  828    0    0    0    0    0    0    0    0 1236  280
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  298  828    0    0    0    0    0    0    0    0 1236  280
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:   298  828    0    0    0    0    0    0    0    0 1236  280
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  0.82 0.82 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 0.80 0.80
Lanes:       0.79 2.21 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 2.45 0.55
Final Sat.:  1235 3433    0    0    0    0    0    0    0    0 3700  838
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.24 0.24 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.33 0.33
Crit Moves:  ****                                                  ****
Green/Cycle: 0.38 0.38 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.52 0.52
Volume/Cap:  0.64 0.64 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.65 0.65
Delay/Veh:   16.2 16.2  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0 11.2 11.2
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:  16.2 16.2  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0 11.2 11.2
HCM2k95th:     12   12    0    0    0    0    0    0    0    0   14   14
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-------------------------------------------------------------------------------
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-------------------------------------------------------------------------------
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*******************************************************************************
Intersection #27 10th St/L St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.807
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        16.0
Optimal Cycle:        56               Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    21   21    0    0    0    0    0    0    0    0   29   29
Lanes:        0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     298  828    0    0    0    0    0    0    0    0 1236  280
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:  298  828    0    0    0    0    0    0    0    0 1236  280
Added Vol:    166    1    0    0    0    0    0    0    0    0  414   -2
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:  464  829    0    0    0    0    0    0    0    0 1650  278
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:   464  829    0    0    0    0    0    0    0    0 1650  278
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  464  829    0    0    0    0    0    0    0    0 1650  278
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:   464  829    0    0    0    0    0    0    0    0 1650  278
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  0.82 0.82 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 0.80 0.80
Lanes:       1.00 2.00 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 2.57 0.43
Final Sat.:  1556 3112    0    0    0    0    0    0    0    0 3907  658
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.30 0.27 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.42 0.42
Crit Moves:  ****                                                  ****
Green/Cycle: 0.38 0.38 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.52 0.52
Volume/Cap:  0.80 0.71 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.82 0.82
Delay/Veh:   19.7 17.3  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0 14.5 14.5
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:  19.7 17.3  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0 14.5 14.5
HCM2k95th:     17   14    0    0    0    0    0    0    0    0   20   20
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Intersection #28 10th St/P St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.567
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	12.9
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	0	0	0	0	0	0	25	25
Lanes:	0 1	2	0 0	0 0	0	0 0	0 0	0	0 0	0 0	2	1 0
Volume Module:												
Base Vol:	168	1545	0	0	0	0	0	0	0	0	628	246
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	168	1545	0	0	0	0	0	0	0	0	628	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	168	1545	0	0	0	0	0	0	0	0	628	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	168	1545	0	0	0	0	0	0	0	0	628	246
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	168	1545	0	0	0	0	0	0	0	0	628	246
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	0.87
Lanes:	0.29	2.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.16	0.84
Final Sat.:	509	4678	0	0	0	0	0	0	0	0	3571	1399
Capacity Analysis Module:												
Vol/Sat:	0.33	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18
Crit Moves:	****										****	
Green/Cycle:	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Volume/Cap:	0.74	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.39
Delay/Veh:	14.1	14.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5	10.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.1	14.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5	10.5
HCM2k95th:	16	16	0	0	0	0	0	0	0	0	7	7

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Intersection #28 10th St/P St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.620
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	14.6
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	0	0	0	0	0	0	25	25
Lanes:	0 1	2	0 0	0 0	0	0 0	0 0	0	0 0	0 0	2	1 0
Volume Module:												
Base Vol:	168	1545	0	0	0	0	0	0	0	0	628	246
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	168	1545	0	0	0	0	0	0	0	0	628	246
Added Vol:	90	131	0	0	0	0	0	0	0	0	12	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	258	1676	0	0	0	0	0	0	0	0	640	255
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	258	1676	0	0	0	0	0	0	0	0	640	255
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	258	1676	0	0	0	0	0	0	0	0	640	255
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	258	1676	0	0	0	0	0	0	0	0	640	255
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	0.87
Lanes:	0.40	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.15	0.85
Final Sat.:	692	4495	0	0	0	0	0	0	0	0	3550	1414
Capacity Analysis Module:												
Vol/Sat:	0.37	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18
Crit Moves:	****										****	
Green/Cycle:	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Volume/Cap:	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.40
Delay/Veh:	16.5	16.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	10.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.5	16.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	10.6
HCM2k95th:	19	19	0	0	0	0	0	0	0	0	7	7

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #29 10th St/Q St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.537
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	11.5
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	25	25	0	0	0	25	25	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	1103	178	0	0	0	401	1168	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1103	178	0	0	0	401	1168	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1103	178	0	0	0	401	1168	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1103	178	0	0	0	401	1168	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1103	178	0	0	0	401	1168	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.89	0.89	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.58	0.42	0.00	0.00	0.00	1.02	2.98	0.00	0.00	0.00	0.00
Final Sat.:	0	4372	706	0	0	0	1768	5148	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.57	0.57	0.00	0.00	0.00	0.51	0.51	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	11.8	11.8	0.0	0.0	0.0	11.2	11.2	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	11.8	11.8	0.0	0.0	0.0	11.2	11.2	0.0	0.0	0.0	0.0
HCM2k95th:	0	12	12	0	0	0	9	9	0	0	0	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #29 10th St/Q St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.586
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	12.1
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	25	25	0	0	0	25	25	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	1103	178	0	0	0	401	1168	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1103	178	0	0	0	401	1168	0	0	0	0
Added Vol:	0	221	0	0	0	0	0	10	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1324	178	0	0	0	401	1178	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1324	178	0	0	0	401	1178	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1324	178	0	0	0	401	1178	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1324	178	0	0	0	401	1178	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.89	0.89	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.64	0.36	0.00	0.00	0.00	1.02	2.98	0.00	0.00	0.00	0.00
Final Sat.:	0	4490	604	0	0	0	1756	5160	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.29	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.66	0.66	0.00	0.00	0.00	0.51	0.51	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	12.9	12.9	0.0	0.0	0.0	11.3	11.3	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.9	12.9	0.0	0.0	0.0	11.3	11.3	0.0	0.0	0.0	0.0
HCM2k95th:	0	15	15	0	0	0	9	9	0	0	0	0

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-------------------------------------------------------------------------------
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                     Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #30 12th St/H St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.496
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       17.6
Optimal Cycle:        66               Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   27   27     0    0   33    33    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  288 1415     0    0  569    59    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  288 1415     0    0  569    59    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  288 1415     0    0  569    59    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  288 1415     0    0  569    59    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  288 1415     0    0  569    59    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.90  0.90 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.51 2.49  0.00 0.00 2.72  0.28 0.00 0.00  0.00
Final Sat.:     0    0     0  877 4310     0    0 4634   480    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.33 0.33  0.00 0.00 0.12  0.12 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.41 0.41  0.00 0.00 0.50  0.50 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.80 0.80  0.00 0.00 0.25  0.25 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 20.5 20.5   0.0  0.0  9.6   9.6  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 20.5 20.5   0.0  0.0  9.6   9.6  0.0  0.0   0.0
HCM2k95th:      0    0     0   21   21     0    0    6     6    0    0     0
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-------------------------------------------------------------------------------
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                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #30 12th St/H St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.527
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       19.2
Optimal Cycle:        66               Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   27   27     0    0   33    33    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  288 1415     0    0  569    59    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  288 1415     0    0  569    59    0    0     0
Added Vol:      0    0     0    0  123     0    0   12     9    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0  288 1538     0    0  581    68    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  288 1538     0    0  581    68    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  288 1538     0    0  581    68    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  288 1538     0    0  581    68    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.90  0.90 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.47 2.53  0.00 0.00 2.69  0.31 0.00 0.00  0.00
Final Sat.:     0    0     0  818 4369     0    0 4569   535    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.35 0.35  0.00 0.00 0.13  0.13 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.41 0.41  0.00 0.00 0.50  0.50 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.86 0.86  0.00 0.00 0.25  0.25 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 22.6 22.6   0.0  0.0  9.7   9.7  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 22.6 22.6   0.0  0.0  9.7   9.7  0.0  0.0   0.0
HCM2k95th:      0    0     0   24   24     0    0    6     6    0    0     0
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-----------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
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-----------------------------------------------------------------------------
                    Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #31 12th St/I St
*****************************************************************************
Cycle (sec):          0                Critical Vol./Cap. (X):        0.569
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):         6.9
Optimal Cycle:       25                Level Of Service:                  A
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:         Include          Include          Include          Include
Min. Green:    0    0    0     0    7    7     0    0    0     3    7    0
Lanes:       0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0    0     0  859  464     0    0    0    61  712    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   0    0    0     0  859  464     0    0    0    61  712    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    0    0    0     0  859  464     0    0    0    61  712    0
Reduct Vol:    0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   0    0    0     0  859  464     0    0    0    61  712    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:    0    0    0     0  859  464     0    0    0    61  712    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  1.00 0.86 0.86  1.00 1.00 1.00  0.91 0.91 1.00
Lanes:       0.00 0.00 0.00  0.00 2.00 1.00  0.00 0.00 0.00  0.24 2.76 0.00
Final Sat.:    0    0    0     0 3275 1637     0    0    0   409 4778    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.00 0.26 0.28  0.00 0.00 0.00  0.15 0.15 0.00
Crit Moves:                            ****                        ****
Green/Cycle: 0.00 0.00 0.00  0.00 0.48 0.48  0.00 0.00 0.00  0.28 0.28 0.00
Volume/Cap:  0.00 0.00 0.00  0.00 0.55 0.59  0.00 0.00 0.00  0.53 0.53 0.00
Delay/Veh:    0.0  0.0  0.0   0.0  5.5  5.9   0.0  0.0  0.0   9.0  9.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0   0.0  5.5  5.9   0.0  0.0  0.0   9.0  9.0  0.0
HCM2k95th:     0    0    0     0    7    8     0    0    0     6    6    0
*****************************************************************************
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-----------------------------------------------------------------------------
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-----------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*****************************************************************************
Intersection #31 12th St/I St
*****************************************************************************
Cycle (sec):          0                Critical Vol./Cap. (X):        0.589
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):         7.3
Optimal Cycle:       26                Level Of Service:                  A
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:         Include          Include          Include          Include
Min. Green:    0    0    0     0    7    7     0    0    0     3    7    0
Lanes:       0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0    0     0  859  464     0    0    0    61  712    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   0    0    0     0  859  464     0    0    0    61  712    0
Added Vol:     0    0    0     0  116   -7     0    0    0     3   68    0
PasserByVol:   0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:   0    0    0     0  975  457     0    0    0    64  780    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    0    0    0     0  975  457     0    0    0    64  780    0
Reduct Vol:    0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   0    0    0     0  975  457     0    0    0    64  780    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:    0    0    0     0  975  457     0    0    0    64  780    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  1.00 0.87 0.87  1.00 1.00 1.00  0.91 0.91 1.00
Lanes:       0.00 0.00 0.00  0.00 2.04 0.96  0.00 0.00 0.00  0.23 2.77 0.00
Final Sat.:    0    0    0     0 3362 1576     0    0    0   393 4794    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.00 0.29 0.29  0.00 0.00 0.00  0.16 0.16 0.00
Crit Moves:                       ****                             ****
Green/Cycle: 0.00 0.00 0.00  0.00 0.49 0.49  0.00 0.00 0.00  0.28 0.28 0.00
Volume/Cap:  0.00 0.00 0.00  0.00 0.59 0.59  0.00 0.00 0.00  0.59 0.59 0.00
Delay/Veh:    0.0  0.0  0.0   0.0  5.8  5.8   0.0  0.0  0.0   9.9  9.9  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0   0.0  5.8  5.8   0.0  0.0  0.0   9.9  9.9  0.0
HCM2k95th:     0    0    0     0    8    8     0    0    0     7    7    0
*****************************************************************************
```

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--------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
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                               AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #32 12th St/J St
********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.610
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       18.8
Optimal Cycle:       56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0     0    31    31    31    31     0    19    19     0     0     0
Lanes:       0  0  0  0  1    1  0  2  0  0    0  0  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0     0   114   346   549     0     0  1424   149     0     0     0
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   0     0   114   346   549     0     0  1424   149     0     0     0
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    0     0   114   346   549     0     0  1424   149     0     0     0
Reduct Vol:    0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   0     0   114   346   549     0     0  1424   149     0     0     0
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Final Vol.:    0     0   114   346   549     0     0  1424   149     0     0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900  1900  1900  1900  1900  1900  1900  1900  1900  1900  1900  1900
Adjustment:  1.00  1.00  0.87  0.77  0.95  1.00  1.00  0.90  0.90  1.00  1.00  1.00
Lanes:       0.00  0.00  1.00  1.00  2.00  0.00  0.00  2.72  0.28  0.00  0.00  0.00
Final Sat.:    0     0  1644  1461  3610     0     0  4630   484     0     0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00  0.00  0.07  0.24  0.15  0.00  0.00  0.31  0.31  0.00  0.00  0.00
Crit Moves:                    ****                    ****
Green/Cycle: 0.00  0.00  0.55  0.55  0.55  0.00  0.00  0.34  0.34  0.00  0.00  0.00
Volume/Cap:  0.00  0.00  0.13  0.43  0.27  0.00  0.00  0.91  0.91  0.00  0.00  0.00
Delay/Veh:    0.0   0.0   6.3   9.0   6.9   0.0   0.0  26.0  26.0   0.0   0.0   0.0
User DelAdj: 1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
AdjDel/Veh:   0.0   0.0   6.3   9.0   6.9   0.0   0.0  26.0  26.0   0.0   0.0   0.0
HCM2k95th:     0     0     2     9     6     0     0    22    22     0     0     0
********************************************************************************
```



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--------------------------------------------------------------------------------
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--------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #32 12th St/J St
********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.655
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       31.5
Optimal Cycle:       56              Level Of Service:                  C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0     0    31    31    31    31     0    19    19     0     0     0
Lanes:       0  0  0  0  1    1  0  2  0  0    0  0  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0     0   114   346   549     0     0  1424   149     0     0     0
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   0     0   114   346   549     0     0  1424   149     0     0     0
Added Vol:     0     0     0     0   119     0     0   186    19     0     0     0
PasserByVol:   0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:   0     0   114   346   668     0     0  1610   168     0     0     0
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    0     0   114   346   668     0     0  1610   168     0     0     0
Reduct Vol:    0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   0     0   114   346   668     0     0  1610   168     0     0     0
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Final Vol.:    0     0   114   346   668     0     0  1610   168     0     0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900  1900  1900  1900  1900  1900  1900  1900  1900  1900  1900  1900
Adjustment:  1.00  1.00  0.87  0.77  0.95  1.00  1.00  0.90  0.90  1.00  1.00  1.00
Lanes:       0.00  0.00  1.00  1.00  2.00  0.00  0.00  2.72  0.28  0.00  0.00  0.00
Final Sat.:    0     0  1644  1461  3610     0     0  4631   483     0     0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00  0.00  0.07  0.24  0.19  0.00  0.00  0.35  0.35  0.00  0.00  0.00
Crit Moves:                    ****                    ****
Green/Cycle: 0.00  0.00  0.55  0.55  0.55  0.00  0.00  0.34  0.34  0.00  0.00  0.00
Volume/Cap:  0.00  0.00  0.13  0.43  0.33  0.00  0.00  1.02  1.02  0.00  0.00  0.00
Delay/Veh:    0.0   0.0   6.3   9.0   7.3   0.0   0.0  46.6  46.6   0.0   0.0   0.0
User DelAdj: 1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
AdjDel/Veh:   0.0   0.0   6.3   9.0   7.3   0.0   0.0  46.6  46.6   0.0   0.0   0.0
HCM2k95th:     0     0     2     9     7     0     0    30    30     0     0     0
********************************************************************************
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 12th St/L St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.474
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	13.3
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Permitted			Permitted			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	25	25	0	0	25	25	0	0	0	25	25	25
Lanes:		0 1 0 0 0			0 0 0 1 1			0 0 0 0 0			0 1 1 1 0	
Volume Module:												
Base Vol:	5	1	0	0	1	595	0	0	0	3	913	162
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	1	0	0	1	595	0	0	0	3	913	162
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	1	0	0	1	595	0	0	0	3	913	162
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	1	0	0	1	595	0	0	0	3	913	162
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	1	0	0	1	595	0	0	0	3	913	162
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	1.00	1.00	0.85	0.85	1.00	1.00	1.00	0.87	0.87	0.87
Lanes:	0.83	0.17	0.00	0.00	0.01	1.99	0.00	0.00	0.00	0.01	2.54	0.45
Final Sat.:	1454	291	0	0	5	3225	0	0	0	14	4202	746
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.18	0.18	0.00	0.00	0.00	0.22	0.22	0.22
Crit Moves:					****					****		
Green/Cycle:	0.42	0.42	0.00	0.00	0.42	0.42	0.00	0.00	0.00	0.42	0.42	0.42
Volume/Cap:	0.01	0.01	0.00	0.00	0.44	0.44	0.00	0.00	0.00	0.51	0.51	0.51
Delay/Veh:	9.9	9.9	0.0	0.0	13.0	13.0	0.0	0.0	0.0	13.4	13.4	13.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.9	9.9	0.0	0.0	13.0	13.0	0.0	0.0	0.0	13.4	13.4	13.4
HCM2k95th:	0	0	0	0	8	8	0	0	0	10	10	10

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #33 12th St/L St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.587
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	14.6
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Permitted			Permitted			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	25	25	0	0	25	25	0	0	0	25	25	25
Lanes:		0 1 0 0 0			0 0 0 1 1			0 0 0 0 0			0 1 1 1 0	
Volume Module:												
Base Vol:	5	1	0	0	1	595	0	0	0	3	913	162
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	1	0	0	1	595	0	0	0	3	913	162
Added Vol:	0	0	0	0	0	138	0	0	0	0	275	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	1	0	0	1	733	0	0	0	3	1188	162
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	1	0	0	1	733	0	0	0	3	1188	162
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	1	0	0	1	733	0	0	0	3	1188	162
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	1	0	0	1	733	0	0	0	3	1188	162
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	1.00	1.00	0.85	0.85	1.00	1.00	1.00	0.88	0.88	0.88
Lanes:	0.83	0.17	0.00	0.00	0.01	1.99	0.00	0.00	0.00	0.01	2.63	0.36
Final Sat.:	1454	291	0	0	4	3226	0	0	0	11	4392	599
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.00	0.27	0.27	0.27
Crit Moves:					****					****		
Green/Cycle:	0.42	0.42	0.00	0.00	0.42	0.42	0.00	0.00	0.00	0.42	0.42	0.42
Volume/Cap:	0.01	0.01	0.00	0.00	0.54	0.54	0.00	0.00	0.00	0.64	0.64	0.64
Delay/Veh:	9.9	9.9	0.0	0.0	14.2	14.2	0.0	0.0	0.0	14.9	14.9	14.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.9	9.9	0.0	0.0	14.2	14.2	0.0	0.0	0.0	14.9	14.9	14.9
HCM2k95th:	0	0	0	0	10	10	0	0	0	12	12	12

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--------------------------------------------------------------------------------
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--------------------------------------------------------------------------------
                   Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #34 15th St/H St
********************************************************************************
Cycle (sec):         50             Critical Vol./Cap. (X):        0.310
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      9.9
Optimal Cycle:       56             Level Of Service:                 A
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0    25   25    0     0   25   25     0    0    0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0    39  625    0     0  396  242     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0    39  625    0     0  396  242     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0    39  625    0     0  396  242     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0    39  625    0     0  396  242     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0    39  625    0     0  396  242     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.91 0.91 1.00  1.00 0.86 0.86  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  0.18 2.82 0.00  0.00 2.00 1.00  0.00 0.00 0.00
Final Sat.:     0    0    0   305 4882    0     0 3261 1630     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.13 0.13 0.00  0.00 0.12 0.15  0.00 0.00 0.00
Crit Moves:                  ****                       ****
Green/Cycle: 0.00 0.00 0.00  0.45 0.45 0.00  0.00 0.45 0.45  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.29 0.29 0.00  0.00 0.27 0.33  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0   9.9  9.9  0.0   0.0  9.8 10.2   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0   9.9  9.9  0.0   0.0  9.8 10.2   0.0  0.0  0.0
HCM2k95th:      0    0    0     5    5    0     0    5    6     0    0    0
********************************************************************************
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--------------------------------------------------------------------------------
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         2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #34 15th St/H St
********************************************************************************
Cycle (sec):         50             Critical Vol./Cap. (X):        0.309
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):     10.0
Optimal Cycle:       56             Level Of Service:                 A
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0    25   25    0     0   25   25     0    0    0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0    39  625    0     0  396  242     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0    39  625    0     0  396  242     0    0    0
Added Vol:      0    0    0     0    0    0     0   20    0     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    0    0    0    39  625    0     0  416  242     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0    39  625    0     0  416  242     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0    39  625    0     0  416  242     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0    39  625    0     0  416  242     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.91 0.91 1.00  1.00 0.86 0.86  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  0.18 2.82 0.00  0.00 2.00 1.00  0.00 0.00 0.00
Final Sat.:     0    0    0   305 4882    0     0 3268 1634     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.13 0.13 0.00  0.00 0.13 0.15  0.00 0.00 0.00
Crit Moves:                  ****                       ****
Green/Cycle: 0.00 0.00 0.00  0.45 0.45 0.00  0.00 0.45 0.45  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.29 0.29 0.00  0.00 0.29 0.33  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0   9.9  9.9  0.0   0.0  9.9 10.2   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0   9.9  9.9  0.0   0.0  9.9 10.2   0.0  0.0  0.0
HCM2k95th:      0    0    0     5    5    0     0    5    6     0    0    0
********************************************************************************
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Downtown Sacramento Traffic Study
2013 Cumulative Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 15th St/J St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.488
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	11.6
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	25	25	0	0	25	25	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	0	0	197	638	0	0	990	375	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	197	638	0	0	990	375	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	197	638	0	0	990	375	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	197	638	0	0	990	375	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	197	638	0	0	990	375	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.87	0.87	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.71	2.29	0.00	0.00	2.18	0.82	0.00	0.00	0.00
Final Sat.:	0	0	0	1224	3963	0	0	3608	1367	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.16	0.00	0.00	0.27	0.27	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.45	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.36	0.36	0.00	0.00	0.61	0.61	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	10.3	10.3	0.0	0.0	12.3	12.3	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	10.3	10.3	0.0	0.0	12.3	12.3	0.0	0.0	0.0
HCM2k95th:	0	0	0	7	7	0	0	13	13	0	0	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #35 15th St/J St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.526
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	12.3
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	25	25	0	0	25	25	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	0	0	197	638	0	0	990	375	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	197	638	0	0	990	375	0	0	0
Added Vol:	0	0	0	0	0	0	0	109	59	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	197	638	0	0	1099	434	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	197	638	0	0	1099	434	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	197	638	0	0	1099	434	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	197	638	0	0	1099	434	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.87	0.87	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.71	2.29	0.00	0.00	2.15	0.85	0.00	0.00	0.00
Final Sat.:	0	0	0	1224	3963	0	0	3562	1407	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.16	0.00	0.00	0.31	0.31	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.45	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.36	0.36	0.00	0.00	0.69	0.69	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	10.3	10.3	0.0	0.0	13.4	13.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	10.3	10.3	0.0	0.0	13.4	13.4	0.0	0.0	0.0
HCM2k95th:	0	0	0	7	7	0	0	16	16	0	0	0

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--------------------------------------------------------------------------------
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--------------------------------------------------------------------------------
                   Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #36 15th St/L St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):         0.435
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        11.5
Optimal Cycle:        56               Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0     0    0   30    30    0    0     0   20   20     0
Lanes:       0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0     0    0  677   243    0    0     0   59  999     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0     0    0  677   243    0    0     0   59  999     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0    0     0    0  677   243    0    0     0   59  999     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0     0    0  677   243    0    0     0   59  999     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0    0     0    0  677   243    0    0     0   59  999     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.87  0.87 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 2.21  0.79 0.00 0.00  0.00 0.17 2.83  0.00
Final Sat.:    0    0     0    0 3664  1315    0    0     0  289 4898     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.18  0.18 0.00 0.00  0.00 0.20 0.20  0.00
Crit Moves:                       ****                        ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.54  0.54 0.00 0.00  0.00 0.36 0.36  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.34  0.34 0.00 0.00  0.00 0.57 0.57  0.00
Delay/Veh:    0.0  0.0   0.0  0.0  7.5   7.5  0.0  0.0   0.0 15.0 15.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0  7.5   7.5  0.0  0.0   0.0 15.0 15.0   0.0
HCM2k95th:     0    0     0    0    6     6    0    0     0   10   10     0
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--------------------------------------------------------------------------------
                   Level Of Service Computation Report
         2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #36 15th St/L St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):         0.507
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        13.0
Optimal Cycle:        56               Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0     0    0   30    30    0    0     0   20   20     0
Lanes:       0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0     0    0  677   243    0    0     0   59  999     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0     0    0  677   243    0    0     0   59  999     0
Added Vol:     0    0     0    0   59     0    0    0     0    0  275     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   0    0     0    0  736   243    0    0     0   59 1274     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0    0     0    0  736   243    0    0     0   59 1274     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0     0    0  736   243    0    0     0   59 1274     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0    0     0    0  736   243    0    0     0   59 1274     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.88  0.88 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 2.26  0.74 0.00 0.00  0.00 0.13 2.87  0.00
Final Sat.:    0    0     0    0 3755  1240    0    0     0  230 4957     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.20  0.20 0.00 0.00  0.00 0.26 0.26  0.00
Crit Moves:                       ****                        ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.54  0.54 0.00 0.00  0.00 0.36 0.36  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.37  0.37 0.00 0.00  0.00 0.72 0.72  0.00
Delay/Veh:    0.0  0.0   0.0  0.0  7.6   7.6  0.0  0.0   0.0 17.0 17.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0  7.6   7.6  0.0  0.0   0.0 17.0 17.0   0.0
HCM2k95th:     0    0     0    0    7     7    0    0     0   13   13     0
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--------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
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                                 AM Peak Hour
--------------------------------------------------------------------------------
                        Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #37 15th St/P St
********************************************************************************
Cycle (sec):         50               Critical Vol./Cap. (X):        0.429
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        11.7
Optimal Cycle:       56               Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0    0   28   28    0    0    0   22   22    0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0    0  571  185    0    0    0  107 1096    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0    0    0    0  571  185    0    0    0  107 1096    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0    0    0    0  571  185    0    0    0  107 1096    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0    0    0    0  571  185    0    0    0  107 1096    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0    0    0    0  571  185    0    0    0  107 1096    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 1.00 0.88 0.88 1.00 1.00 1.00 0.91 0.91 1.00
Lanes:       0.00 0.00 0.00 0.00 2.27 0.73 0.00 0.00 0.00 0.27 2.73 0.00
Final Sat.:     0    0    0    0 3773 1222    0    0    0  461 4726    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.00 0.15 0.15 0.00 0.00 0.00 0.23 0.23 0.00
Crit Moves:                       ****                          ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.50 0.50 0.00 0.00 0.00 0.39 0.39 0.00
Volume/Cap:  0.00 0.00 0.00 0.00 0.30 0.30 0.00 0.00 0.00 0.59 0.59 0.00
Delay/Veh:    0.0  0.0  0.0  0.0  8.3  8.3  0.0  0.0  0.0 13.9 13.9  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  0.0  8.3  8.3  0.0  0.0  0.0 13.9 13.9  0.0
HCM2k95th:      0    0    0    0    6    6    0    0    0   10   10    0
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--------------------------------------------------------------------------------
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--------------------------------------------------------------------------------
                        Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #37 15th St/P St
********************************************************************************
Cycle (sec):         50               Critical Vol./Cap. (X):        0.451
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        11.8
Optimal Cycle:       56               Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0    0   28   28    0    0    0   22   22    0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0    0  571  185    0    0    0  107 1096    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0    0    0    0  571  185    0    0    0  107 1096    0
Added Vol:      0    0    0    0   81    0    0    0    0    0   22    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:    0    0    0    0  652  185    0    0    0  107 1118    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0    0    0    0  652  185    0    0    0  107 1118    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0    0    0    0  652  185    0    0    0  107 1118    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0    0    0    0  652  185    0    0    0  107 1118    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 1.00 0.88 0.88 1.00 1.00 1.00 0.91 0.91 1.00
Lanes:       0.00 0.00 0.00 0.00 2.34 0.66 0.00 0.00 0.00 0.26 2.74 0.00
Final Sat.:     0    0    0    0 3907 1109    0    0    0  453 4734    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.00 0.17 0.17 0.00 0.00 0.00 0.24 0.24 0.00
Crit Moves:                       ****                          ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.50 0.50 0.00 0.00 0.00 0.39 0.39 0.00
Volume/Cap:  0.00 0.00 0.00 0.00 0.33 0.33 0.00 0.00 0.00 0.60 0.60 0.00
Delay/Veh:    0.0  0.0  0.0  0.0  8.5  8.5  0.0  0.0  0.0 14.0 14.0  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  0.0  8.5  8.5  0.0  0.0  0.0 14.0 14.0  0.0
HCM2k95th:      0    0    0    0    6    6    0    0    0   10   10    0
********************************************************************************
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Downtown Sacramento Traffic Study
2013 Cumulative Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #38 15th St/Q St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.329
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.3
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	27	27	0	0	23	23	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	0	0	112	590	0	0	687	117	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	112	590	0	0	687	117	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	112	590	0	0	687	117	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	112	590	0	0	687	117	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	112	590	0	0	687	117	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.89	0.89	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.48	2.52	0.00	0.00	2.56	0.44	0.00	0.00	0.00
Final Sat.:	0	0	0	828	4359	0	0	4335	738	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.14	0.14	0.00	0.00	0.16	0.16	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.48	0.48	0.00	0.00	0.41	0.41	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.28	0.28	0.00	0.00	0.39	0.39	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	8.7	8.7	0.0	0.0	11.7	11.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	8.7	8.7	0.0	0.0	11.7	11.7	0.0	0.0	0.0
HCM2k95th:	0	0	0	5	5	0	0	6	6	0	0	0

Downtown Sacramento Traffic Study
2013 Cumulative Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #38 15th St/Q St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.349
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.3
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	27	27	0	0	23	23	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	0	0	112	590	0	0	687	117	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	112	590	0	0	687	117	0	0	0
Added Vol:	0	0	0	6	75	0	0	9	1	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	118	665	0	0	696	118	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	118	665	0	0	696	118	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	118	665	0	0	696	118	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	118	665	0	0	696	118	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.89	0.89	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.45	2.55	0.00	0.00	2.57	0.43	0.00	0.00	0.00
Final Sat.:	0	0	0	782	4405	0	0	4338	735	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.15	0.00	0.00	0.16	0.16	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.48	0.48	0.00	0.00	0.41	0.41	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.31	0.31	0.00	0.00	0.39	0.39	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	8.9	8.9	0.0	0.0	11.7	11.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	8.9	8.9	0.0	0.0	11.7	11.7	0.0	0.0	0.0
HCM2k95th:	0	0	0	5	5	0	0	6	6	0	0	0

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---------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                      2013 Cumulative Conditions
                             AM Peak Hour
---------------------------------------------------------------------------
                   Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
***************************************************************************
Intersection #39 15th St/W St
***************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):         0.230
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       12.5
Optimal Cycle:        76              Level Of Service:                   B
***************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0    0   32    32    0    0     0   38   38     0
Lanes:        0  0  0  0  0   0  0  3  1  0   0  0  0  0  0   1  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0  617    24    0    0     0  205  957     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  617    24    0    0     0  205  957     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  617    24    0    0     0  205  957     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  617    24    0    0     0  205  957     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  617    24    0    0     0  205  957     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.90  0.90 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 3.85  0.15 0.00 0.00  0.00 1.00 3.00  0.00
Final Sat.:     0    0     0    0 6617   257    0    0     0 1729 5187     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.09  0.09 0.00 0.00  0.00 0.12 0.18  0.00
Crit Moves:                       ****                      ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.42  0.42 0.00 0.00  0.00 0.50 0.50  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.22  0.22 0.00 0.00  0.00 0.24 0.37  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 14.1  14.1  0.0  0.0   0.0 10.8 11.7   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 14.1  14.1  0.0  0.0   0.0 10.8 11.7   0.0
HCM2k95th:      0    0     0    0    5     5    0    0     0    6    9     0
***************************************************************************
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---------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                      2013 Cumulative Conditions
                             AM Peak Hour
---------------------------------------------------------------------------
                   Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
***************************************************************************
Intersection #39 15th St/W St
***************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):         0.240
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       12.6
Optimal Cycle:        76              Level Of Service:                   B
***************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0    0   32    32    0    0     0   38   38     0
Lanes:        0  0  0  0  0   0  0  3  1  0   0  0  0  0  0   1  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0  617    24    0    0     0  205  957     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  617    24    0    0     0  205  957     0
Added Vol:      0    0     0    0   64     0    0    0     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0    0  681    24    0    0     0  205  957     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  681    24    0    0     0  205  957     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  681    24    0    0     0  205  957     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  681    24    0    0     0  205  957     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.91  0.91 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 3.86  0.14 0.00 0.00  0.00 1.00 3.00  0.00
Final Sat.:     0    0     0    0 6647   234    0    0     0 1729 5187     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.10  0.10 0.00 0.00  0.00 0.12 0.18  0.00
Crit Moves:                       ****                      ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.42  0.42 0.00 0.00  0.00 0.50 0.50  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.24  0.24 0.00 0.00  0.00 0.24 0.37  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 14.2  14.2  0.0  0.0   0.0 10.8 11.7   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 14.2  14.2  0.0  0.0   0.0 10.8 11.7   0.0
HCM2k95th:      0    0     0    0    5     5    0    0     0    6    9     0
***************************************************************************
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--------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                        2013 Cumulative Conditions
                               AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #40 15th St/X St
********************************************************************************
Cycle (sec):        70              Critical Vol./Cap. (X):        0.463
Loss Time (sec):     9 (Y+R =  4 sec) Average Delay (sec/veh):       23.1
Optimal Cycle:      79              Level Of Service:                  C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase       Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0   14    14    24   24     0     0   32    32     0    0     0
Lanes:       0  0  2  1  0    1  1  2  0  0    0  0  1  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0  550    26   349  369     0     0  589    91     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0  550    26   349  369     0     0  589    91     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0  550    26   349  369     0     0  589    91     0    0     0
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   0  550    26   349  369     0     0  589    91     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0  550    26   349  369     0     0  589    91     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.90  0.90  0.89 0.89  1.00  1.00 0.93  0.93  1.00 1.00  1.00
Lanes:       0.00 2.86  0.14  1.94 2.06  0.00  0.00 1.73  0.27  0.00 0.00  0.00
Final Sat.:    0 4918   232  3281 3469     0     0 3064   473     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.11  0.11  0.11 0.11  0.00  0.00 0.19  0.19  0.00 0.00  0.00
Crit Moves:       ****             ****             ****
Green/Cycle: 0.00 0.18  0.18  0.30 0.30  0.00  0.00 0.41  0.41  0.00 0.00  0.00
Volume/Cap:  0.00 0.63  0.63  0.35 0.35  0.00  0.00 0.47  0.47  0.00 0.00  0.00
Delay/Veh:    0.0 31.5  31.5  21.5 21.5   0.0   0.0 17.6  17.6   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 31.5  31.5  21.5 21.5   0.0   0.0 17.6  17.6   0.0  0.0   0.0
HCM2k95th:     0   11    11     7    7     0     0   12    12     0    0     0
********************************************************************************
```



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--------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                        2013 Cumulative Conditions
                               AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #40 15th St/X St
********************************************************************************
Cycle (sec):        70              Critical Vol./Cap. (X):        0.482
Loss Time (sec):     9 (Y+R =  4 sec) Average Delay (sec/veh):       23.1
Optimal Cycle:      79              Level Of Service:                  C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase       Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0   14    14    24   24     0     0   32    32     0    0     0
Lanes:       0  0  2  1  0    1  1  2  0  0    0  0  1  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0  550    26   349  369     0     0  589    91     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0  550    26   349  369     0     0  589    91     0    0     0
Added Vol:     0    0     0    64    0     0     0    0     0     0    0     0
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   0  550    26   413  369     0     0  589    91     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0  550    26   413  369     0     0  589    91     0    0     0
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   0  550    26   413  369     0     0  589    91     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0  550    26   413  369     0     0  589    91     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.90  0.90  0.89 0.89  1.00  1.00 0.93  0.93  1.00 1.00  1.00
Lanes:       0.00 2.86  0.14  2.00 2.00  0.00  0.00 1.73  0.27  0.00 0.00  0.00
Final Sat.:    0 4918   232  3368 3368     0     0 3064   473     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.11  0.11  0.12 0.11  0.00  0.00 0.19  0.19  0.00 0.00  0.00
Crit Moves:       ****        ****                  ****
Green/Cycle: 0.00 0.18  0.18  0.30 0.30  0.00  0.00 0.41  0.41  0.00 0.00  0.00
Volume/Cap:  0.00 0.63  0.63  0.40 0.36  0.00  0.00 0.47  0.47  0.00 0.00  0.00
Delay/Veh:    0.0 31.5  31.5  22.0 21.6   0.0   0.0 17.6  17.6   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 31.5  31.5  22.0 21.6   0.0   0.0 17.6  17.6   0.0  0.0   0.0
HCM2k95th:     0   11    11     8    7     0     0   12    12     0    0     0
********************************************************************************
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Downtown Sacramento Traffic Study
2013 Cumulative Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #41 16th St/H St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.397
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.6
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	25	25	0	0	0	16	25	0	0	0	9
Lanes:	0 0	2 1	0	0 0	0 0	0	2 1	0 0	0	0 0	0 0	1
Volume Module:												
Base Vol:	0	1058	22	0	0	0	182	271	0	0	0	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1058	22	0	0	0	182	271	0	0	0	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1058	22	0	0	0	182	271	0	0	0	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1058	22	0	0	0	182	271	0	0	0	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1058	22	0	0	0	182	271	0	0	0	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.91	1.00	1.00	1.00	0.95	0.98	1.00	1.00	1.00	0.87
Lanes:	0.00	2.94	0.06	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00
Final Sat.:	0	5066	105	0	0	0	3612	1862	0	0	0	1644
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.00	0.00	0.00	0.05	0.15	0.00	0.00	0.00	0.02
Crit Moves:		****						****		****		
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.29	0.45	0.00	0.00	0.00	0.16
Volume/Cap:	0.00	0.47	0.47	0.00	0.00	0.00	0.18	0.33	0.00	0.00	0.00	0.15
Delay/Veh:	0.0	11.0	11.0	0.0	0.0	0.0	15.1	10.2	0.0	0.0	0.0	20.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	11.0	11.0	0.0	0.0	0.0	15.1	10.2	0.0	0.0	0.0	20.5
HCM2k95th:	0	8	8	0	0	0	2	6	0	0	0	1

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #41 16th St/H St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.407
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.7
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	25	25	0	0	0	16	25	0	0	0	9
Lanes:	0 0	2 1	0	0 0	0 0	0	2 1	0 0	0	0 0	0 0	1
Volume Module:												
Base Vol:	0	1058	22	0	0	0	182	271	0	0	0	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1058	22	0	0	0	182	271	0	0	0	39
Added Vol:	0	46	0	0	0	0	20	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1104	22	0	0	0	202	271	0	0	0	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1104	22	0	0	0	202	271	0	0	0	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1104	22	0	0	0	202	271	0	0	0	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1104	22	0	0	0	202	271	0	0	0	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.91	1.00	1.00	1.00	0.95	0.98	1.00	1.00	1.00	0.87
Lanes:	0.00	2.94	0.06	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00
Final Sat.:	0	5070	101	0	0	0	3609	1860	0	0	0	1644
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.00	0.00	0.00	0.06	0.15	0.00	0.00	0.00	0.02
Crit Moves:		****						****		****		
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.29	0.45	0.00	0.00	0.00	0.16
Volume/Cap:	0.00	0.49	0.49	0.00	0.00	0.00	0.20	0.33	0.00	0.00	0.00	0.15
Delay/Veh:	0.0	11.1	11.1	0.0	0.0	0.0	15.2	10.2	0.0	0.0	0.0	20.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	11.1	11.1	0.0	0.0	0.0	15.2	10.2	0.0	0.0	0.0	20.5
HCM2k95th:	0	9	9	0	0	0	3	6	0	0	0	1

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--------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2013 Cumulative Conditions
                               AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #42 16th St/I St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.414
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       10.6
Optimal Cycle:        56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    25   25    0    0    0    0    0    0    0    0   25   25
Lanes:        1  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     321  891    0    0    0    0    0    0    0    0  796  186
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  321  891    0    0    0    0    0    0    0    0  796  186
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   321  891    0    0    0    0    0    0    0    0  796  186
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  321  891    0    0    0    0    0    0    0    0  796  186
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   321  891    0    0    0    0    0    0    0    0  796  186
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.91 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.88 0.88
Lanes:       1.06 2.94 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.43 0.57
Final Sat.:  1832 5084    0    0    0    0    0    0    0    0 4087  955
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.18 0.18 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.19 0.19
Crit Moves:  ****                                                ****
Green/Cycle: 0.45 0.45 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.45
Volume/Cap:  0.39 0.39 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.44 0.44
Delay/Veh:   10.5 10.5  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 10.8 10.8
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  10.5 10.5  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 10.8 10.8
HCM2k95th:      7    7    0    0    0    0    0    0    0    0    8    8
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                     Downtown Sacramento Traffic Study
                        2013 Cumulative Conditions
                               AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #42 16th St/I St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.427
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       10.7
Optimal Cycle:        56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    25   25    0    0    0    0    0    0    0    0   25   25
Lanes:        1  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     321  891    0    0    0    0    0    0    0    0  796  186
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  321  891    0    0    0    0    0    0    0    0  796  186
Added Vol:     33   46    0    0    0    0    0    0    0    0    0    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:  354  937    0    0    0    0    0    0    0    0  796  186
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   354  937    0    0    0    0    0    0    0    0  796  186
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  354  937    0    0    0    0    0    0    0    0  796  186
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   354  937    0    0    0    0    0    0    0    0  796  186
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.91 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.88 0.88
Lanes:       1.10 2.90 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.43 0.57
Final Sat.:  1896 5020    0    0    0    0    0    0    0    0 4087  955
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.19 0.19 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.19 0.19
Crit Moves:  ****                                                ****
Green/Cycle: 0.45 0.45 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.45
Volume/Cap:  0.42 0.42 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.44 0.44
Delay/Veh:   10.6 10.6  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 10.8 10.8
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  10.6 10.6  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 10.8 10.8
HCM2k95th:      7    7    0    0    0    0    0    0    0    0    8    8
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Downtown Sacramento Traffic Study
2013 Cumulative Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #43 16th St/J St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.494
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.9
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	25	25	0	0	0	25	25	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	1365	146	0	0	0	251	1104	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1365	146	0	0	0	251	1104	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1365	146	0	0	0	251	1104	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1365	146	0	0	0	251	1104	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1365	146	0	0	0	251	1104	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.71	0.29	0.00	0.00	0.00	1.00	3.00	0.00	0.00	0.00	0.00
Final Sat.:	0	4616	494	0	0	0	1729	5187	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.30	0.00	0.00	0.00	0.15	0.21	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.66	0.66	0.00	0.00	0.00	0.33	0.48	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	12.9	12.9	0.0	0.0	0.0	10.1	11.0	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.9	12.9	0.0	0.0	0.0	10.1	11.0	0.0	0.0	0.0	0.0
HCM2k95th:	0	15	15	0	0	0	5	9	0	0	0	0

Downtown Sacramento Traffic Study
2013 Cumulative Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #43 16th St/J St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.531
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.1
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	25	25	0	0	0	25	25	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	1365	146	0	0	0	251	1104	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1365	146	0	0	0	251	1104	0	0	0	0
Added Vol:	0	33	0	0	0	0	46	63	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1398	146	0	0	0	297	1167	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1398	146	0	0	0	297	1167	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1398	146	0	0	0	297	1167	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1398	146	0	0	0	297	1167	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.72	0.28	0.00	0.00	0.00	1.00	3.00	0.00	0.00	0.00	0.00
Final Sat.:	0	4631	484	0	0	0	1729	5187	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.30	0.00	0.00	0.00	0.17	0.22	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.68	0.68	0.00	0.00	0.00	0.38	0.50	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	13.1	13.1	0.0	0.0	0.0	10.4	11.2	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.1	13.1	0.0	0.0	0.0	10.4	11.2	0.0	0.0	0.0	0.0
HCM2k95th:	0	16	16	0	0	0	7	9	0	0	0	0

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-------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                      2013 Cumulative Conditions
                             AM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #44 16th St/L St
*******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.462
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      11.5
Optimal Cycle:        56              Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    25   25    0    0    0    0    0    0    0    0   25   25
Lanes:        1  0  2  1  0   0  0  0  0  0   0  0  0  0  0   0  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      334 1278    0    0    0    0    0    0    0    0  701   133
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   334 1278    0    0    0    0    0    0    0    0  701   133
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    334 1278    0    0    0    0    0    0    0    0  701   133
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0     0
Reduced Vol:   334 1278    0    0    0    0    0    0    0    0  701   133
PCE Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    334 1278    0    0    0    0    0    0    0    0  701   133
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:   1.00 0.91  0.91  1.00 1.00  1.00  1.00 1.00  1.00  1.00 0.93  0.93
Lanes:        1.00 3.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 1.68  0.32
Final Sat.:   1900 5187    0    0    0    0    0    0    0    0 2961   562
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.18 0.25  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.24  0.24
Crit Moves:   ****                                                 ****
Green/Cycle:  0.45 0.45  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.45  0.45
Volume/Cap:   0.39 0.55  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.53  0.53
Delay/Veh:    10.7 11.7   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 11.6  11.6
User DelAdj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   10.7 11.7   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 11.6  11.6
HCM2k95th:       8   12    0    0    0    0    0    0    0    0   11    11
*******************************************************************************
```



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-------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                      2013 Cumulative Conditions
                             AM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #44 16th St/L St
*******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.589
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      12.2
Optimal Cycle:        56              Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    25   25    0    0    0    0    0    0    0    0   25   25
Lanes:        1  0  2  1  0   0  0  0  0  0   0  0  0  0  0   0  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      334 1278    0    0    0    0    0    0    0    0  701   133
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   334 1278    0    0    0    0    0    0    0    0  701   133
Added Vol:     135   23    0    0    0    0    0    0    0    0  140    11
PasserByVol:     0    0    0    0    0    0    0    0    0    0    0     0
Initial Fut:   469 1301    0    0    0    0    0    0    0    0  841   144
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    469 1301    0    0    0    0    0    0    0    0  841   144
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0     0
Reduced Vol:   469 1301    0    0    0    0    0    0    0    0  841   144
PCE Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    469 1301    0    0    0    0    0    0    0    0  841   144
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:   1.00 0.91  0.91  1.00 1.00  1.00  1.00 1.00  1.00  1.00 0.93  0.93
Lanes:        1.00 3.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 1.71  0.29
Final Sat.:   1900 5187    0    0    0    0    0    0    0    0 3014   516
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.25 0.25  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.28  0.28
Crit Moves:   ****                                                 ****
Green/Cycle:  0.45 0.45  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.45  0.45
Volume/Cap:   0.55 0.56  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.62  0.62
Delay/Veh:    12.2 11.8   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 12.7  12.7
User DelAdj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   12.2 11.8   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 12.7  12.7
HCM2k95th:      13   12    0    0    0    0    0    0    0    0   14    14
*******************************************************************************
```

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------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                AM Peak Hour
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #45 16th St/P St
******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.718
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       14.4
Optimal Cycle:       56              Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    29   29    0    0    0    0    0    0    0    0   21   21
Lanes:        0  1  1  1  0   0  0  0  0  0   0  0  0  0  0   0  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     244 1448    0     0    0    0     0    0    0     0  944   167
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00  1.00
Initial Bse:  244 1448    0     0    0    0     0    0    0     0  944   167
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00  1.00
PHF Volume:   244 1448    0     0    0    0     0    0    0     0  944   167
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0     0
Reduced Vol:  244 1448    0     0    0    0     0    0    0     0  944   167
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00  1.00
Final Vol.:   244 1448    0     0    0    0     0    0    0     0  944   167
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900  1900
Adjustment:  0.91 0.91 0.91  1.00 1.00 1.00  1.00 1.00 1.00  1.00 0.93  0.93
Lanes:       0.43 2.57 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 1.70  0.30
Final Sat.:   748 4439    0     0    0    0     0    0    0     0 3000   531
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.33 0.33 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.31  0.31
Crit Moves:  ****                                                  ****
Green/Cycle: 0.52 0.52 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.38  0.38
Volume/Cap:  0.63 0.63 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.84  0.84
Delay/Veh:   10.1 10.1  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0 20.9  20.9
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00  1.00
AdjDel/Veh:  10.1 10.1  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0 20.9  20.9
HCM2k95th:     13   13    0     0    0    0     0    0    0     0   22    22
******************************************************************************
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------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                AM Peak Hour
------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #45 16th St/P St
******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.759
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       15.2
Optimal Cycle:       56              Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    29   29    0    0    0    0    0    0    0    0   21   21
Lanes:        0  1  1  1  0   0  0  0  0  0   0  0  0  0  0   0  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     244 1448    0     0    0    0     0    0    0     0  944   167
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00  1.00
Initial Bse:  244 1448    0     0    0    0     0    0    0     0  944   167
Added Vol:     -9  155    0     0    0    0     0    0    0     0   30     2
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0     0
Initial Fut:  235 1603    0     0    0    0     0    0    0     0  974   169
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00  1.00
PHF Volume:   235 1603    0     0    0    0     0    0    0     0  974   169
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0     0
Reduced Vol:  235 1603    0     0    0    0     0    0    0     0  974   169
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00  1.00
Final Vol.:   235 1603    0     0    0    0     0    0    0     0  974   169
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900  1900
Adjustment:  0.91 0.91 0.91  1.00 1.00 1.00  1.00 1.00 1.00  1.00 0.93  0.93
Lanes:       0.38 2.62 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 1.70  0.30
Final Sat.:   663 4524    0     0    0    0     0    0    0     0 3009   522
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.35 0.35 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.32  0.32
Crit Moves:  ****                                                  ****
Green/Cycle: 0.52 0.52 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.38  0.38
Volume/Cap:  0.68 0.68 0.00  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.86  0.86
Delay/Veh:   10.8 10.8  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0 22.3  22.3
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00  1.00
AdjDel/Veh:  10.8 10.8  0.0   0.0  0.0  0.0   0.0  0.0  0.0   0.0 22.3  22.3
HCM2k95th:     15   15    0     0    0    0     0    0    0     0   23    23
******************************************************************************
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------------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                     2013 Cumulative Conditions
                            AM Peak Hour
------------------------------------------------------------------------------
                   Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #46 16th St/Q St
******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.640
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       12.9
Optimal Cycle:        56              Level Of Service:                 B
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   25    25    0    0     0   25   25     0    0    0     0
Lanes:        0  0  2  1  0   0  0  0  0  0   0  1  1  0  0   0  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1534    43    0    0     0  385  575     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0 1534    43    0    0     0  385  575     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0 1534    43    0    0     0  385  575     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0 1534    43    0    0     0  385  575     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0 1534    43    0    0     0  385  575     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.91  0.91 1.00 1.00  1.00 0.95 0.95  1.00 1.00 1.00  1.00
Lanes:       0.00 2.92  0.08 0.00 0.00  0.00 0.80 1.20  0.00 0.00 0.00  1.00
Final Sat.:     0 5025   141    0    0     0 1448 2162     0    0    0  1900
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.31  0.31 0.00 0.00  0.00 0.27 0.27  0.00 0.00 0.00  0.00
Crit Moves:       ****                      ****
Green/Cycle: 0.00 0.45  0.45 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.68  0.68 0.00 0.00  0.00 0.60 0.60  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 13.2  13.2  0.0  0.0   0.0 12.3 12.3   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 13.2  13.2  0.0  0.0   0.0 12.3 12.3   0.0  0.0  0.0   0.0
HCM2k95th:      0   16    16    0    0     0   12   12     0    0    0     0
******************************************************************************
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------------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                     2013 Cumulative Conditions
                            AM Peak Hour
------------------------------------------------------------------------------
                   Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #46 16th St/Q St
******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.676
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       13.6
Optimal Cycle:        56              Level Of Service:                 B
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   25    25    0    0     0   25   25     0    0    0     0
Lanes:        0  0  2  1  0   0  0  0  0  0   0  1  1  0  0   0  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1534    43    0    0     0  385  575     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0 1534    43    0    0     0  385  575     0    0    0     0
Added Vol:      0  146     0    0    0     0    0   15     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0 1680    43    0    0     0  385  590     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0 1680    43    0    0     0  385  590     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0 1680    43    0    0     0  385  590     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0 1680    43    0    0     0  385  590     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.91  0.91 1.00 1.00  1.00 0.95 0.95  1.00 1.00 1.00  1.00
Lanes:       0.00 2.93  0.07 0.00 0.00  0.00 0.79 1.21  0.00 0.00 0.00  1.00
Final Sat.:     0 5037   129    0    0     0 1425 2185     0    0    0  1900
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.33  0.33 0.00 0.00  0.00 0.27 0.27  0.00 0.00 0.00  0.00
Crit Moves:       ****                      ****
Green/Cycle: 0.00 0.45  0.45 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.75  0.75 0.00 0.00  0.00 0.60 0.60  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 14.3  14.3  0.0  0.0   0.0 12.4 12.4   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 14.3  14.3  0.0  0.0   0.0 12.4 12.4   0.0  0.0  0.0   0.0
HCM2k95th:      0   19    19    0    0     0   12   12     0    0    0     0
******************************************************************************
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--------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                AM Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
              2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #47 16th St/W St
********************************************************************************
Cycle (sec):          70               Critical Vol./Cap. (X):        0.450
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):        25.2
Optimal Cycle:        79               Level Of Service:                  C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:   30   30    0    0    0    0    0   16   16    0   24   24
Lanes:        1  1  2  0  0   0  0  0  0  0   0  0  2  1  0   0  0  1  1  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      116 1316    0    0    0    0    0  580  190    0  286  686
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   116 1316    0    0    0    0    0  580  190    0  286  686
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    116 1316    0    0    0    0    0  580  190    0  286  686
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   116 1316    0    0    0    0    0  580  190    0  286  686
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    116 1316    0    0    0    0    0  580  190    0  286  686
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:   0.91 0.91 1.00 1.00 1.00 1.00 1.00 0.88 0.88 1.00 0.85 0.85
Lanes:        1.00 3.00 0.00 0.00 0.00 0.00 0.00 2.26 0.74 0.00 1.00 2.00
Final Sat.:   1729 5187    0    0    0    0    0 3763 1233    0 1614 3227
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.07 0.25 0.00 0.00 0.00 0.00 0.00 0.15 0.15 0.00 0.18 0.21
Crit Moves:   ****                               ****                ****
Green/Cycle:  0.38 0.38 0.00 0.00 0.00 0.00 0.00 0.20 0.20 0.00 0.30 0.30
Volume/Cap:   0.18 0.67 0.00 0.00 0.00 0.00 0.00 0.76 0.76 0.00 0.58 0.70
Delay/Veh:    16.3 21.2  0.0  0.0  0.0  0.0  0.0 33.1 33.1  0.0 23.8 25.9
User DelAdj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   16.3 21.2  0.0  0.0  0.0  0.0  0.0 33.1 33.1  0.0 23.8 25.9
HCM2k95th:       4   17    0    0    0    0    0   15   15    0   13   16
********************************************************************************
```



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--------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                AM Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #47 16th St/W St
********************************************************************************
Cycle (sec):          70               Critical Vol./Cap. (X):        0.451
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):        26.6
Optimal Cycle:        79               Level Of Service:                  C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:   30   30    0    0    0    0    0   16   16    0   24   24
Lanes:        1  1  2  0  0   0  0  0  0  0   0  0  2  1  0   0  0  1  1  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      116 1316    0    0    0    0    0  580  190    0  286  686
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   116 1316    0    0    0    0    0  580  190    0  286  686
Added Vol:       0    0    0    0    0    0    0    0    0    0    0  146
PasserByVol:     0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:   116 1316    0    0    0    0    0  580  190    0  286  832
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    116 1316    0    0    0    0    0  580  190    0  286  832
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   116 1316    0    0    0    0    0  580  190    0  286  832
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    116 1316    0    0    0    0    0  580  190    0  286  832
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:   0.91 0.91 1.00 1.00 1.00 1.00 1.00 0.88 0.88 1.00 0.84 0.84
Lanes:        1.00 3.00 0.00 0.00 0.00 0.00 0.00 2.26 0.74 0.00 1.00 2.00
Final Sat.:   1729 5187    0    0    0    0    0 3763 1233    0 1603 3206
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.07 0.25 0.00 0.00 0.00 0.00 0.00 0.15 0.15 0.00 0.18 0.26
Crit Moves:   ****                               ****                ****
Green/Cycle:  0.38 0.38 0.00 0.00 0.00 0.00 0.00 0.20 0.20 0.00 0.30 0.30
Volume/Cap:   0.18 0.67 0.00 0.00 0.00 0.00 0.00 0.76 0.76 0.00 0.59 0.85
Delay/Veh:    16.3 21.2  0.0  0.0  0.0  0.0  0.0 33.1 33.1  0.0 23.8 31.5
User DelAdj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   16.3 21.2  0.0  0.0  0.0  0.0  0.0 33.1 33.1  0.0 23.8 31.5
HCM2k95th:       4   17    0    0    0    0    0   15   15    0   13   23
********************************************************************************
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Downtown Sacramento Traffic Study
2013 Cumulative Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #48 16th St/X St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.438
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	14.1
Optimal Cycle:	76	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	35	35	0	0	0	35	35	0	0	0	0
Lanes:	0 0 3 1 0			0 0 0 0 0			2 0 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	1367	139	0	0	0	673	764	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1367	139	0	0	0	673	764	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1367	139	0	0	0	673	764	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1367	139	0	0	0	673	764	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1367	139	0	0	0	673	764	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	1.00	1.00	1.00	0.97	0.95	1.00	1.00	1.00	1.00
Lanes:	0.00	3.63	0.37	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00
Final Sat.:	0	6190	629	0	0	0	3686	3610	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.00	0.00	0.00	0.18	0.21	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.46	0.46	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.48	0.48	0.00	0.00	0.00	0.40	0.46	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	14.3	14.3	0.0	0.0	0.0	13.7	14.2	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	14.3	14.3	0.0	0.0	0.0	13.7	14.2	0.0	0.0	0.0	0.0
HCM2k95th:	0	12	12	0	0	0	10	11	0	0	0	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #48 16th St/X St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.438
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	14.2
Optimal Cycle:	76	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	35	35	0	0	0	35	35	0	0	0	0
Lanes:	0 0 3 1 0			0 0 0 0 0			2 0 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	1367	139	0	0	0	673	764	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1367	139	0	0	0	673	764	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	64	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1367	139	0	0	0	673	828	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1367	139	0	0	0	673	828	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1367	139	0	0	0	673	828	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1367	139	0	0	0	673	828	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	1.00	1.00	1.00	0.97	0.95	1.00	1.00	1.00	1.00
Lanes:	0.00	3.63	0.37	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00
Final Sat.:	0	6190	629	0	0	0	3686	3610	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.00	0.00	0.00	0.18	0.23	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.46	0.46	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.48	0.48	0.00	0.00	0.00	0.40	0.50	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	14.3	14.3	0.0	0.0	0.0	13.7	14.6	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	14.3	14.3	0.0	0.0	0.0	13.7	14.6	0.0	0.0	0.0	0.0
HCM2k95th:	0	12	12	0	0	0	10	13	0	0	0	0

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--------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2013 Cumulative Conditions
                                 AM Peak Hour
--------------------------------------------------------------------------------
                        Level Of Service Computation Report
              2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #49 29th St/J St
********************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.667
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):      39.7
Optimal Cycle:        82              Level Of Service:                  D
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Split Phase      Split Phase
Rights:          Include          Include          Include          Include
Min. Green:    18   18     0    26   26     0     0   26    26     0     0     0
Lanes:       0  1  2  0  0    0  1  1  0  0    0  0  2  1  0    1  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      47  287     0   426  699     0     0  624   297     0     0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   47  287     0   426  699     0     0  624   297     0     0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    47  287     0   426  699     0     0  624   297     0     0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0     0     0
Reduced Vol:   47  287     0   426  699     0     0  624   297     0     0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    47  287     0   426  699     0     0  624   297     0     0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.90 0.90  1.00  0.93 0.93  1.00  1.00 0.87  0.87  1.00 1.00  1.00
Lanes:       0.42 2.58  0.00  0.76 1.24  0.00  0.00 2.03  0.97  1.00 0.00  0.00
Final Sat.:   725 4426     0  1341 2200     0     0 3346  1592  1900     0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.06 0.06  0.00  0.32 0.32  0.00  0.00 0.19  0.19  0.00 0.00  0.00
Crit Moves:       ****        ****                  ****
Green/Cycle: 0.22 0.22  0.00  0.32 0.32  0.00  0.00 0.32  0.32  0.00 0.00  0.00
Volume/Cap:  0.30 0.30  0.00  1.00 1.00  0.00  0.00 0.59  0.59  0.00 0.00  0.00
Delay/Veh:   27.4 27.4   0.0  55.3 55.3   0.0   0.0 25.1  25.1   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  27.4 27.4   0.0  55.3 55.3   0.0   0.0 25.1  25.1   0.0  0.0   0.0
HCM2k95th:      6    6     0    35   35     0     0   13    13     0     0     0
********************************************************************************
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--------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
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                                 AM Peak Hour
--------------------------------------------------------------------------------
                        Level Of Service Computation Report
              2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #49 29th St/J St
********************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.669
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):      39.7
Optimal Cycle:        82              Level Of Service:                  D
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Split Phase      Split Phase
Rights:          Include          Include          Include          Include
Min. Green:    18   18     0    26   26     0     0   26    26     0     0     0
Lanes:       0  1  2  0  0    0  1  1  0  0    0  0  2  1  0    1  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      47  287     0   426  699     0     0  624   297     0     0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   47  287     0   426  699     0     0  624   297     0     0     0
Added Vol:      0    0     0     0    0     0     0   11     0     0     0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0     0     0
Initial Fut:   47  287     0   426  699     0     0  635   297     0     0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    47  287     0   426  699     0     0  635   297     0     0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0     0     0
Reduced Vol:   47  287     0   426  699     0     0  635   297     0     0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    47  287     0   426  699     0     0  635   297     0     0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.90 0.90  1.00  0.93 0.93  1.00  1.00 0.87  0.87  1.00 1.00  1.00
Lanes:       0.42 2.58  0.00  0.76 1.24  0.00  0.00 2.04  0.96  1.00 0.00  0.00
Final Sat.:   725 4426     0  1341 2200     0     0 3364  1574  1900     0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.06 0.06  0.00  0.32 0.32  0.00  0.00 0.19  0.19  0.00 0.00  0.00
Crit Moves:       ****        ****                  ****
Green/Cycle: 0.22 0.22  0.00  0.32 0.32  0.00  0.00 0.32  0.32  0.00 0.00  0.00
Volume/Cap:  0.30 0.30  0.00  1.00 1.00  0.00  0.00 0.60  0.60  0.00 0.00  0.00
Delay/Veh:   27.4 27.4   0.0  55.3 55.3   0.0   0.0 25.2  25.2   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  27.4 27.4   0.0  55.3 55.3   0.0   0.0 25.2  25.2   0.0  0.0   0.0
HCM2k95th:      6    6     0    35   35     0     0   13    13     0     0     0
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #50 30th St/J St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.347
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 14.9
Optimal Cycle: 79 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	31	31	0	0	0	39	39	0	0	0	0
Lanes:	0 1 1 1 0			0 0 0 0 0			1 0 2 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	462	294	0	0	0	242	854	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	462	294	0	0	0	242	854	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	462	294	0	0	0	242	854	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	462	294	0	0	0	242	854	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	462	294	0	0	0	242	854	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.86	0.86	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	0.00	0.00	0.00	1.00	2.00	0.00	0.00	1.00	0.00
Final Sat.:	0	3257	1629	0	0	0	1900	3610	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.18	0.00	0.00	0.00	0.13	0.24	0.00	0.00	0.00	0.00
Crit Moves:			****				****					
Green/Cycle:	0.00	0.39	0.39	0.00	0.00	0.00	0.49	0.49	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.36	0.46	0.00	0.00	0.00	0.26	0.48	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	17.1	18.0	0.0	0.0	0.0	11.8	13.5	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	17.1	18.0	0.0	0.0	0.0	11.8	13.5	0.0	0.0	0.0	0.0
HCM2k95th:	0	8	11	0	0	0	6	13	0	0	0	0

Downtown Sacramento Traffic Study
2013 Cumulative Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #50 30th St/J St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.347
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 14.9
Optimal Cycle: 79 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	31	31	0	0	0	39	39	0	0	0	0
Lanes:	0 1 1 1 0			0 0 0 0 0			1 0 2 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	462	294	0	0	0	242	854	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	462	294	0	0	0	242	854	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	11	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	462	294	0	0	0	242	865	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	462	294	0	0	0	242	865	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	462	294	0	0	0	242	865	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	462	294	0	0	0	242	865	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.86	0.86	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	0.00	0.00	0.00	1.00	2.00	0.00	0.00	1.00	0.00
Final Sat.:	0	3257	1629	0	0	0	1900	3610	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.18	0.00	0.00	0.00	0.13	0.24	0.00	0.00	0.00	0.00
Crit Moves:			****				****					
Green/Cycle:	0.00	0.39	0.39	0.00	0.00	0.00	0.49	0.49	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.36	0.46	0.00	0.00	0.00	0.26	0.49	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	17.1	18.0	0.0	0.0	0.0	11.8	13.5	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	17.1	18.0	0.0	0.0	0.0	11.8	13.5	0.0	0.0	0.0	0.0
HCM2k95th:	0	8	11	0	0	0	6	13	0	0	0	0

Downtown Sacramento Traffic Study
2013 Cumulative Conditions
PM Peak Hour

Scenario Report

Scenario:	2013 PM Project
Command:	2013 PM PROJ
Volume:	2013 PM NO Project
Geometry:	Cumulative PM
Impact Fee:	Default Impact Fee
Trip Generation:	PM Add Projects
Trip Distribution:	Project
Paths:	Project
Routes:	Default Routes
Configuration:	Default Configuration

```
-----------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                       2013 Cumulative Conditions
                             PM Peak Hour
-----------------------------------------------------------------------------
                    Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #1 3rd St/J St
*****************************************************************************
Cycle (sec):          0               Critical Vol./Cap. (X):        0.785
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):        22.0
Optimal Cycle:       54               Level Of Service:                  C
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted       Split Phase      Split Phase
Rights:          Include          Include          Include          Include
Min. Green:    0    0    4    4    4    0    4    4    4    4    4    4
Lanes:       0  0  0  0  2    2  0  1  0  0    0  1  2  1  0    0  1  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0   302   421  375     0     2  472   186    10  968   407
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0    0   302   421  375     0     2  472   186    10  968   407
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0    0   302   421  375     0     2  472   186    10  968   407
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   0    0   302   421  375     0     2  472   186    10  968   407
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0    0   302   421  375     0     2  472   186    10  968   407
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  0.67  0.55 0.90  1.00  0.78 0.78  0.78  0.78 0.78  0.78
Lanes:       0.00 0.00  2.00  2.00 1.00  0.00  0.01 2.99  1.00  0.02 2.10  0.88
Final Sat.:    0    0  2558  2093 1710     0    19 4453  1491    32 3119  1311
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.12  0.20 0.22  0.00  0.11 0.11  0.12  0.31 0.31  0.31
Crit Moves:                        ****                    ****              ****
Green/Cycle: 0.00 0.00  0.28  0.28 0.28  0.00  0.16 0.16  0.16  0.40 0.40  0.40
Volume/Cap:  0.00 0.00  0.42  0.72 0.79  0.00  0.67 0.67  0.79  0.79 0.79  0.79
Delay/Veh:    0.0  0.0  17.7  25.0 30.2   0.0  24.9 24.9  29.1  17.9 17.9  17.9
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0  17.7  25.0 30.2   0.0  24.9 24.9  29.1  17.9 17.9  17.9
HCM2k95th:     0    0     6    13   15     0     8    8    10    16   16    16
*****************************************************************************
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-----------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                       2013 Cumulative Conditions
                             PM Peak Hour
-----------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*****************************************************************************
Intersection #1 3rd St/J St
*****************************************************************************
Cycle (sec):          0               Critical Vol./Cap. (X):        0.826
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):        26.5
Optimal Cycle:       64               Level Of Service:                  C
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted       Split Phase      Split Phase
Rights:          Include          Include          Include          Include
Min. Green:    0    0    4    4    4    0    4    4    4    4    4    4
Lanes:       0  0  0  0  2    2  0  1  0  0    0  1  2  1  0    0  1  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0   302   421  375     0     2  472   186    10  968   407
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0    0   302   421  375     0     2  472   186    10  968   407
Added Vol:     0    0     0     0    8     0     0  149    35     0  129     0
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   0    0   302   421  383     0     2  621   221    10 1097   407
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0    0   302   421  383     0     2  621   221    10 1097   407
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   0    0   302   421  383     0     2  621   221    10 1097   407
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0    0   302   421  383     0     2  621   221    10 1097   407
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  0.67  0.55 0.90  1.00  0.79 0.79  0.79  0.79 0.79  0.79
Lanes:       0.00 0.00  2.00  2.00 1.00  0.00  0.01 2.99  1.00  0.02 2.17  0.81
Final Sat.:    0    0  2558  2077 1710     0    14 4472  1495    30 3247  1205
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.12  0.20 0.22  0.00  0.14 0.14  0.15  0.34 0.34  0.34
Crit Moves:                        ****                    ****              ****
Green/Cycle: 0.00 0.00  0.27  0.27 0.27  0.00  0.18 0.18  0.18  0.41 0.41  0.41
Volume/Cap:  0.00 0.00  0.44  0.75 0.83  0.00  0.78 0.78  0.83  0.83 0.83  0.83
Delay/Veh:    0.0  0.0  21.3  30.1 37.3   0.0  30.5 30.5  32.9  21.3 21.3  21.3
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0  21.3  30.1 37.3   0.0  30.5 30.5  32.9  21.3 21.3  21.3
HCM2k95th:     0    0     6    14   17     0    12   12    13    20   20    20
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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2013 Cumulative Conditions
                                 PM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #2 3rd St/L St
*******************************************************************************
Cycle (sec):           70             Critical Vol./Cap. (X):        1.005
Loss Time (sec):        9 (Y+R =  4 sec) Average Delay (sec/veh):        55.3
Optimal Cycle:         85             Level Of Service:                  E
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    10   30    0     0   20   20     0    0    0    40   40    0
Lanes:        1  0  2  0  0   0  0  2  1  0   0  0  0  0  0   1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      82   70    0     0  599   437    0    0    0   443 1492    81
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   82   70    0     0  599   437    0    0    0   443 1492    81
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    82   70    0     0  599   437    0    0    0   443 1492    81
Reduct Vol:     0    0    0     0    0     0    0    0    0     0    0     0
Reduced Vol:   82   70    0     0  599   437    0    0    0   443 1492    81
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    82   70    0     0  599   437    0    0    0   443 1492    81
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.86 0.86  1.00  1.00 0.77  0.77  1.00 1.00  1.00  0.73 0.73  0.77
Lanes:       1.00 2.00  0.00  0.00 2.00  1.00  0.00 0.00  0.00  1.00 2.00  1.00
Final Sat.:  1625 3249     0     0 2916  1458     0    0     0  1381 2762  1454
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.02  0.00  0.00 0.21  0.30  0.00 0.00  0.00  0.32 0.54  0.06
Crit Moves:  ****                        ****                          ****
Green/Cycle: 0.13 0.38  0.00  0.00 0.25  0.25  0.00 0.00  0.00  0.51 0.51  0.51
Volume/Cap:  0.40 0.06  0.00  0.00 0.81  1.18  0.00 0.00  0.00  0.63 1.07  0.11
Delay/Veh:   37.4 15.6   0.0   0.0 33.4 123.9   0.0  0.0   0.0  15.2 61.1  10.5
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  37.4 15.6   0.0   0.0 33.4 123.9   0.0  0.0   0.0  15.2 61.1  10.5
HCM2k95th:      5    1     0     0   16    36     0    0     0    17   54     3
*******************************************************************************
```



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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2013 Cumulative Conditions
                                 PM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #2 3rd St/L St
*******************************************************************************
Cycle (sec):           70             Critical Vol./Cap. (X):        1.124
Loss Time (sec):        9 (Y+R =  4 sec) Average Delay (sec/veh):        99.2
Optimal Cycle:         85             Level Of Service:                  F
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    10   30    0     0   20   20     0    0    0    40   40    0
Lanes:        1  0  2  0  0   0  0  2  1  0   0  0  0  0  0   1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      82   70    0     0  599   437    0    0    0   443 1492    81
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   82   70    0     0  599   437    0    0    0   443 1492    81
Added Vol:      0    0    0     0   42     0    0    0    0    36  293     0
PasserByVol:    0    0    0     0    0     0    0    0    0     0    0     0
Initial Fut:   82   70    0     0  641   437    0    0    0   479 1785    81
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    82   70    0     0  641   437    0    0    0   479 1785    81
Reduct Vol:     0    0    0     0    0     0    0    0    0     0    0     0
Reduced Vol:   82   70    0     0  641   437    0    0    0   479 1785    81
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    82   70    0     0  641   437    0    0    0   479 1785    81
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.86 0.86  1.00  1.00 0.77  0.77  1.00 1.00  1.00  0.73 0.73  0.77
Lanes:       1.00 2.00  0.00  0.00 2.00  1.00  0.00 0.00  0.00  1.00 2.00  1.00
Final Sat.:  1625 3249     0     0 2922  1461     0    0     0  1381 2762  1454
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.02  0.00  0.00 0.22  0.30  0.00 0.00  0.00  0.35 0.65  0.06
Crit Moves:  ****                        ****                          ****
Green/Cycle: 0.13 0.38  0.00  0.00 0.25  0.25  0.00 0.00  0.00  0.51 0.51  0.51
Volume/Cap:  0.40 0.06  0.00  0.00 0.87  1.18  0.00 0.00  0.00  0.69 1.28  0.11
Delay/Veh:   37.4 15.6   0.0   0.0 36.5 122.4   0.0  0.0   0.0  15.9  148  10.5
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  37.4 15.6   0.0   0.0 36.5 122.4   0.0  0.0   0.0  15.9  148  10.5
HCM2k95th:      5    1     0     0   18    36     0    0     0    19   89     3
*******************************************************************************
```

Downtown Sacramento Traffic Study
2013 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 3rd St/Capitol Mall

Cycle (sec):	70	Critical Vol./Cap. (X):	0.640
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	23.3
Optimal Cycle:	79	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	29	29	0	14	21	0	20	27	0
Lanes:	0 0 0 0 0			0 1 1 1 1			1 0 3 0 0			1 0 1 1 0		
Volume Module:												
Base Vol:	0	0	0	138	892	128	176	462	0	361	637	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	138	892	128	176	462	0	361	637	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	138	892	128	176	462	0	361	637	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	138	892	128	176	462	0	361	637	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	138	892	128	176	462	0	361	637	98
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.79	0.79	0.79	0.86	0.82	1.00	0.86	0.84	0.84
Lanes:	0.00	0.00	0.00	0.40	2.60	1.00	1.00	3.00	0.00	1.00	1.73	0.27
Final Sat.:	0	0	0	604	3907	1504	1625	4668	0	1625	2759	425
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.23	0.23	0.09	0.11	0.10	0.00	0.22	0.23	0.23
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.37	0.37	0.37	0.18	0.27	0.00	0.56	0.34	0.34
Volume/Cap:	0.00	0.00	0.00	0.62	0.62	0.23	0.61	0.37	0.00	0.60	0.68	0.68
Delay/Veh:	0.0	0.0	0.0	22.1	22.1	17.4	39.3	24.5	0.0	14.7	25.6	25.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	22.1	22.1	17.4	39.3	24.5	0.0	14.7	25.6	25.6
HCM2k95th:	0	0	0	14	14	5	10	7	0	13	16	16

Downtown Sacramento Traffic Study
2013 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 3rd St/Capitol Mall

Cycle (sec):	70	Critical Vol./Cap. (X):	0.778
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	26.2
Optimal Cycle:	79	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	29	29	0	14	21	0	20	27	0
Lanes:	0 0 0 0 0			0 1 1 1 1			1 0 3 0 0			1 0 1 1 0		
Volume Module:												
Base Vol:	0	0	0	138	892	128	176	462	0	361	637	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	138	892	128	176	462	0	361	637	98
Added Vol:	0	0	0	0	78	0	0	105	0	150	56	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	138	970	128	176	567	0	511	693	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	138	970	128	176	567	0	511	693	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	138	970	128	176	567	0	511	693	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	138	970	128	176	567	0	511	693	98
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.79	0.79	0.79	0.86	0.82	1.00	0.61	0.84	0.84
Lanes:	0.00	0.00	0.00	0.37	2.63	1.00	1.00	3.00	0.00	1.00	1.75	0.25
Final Sat.:	0	0	0	563	3957	1507	1625	4668	0	1150	2792	395
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.25	0.25	0.08	0.11	0.12	0.00	0.44	0.25	0.25
Crit Moves:				****						****		
Green/Cycle:	0.00	0.00	0.00	0.37	0.37	0.37	0.18	0.27	0.00	0.57	0.34	0.34
Volume/Cap:	0.00	0.00	0.00	0.67	0.67	0.23	0.61	0.46	0.00	0.89	0.73	0.73
Delay/Veh:	0.0	0.0	0.0	22.9	22.9	17.4	39.3	25.4	0.0	30.4	27.0	27.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	22.9	22.9	17.4	39.3	25.4	0.0	30.4	27.0	27.0
HCM2k95th:	0	0	0	16	16	5	10	9	0	25	17	17

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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                PM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #4 3rd St/N St
*******************************************************************************
Cycle (sec):          70                Critical Vol./Cap. (X):         0.511
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):         20.2
Optimal Cycle:        79                Level Of Service:                   C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase       Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   16    16    36   36     0     0   18    18     0    0     0
Lanes:        0  0  0  1  0    0  1  2  0  0    0  0  1  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0   91    25   169 1183     0     0  173   212     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0   91    25   169 1183     0     0  173   212     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0   91    25   169 1183     0     0  173   212     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0   91    25   169 1183     0     0  173   212     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0   91    25   169 1183     0     0  173   212     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.97  0.97  0.90 0.90  1.00  1.00 0.87  0.87  1.00 1.00  1.00
Lanes:       0.00 0.78  0.22  0.37 2.63  0.00  0.00 1.00  1.00  0.00 0.00  0.00
Final Sat.:     0 1447   398   644 4511     0     0 1655  1655     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.06  0.06  0.26 0.26  0.00  0.00 0.10  0.13  0.00 0.00  0.00
Crit Moves:       ****             ****                     ****
Green/Cycle: 0.00 0.20  0.20  0.46 0.46  0.00  0.00 0.23  0.23  0.00 0.00  0.00
Volume/Cap:  0.00 0.31  0.31  0.58 0.58  0.00  0.00 0.46  0.56  0.00 0.00  0.00
Delay/Veh:    0.0 29.0  29.0  16.9 16.9   0.0   0.0 28.1  30.3   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 29.0  29.0  16.9 16.9   0.0   0.0 28.1  30.3   0.0  0.0   0.0
HCM2k95th:      0    6     6    15   15     0     0    8    10     0    0     0
*******************************************************************************
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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                PM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #4 3rd St/N St
*******************************************************************************
Cycle (sec):          70                Critical Vol./Cap. (X):         0.561
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):         21.2
Optimal Cycle:        79                Level Of Service:                   C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase       Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   16    16    36   36     0     0   18    18     0    0     0
Lanes:        0  0  0  1  0    0  1  2  0  0    0  0  1  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0   91    25   169 1183     0     0  173   212     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0   91    25   169 1183     0     0  173   212     0    0     0
Added Vol:      0    0     0    35  193     0     0   23     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0   91    25   204 1376     0     0  196   212     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0   91    25   204 1376     0     0  196   212     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0   91    25   204 1376     0     0  196   212     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0   91    25   204 1376     0     0  196   212     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.97  0.97  0.90 0.90  1.00  1.00 0.88  0.88  1.00 1.00  1.00
Lanes:       0.00 0.78  0.22  0.39 2.61  0.00  0.00 1.00  1.00  0.00 0.00  0.00
Final Sat.:     0 1447   398   666 4490     0     0 1664  1664     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.06  0.06  0.31 0.31  0.00  0.00 0.12  0.13  0.00 0.00  0.00
Crit Moves:       ****        ****                          ****
Green/Cycle: 0.00 0.20  0.20  0.46 0.46  0.00  0.00 0.23  0.23  0.00 0.00  0.00
Volume/Cap:  0.00 0.31  0.31  0.67 0.67  0.00  0.00 0.52  0.56  0.00 0.00  0.00
Delay/Veh:    0.0 29.0  29.0  18.4 18.4   0.0   0.0 29.1  30.1   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 29.0  29.0  18.4 18.4   0.0   0.0 29.1  30.1   0.0  0.0   0.0
HCM2k95th:      0    6     6    18   18     0     0    9    10     0    0     0
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---------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                PM Peak Hour
---------------------------------------------------------------------------------
                        Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
*********************************************************************************
Intersection #5 3rd St/P St
*********************************************************************************
Cycle (sec):          50                Critical Vol./Cap. (X):         0.879
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):         27.9
Optimal Cycle:        67                Level Of Service:                   C
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0    0   19    19    0    0     0   31   31     0
Lanes:        0  0  0  0  0   0  0  1  1  2   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0  522   833    0    0     0  157 2753     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  522   833    0    0     0  157 2753     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  522   833    0    0     0  157 2753     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  522   833    0    0     0  157 2753     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  522   833    0    0     0  157 2753     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.86  0.76 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 1.42  2.58 0.00 0.00  0.00 0.16 2.84  0.00
Final Sat.:     0    0     0    0 2330  3718    0    0     0  280 4907     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.22  0.22 0.00 0.00  0.00 0.56 0.56  0.00
Crit Moves:                       ****                        ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.34  0.34 0.00 0.00  0.00 0.55 0.55  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.66  0.66 0.00 0.00  0.00 1.01 1.01  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 17.4  17.4  0.0  0.0   0.0 32.7 32.7   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 17.4  17.4  0.0  0.0   0.0 32.7 32.7   0.0
HCM2k95th:      0    0     0    0   12    12    0    0     0   35   35     0
*********************************************************************************
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---------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                PM Peak Hour
---------------------------------------------------------------------------------
                        Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
*********************************************************************************
Intersection #5 3rd St/P St
*********************************************************************************
Cycle (sec):          50                Critical Vol./Cap. (X):         0.947
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):         38.0
Optimal Cycle:        85                Level Of Service:                   D
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0    0   19    19    0    0     0   31   31     0
Lanes:        0  0  0  0  0   0  0  1  1  2   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0  522   833    0    0     0  157 2753     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  522   833    0    0     0  157 2753     0
Added Vol:      0    0     0    0    0   193    0    0     0    0  130     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0    0  522  1026    0    0     0  157 2883     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  522  1026    0    0     0  157 2883     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  522  1026    0    0     0  157 2883     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  522  1026    0    0     0  157 2883     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.86  0.75 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 1.24  2.76 0.00 0.00  0.00 0.15 2.85  0.00
Final Sat.:     0    0     0    0 2012  3954    0    0     0  268 4919     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.26  0.26 0.00 0.00  0.00 0.59 0.59  0.00
Crit Moves:                       ****                        ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.34  0.34 0.00 0.00  0.00 0.55 0.55  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.76  0.76 0.00 0.00  0.00 1.06 1.06  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 19.3  19.3  0.0  0.0   0.0 47.5 47.5   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 19.3  19.3  0.0  0.0   0.0 47.5 47.5   0.0
HCM2k95th:      0    0     0    0   15    14    0    0     0   40   40     0
*********************************************************************************
```

Downtown Sacramento Traffic Study
2013 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 3rd St/Q St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.330
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.1
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	19	19	0	0	31	31	0	0	0
Lanes:		0 0 0 0 0			0 1 2 0 0			0 0 3 1 0			0 0 0 0 0	
Volume Module:												
Base Vol:	0	0	0	194	519	0	0	839	216	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	194	519	0	0	839	216	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	194	519	0	0	839	216	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	194	519	0	0	839	216	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	194	519	0	0	839	216	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.88	0.88	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.82	2.18	0.00	0.00	3.18	0.82	0.00	0.00	0.00
Final Sat.:	0	0	0	1411	3776	0	0	5330	1372	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.14	0.14	0.00	0.00	0.16	0.16	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.34	0.34	0.00	0.00	0.55	0.55	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.41	0.41	0.00	0.00	0.28	0.28	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	14.9	14.9	0.0	0.0	6.8	6.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	14.9	14.9	0.0	0.0	6.8	6.8	0.0	0.0	0.0
HCM2k95th:	0	0	0	7	7	0	0	6	6	0	0	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 3rd St/Q St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.348
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.0
Optimal Cycle: 56 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	19	19	0	0	31	31	0	0	0
Lanes:		0 0 0 0 0			0 1 2 0 0			0 0 3 1 0			0 0 0 0 0	
Volume Module:												
Base Vol:	0	0	0	194	519	0	0	839	216	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	194	519	0	0	839	216	0	0	0
Added Vol:	0	0	0	0	0	0	0	107	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	194	519	0	0	946	216	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	194	519	0	0	946	216	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	194	519	0	0	946	216	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	194	519	0	0	946	216	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.88	0.88	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.82	2.18	0.00	0.00	3.26	0.74	0.00	0.00	0.00
Final Sat.:	0	0	0	1411	3776	0	0	5473	1250	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.14	0.14	0.00	0.00	0.17	0.17	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.34	0.34	0.00	0.00	0.55	0.55	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.41	0.41	0.00	0.00	0.31	0.31	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	14.9	14.9	0.0	0.0	7.0	7.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	14.9	14.9	0.0	0.0	7.0	7.0	0.0	0.0	0.0
HCM2k95th:	0	0	0	7	7	0	0	6	6	0	0	0

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Intersection #7 5th St/I St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.656
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 23.2
Optimal Cycle: 106 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	21	21	0	0	0	21	0	0	0	0	79	79
Lanes:	2 0 2 0 0			0 0 0 0 2			0 0 0 0 0			0 0 3 1 0		
Volume Module:												
Base Vol:	419	536	0	0	0	46	0	0	0	0	2743	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	419	536	0	0	0	46	0	0	0	0	2743	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	419	536	0	0	0	46	0	0	0	0	2743	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	419	536	0	0	0	46	0	0	0	0	2743	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	419	536	0	0	0	46	0	0	0	0	2743	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.54	0.86	1.00	1.00	1.00	0.67	1.00	1.00	1.00	1.00	0.82	0.82
Lanes:	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	3.90	0.10
Final Sat.:	2063	3249	0	0	0	2558	0	0	0	0	6045	154
Capacity Analysis Module:												
Vol/Sat:	0.20	0.16	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.45	0.45
Crit Moves:		****		****							****	
Green/Cycle:	0.20	0.20	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.75	0.75
Volume/Cap:	1.03	0.83	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.61	0.61
Delay/Veh:	93.6	52.8	0.0	0.0	0.0	35.1	0.0	0.0	0.0	0.0	6.9	6.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	93.6	52.8	0.0	0.0	0.0	35.1	0.0	0.0	0.0	0.0	6.9	6.9
HCM2k95th:	18	17	0	0	0	2	0	0	0	0	19	19

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 5th St/I St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.755
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 30.6
Optimal Cycle: 106 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	21	21	0	0	0	21	0	0	0	0	79	79
Lanes:	2 0 2 0 0			0 0 0 0 2			0 0 0 0 0			0 0 3 1 0		
Volume Module:												
Base Vol:	419	536	0	0	0	46	0	0	0	0	2743	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	419	536	0	0	0	46	0	0	0	0	2743	70
Added Vol:	64	11	0	0	0	0	0	0	0	0	151	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	483	547	0	0	0	46	0	0	0	0	2894	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	483	547	0	0	0	46	0	0	0	0	2894	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	483	547	0	0	0	46	0	0	0	0	2894	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	483	547	0	0	0	46	0	0	0	0	2894	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.54	0.86	1.00	1.00	1.00	0.67	1.00	1.00	1.00	1.00	0.82	0.82
Lanes:	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	3.91	0.09
Final Sat.:	2063	3249	0	0	0	2558	0	0	0	0	6053	146
Capacity Analysis Module:												
Vol/Sat:	0.23	0.17	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.48	0.48
Crit Moves:	****			****							****	
Green/Cycle:	0.20	0.20	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.75	0.75
Volume/Cap:	1.18	0.85	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.64	0.64
Delay/Veh:	146.7	54.2	0.0	0.0	0.0	35.1	0.0	0.0	0.0	0.0	7.3	7.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	146.7	54.2	0.0	0.0	0.0	35.1	0.0	0.0	0.0	0.0	7.3	7.3
HCM2k95th:	23	17	0	0	0	2	0	0	0	0	21	21

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-------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
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                               PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #8 5th St/J St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):         0.489
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        11.8
Optimal Cycle:        56               Level Of Service:                   B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0   25    25    0    0     0   25   25    25    0    0     0
Lanes:       0  0  1  1  1    0  0  0  0  0    1  1  3  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0  460   407    0    0     0  432 1190   243    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0  460   407    0    0     0  432 1190   243    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0  460   407    0    0     0  432 1190   243    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0  460   407    0    0     0  432 1190   243    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0  460   407    0    0     0  432 1190   243    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.80  0.80 1.00 1.00  1.00 0.70 0.70  0.77 1.00 1.00  1.00
Lanes:       0.00 1.59  1.41 0.00 0.00  0.00 1.33 3.67  1.00 0.00 0.00  0.00
Final Sat.:    0 2405  2128    0    0     0 1761 4852  1454    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.19  0.19 0.00 0.00  0.00 0.25 0.25  0.17 0.00 0.00  0.00
Crit Moves:       ****                       ****
Green/Cycle: 0.00 0.45  0.45 0.00 0.00  0.00 0.45 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.43  0.43 0.00 0.00  0.00 0.55 0.55  0.37 0.00 0.00  0.00
Delay/Veh:    0.0 11.3  11.3  0.0  0.0   0.0 12.1 12.1  12.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 11.3  11.3  0.0  0.0   0.0 12.1 12.1  12.0  0.0  0.0   0.0
HCM2k95th:     0    7     7    0    0     0   11   11     7    0    0     0
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-------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
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-------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #8 5th St/J St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):         0.576
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        12.7
Optimal Cycle:        56               Level Of Service:                   B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0   25    25    0    0     0   25   25    25    0    0     0
Lanes:       0  0  1  1  1    0  0  0  0  0    1  1  3  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0  460   407    0    0     0  432 1190   243    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0  460   407    0    0     0  432 1190   243    0    0     0
Added Vol:     0   75    83    0    0     0    0  278     0    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   0  535   490    0    0     0  432 1468   243    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0  535   490    0    0     0  432 1468   243    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0  535   490    0    0     0  432 1468   243    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0  535   490    0    0     0  432 1468   243    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.79  0.79 1.00 1.00  1.00 0.70 0.70  0.77 1.00 1.00  1.00
Lanes:       0.00 1.57  1.43 0.00 0.00  0.00 1.14 3.86  1.00 0.00 0.00  0.00
Final Sat.:    0 2361  2162    0    0     0 1504 5110  1454    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.23  0.23 0.00 0.00  0.00 0.29 0.29  0.17 0.00 0.00  0.00
Crit Moves:       ****                       ****
Green/Cycle: 0.00 0.45  0.45 0.00 0.00  0.00 0.45 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.51  0.51 0.00 0.00  0.00 0.64 0.64  0.37 0.00 0.00  0.00
Delay/Veh:    0.0 12.0  12.0  0.0  0.0   0.0 13.1 13.1  12.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 12.0  12.0  0.0  0.0   0.0 13.1 13.1  12.0  0.0  0.0   0.0
HCM2k95th:     0    9     9    0    0     0   13   13     7    0    0     0
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #9 5th St/L St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.739
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 23.9
Optimal Cycle: 79 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	45	45	0	0	0	45	0	0	0	0	25	25
Lanes:	1 0 3 0 0			0 0 0 0 2			0 0 0 0 0			0 0 3 1 0		
Volume Module:												
Base Vol:	482	730	0	0	0	172	0	0	0	0	1631	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	482	730	0	0	0	172	0	0	0	0	1631	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	482	730	0	0	0	172	0	0	0	0	1631	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	482	730	0	0	0	172	0	0	0	0	1631	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	482	730	0	0	0	172	0	0	0	0	1631	140
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.69	0.82	1.00	1.00	1.00	0.67	1.00	1.00	1.00	1.00	0.81	0.81
Lanes:	1.00	3.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	3.68	0.32
Final Sat.:	1315	4668	0	0	0	2558	0	0	0	0	5664	486
Capacity Analysis Module:												
Vol/Sat:	0.37	0.16	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.29	0.29
Crit Moves:	****										****	
Green/Cycle:	0.57	0.57	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.32	0.32
Volume/Cap:	0.64	0.27	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.91	0.91
Delay/Veh:	15.8	8.9	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	33.8	33.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.8	8.9	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	33.8	33.8
HCM2k95th:	19	7	0	0	0	2	0	0	0	0	24	24

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 5th St/L St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.833
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 58.5
Optimal Cycle: 79 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	45	45	0	0	0	45	0	0	0	0	25	25
Lanes:	1 0 3 0 0			0 0 0 0 2			0 0 0 0 0			0 0 3 1 0		
Volume Module:												
Base Vol:	482	730	0	0	0	172	0	0	0	0	1631	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	482	730	0	0	0	172	0	0	0	0	1631	140
Added Vol:	21	94	0	0	0	0	0	0	0	0	350	64
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	503	824	0	0	0	172	0	0	0	0	1981	204
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	503	824	0	0	0	172	0	0	0	0	1981	204
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	503	824	0	0	0	172	0	0	0	0	1981	204
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	503	824	0	0	0	172	0	0	0	0	1981	204
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.69	0.82	1.00	1.00	1.00	0.67	1.00	1.00	1.00	1.00	0.81	0.81
Lanes:	1.00	3.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	3.63	0.37
Final Sat.:	1315	4668	0	0	0	2558	0	0	0	0	5564	573
Capacity Analysis Module:												
Vol/Sat:	0.38	0.18	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.36	0.36
Crit Moves:	****										****	
Green/Cycle:	0.57	0.57	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.32	0.32
Volume/Cap:	0.67	0.31	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	1.13	1.13
Delay/Veh:	16.6	9.2	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	90.6	90.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.6	9.2	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	90.6	90.6
HCM2k95th:	20	7	0	0	0	2	0	0	0	0	40	40

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #10 5th St/Capitol Mall

Cycle (sec):	70	Critical Vol./Cap. (X):	0.276
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	19.3
Optimal Cycle:	76	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	35	35	0	0	0	0	17	35	0	0	18	18
Lanes:	2 0 2 1 0			0 0 0 0 0			2 0 2 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	410	662	64	0	0	0	334	420	0	0	625	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	410	662	64	0	0	0	334	420	0	0	625	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	410	662	64	0	0	0	334	420	0	0	625	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	410	662	64	0	0	0	334	420	0	0	625	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	410	662	64	0	0	0	334	420	0	0	625	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.81	0.81	1.00	1.00	1.00	0.83	0.86	1.00	1.00	0.81	0.81
Lanes:	2.00	2.74	0.26	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.74	0.26
Final Sat.:	3274	4201	406	0	0	0	3152	3249	0	0	4204	404
Capacity Analysis Module:												
Vol/Sat:	0.13	0.16	0.16	0.00	0.00	0.00	0.11	0.13	0.00	0.00	0.15	0.15
Crit Moves:	****							****		****		
Green/Cycle:	0.46	0.46	0.46	0.00	0.00	0.00	0.22	0.46	0.00	0.00	0.24	0.24
Volume/Cap:	0.27	0.34	0.34	0.00	0.00	0.00	0.47	0.28	0.00	0.00	0.63	0.63
Delay/Veh:	13.1	13.6	13.6	0.0	0.0	0.0	27.9	13.2	0.0	0.0	28.7	28.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.1	13.6	13.6	0.0	0.0	0.0	27.9	13.2	0.0	0.0	28.7	28.7
HCM2k95th:	7	8	8	0	0	0	8	7	0	0	11	11

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 5th St/Capitol Mall

Cycle (sec):	70	Critical Vol./Cap. (X):	0.317
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	20.9
Optimal Cycle:	76	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	35	35	0	0	0	0	17	35	0	0	18	18
Lanes:	2 0 2 1 0			0 0 0 0 0			2 0 2 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	410	662	64	0	0	0	334	420	0	0	625	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	410	662	64	0	0	0	334	420	0	0	625	60
Added Vol:	61	70	31	0	0	0	45	60	0	0	159	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	471	732	95	0	0	0	379	480	0	0	784	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	471	732	95	0	0	0	379	480	0	0	784	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	471	732	95	0	0	0	379	480	0	0	784	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	471	732	95	0	0	0	379	480	0	0	784	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.81	0.81	1.00	1.00	1.00	0.83	0.86	1.00	1.00	0.81	0.81
Lanes:	2.00	2.66	0.34	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.79	0.21
Final Sat.:	3261	4062	527	0	0	0	3152	3249	0	0	4289	328
Capacity Analysis Module:												
Vol/Sat:	0.14	0.18	0.18	0.00	0.00	0.00	0.12	0.15	0.00	0.00	0.18	0.18
Crit Moves:	****							****		****		
Green/Cycle:	0.46	0.46	0.46	0.00	0.00	0.00	0.22	0.46	0.00	0.00	0.24	0.24
Volume/Cap:	0.31	0.39	0.39	0.00	0.00	0.00	0.54	0.32	0.00	0.00	0.77	0.77
Delay/Veh:	13.5	14.0	14.0	0.0	0.0	0.0	29.0	13.5	0.0	0.0	32.4	32.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.5	14.0	14.0	0.0	0.0	0.0	29.0	13.5	0.0	0.0	32.4	32.4
HCM2k95th:	8	9	9	0	0	0	10	8	0	0	15	15

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------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
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                                PM Peak Hour
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #11 5th St/N St
******************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.363
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       13.9
Optimal Cycle:        76              Level Of Service:                 B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   35    35    0    0     0   35   35     0    0    0     0
Lanes:        0  0  2  1  0   0  0  0  0  0   0  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  905   124    0    0     0   72  613     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0  905   124    0    0     0   72  613     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0  905   124    0    0     0   72  613     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0  905   124    0    0     0   72  613     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0  905   124    0    0     0   72  613     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.89  0.89 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.64  0.36 0.00 0.00  0.00 0.32 2.68  0.00 0.00 0.00  0.00
Final Sat.:     0 4480   614    0    0     0  545 4642     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.20  0.20 0.00 0.00  0.00 0.13 0.13  0.00 0.00 0.00  0.00
Crit Moves:       ****                      ****
Green/Cycle: 0.00 0.46  0.46 0.00 0.00  0.00 0.46 0.46  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.44  0.44 0.00 0.00  0.00 0.29 0.29  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 14.5  14.5  0.0  0.0   0.0 13.0 13.0   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 14.5  14.5  0.0  0.0   0.0 13.0 13.0   0.0  0.0  0.0   0.0
HCM2k95th:      0   11    11    0    0     0    7    7     0    0    0     0
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------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
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------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #11 5th St/N St
******************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.418
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       14.5
Optimal Cycle:        76              Level Of Service:                 B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   35    35    0    0     0   35   35     0    0    0     0
Lanes:        0  0  2  1  0   0  0  0  0  0   0  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  905   124    0    0     0   72  613     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0  905   124    0    0     0   72  613     0    0    0     0
Added Vol:      0  111    34    0    0     0   70   45     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0 1016   158    0    0     0  142  658     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0 1016   158    0    0     0  142  658     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0 1016   158    0    0     0  142  658     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0 1016   158    0    0     0  142  658     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.89  0.89 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.60  0.40 0.00 0.00  0.00 0.53 2.47  0.00 0.00 0.00  0.00
Final Sat.:     0 4399   684    0    0     0  921 4266     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.23  0.23 0.00 0.00  0.00 0.15 0.15  0.00 0.00 0.00  0.00
Crit Moves:       ****                      ****
Green/Cycle: 0.00 0.46  0.46 0.00 0.00  0.00 0.46 0.46  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.50  0.50 0.00 0.00  0.00 0.33 0.33  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 15.2  15.2  0.0  0.0   0.0 13.5 13.5   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 15.2  15.2  0.0  0.0   0.0 13.5 13.5   0.0  0.0  0.0   0.0
HCM2k95th:      0   12    12    0    0     0    8    8     0    0    0     0
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #12 5th St/P St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.856
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	16.9
Optimal Cycle:	61	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	21	21	0	0	0	0	0	0	0	0	29	29
Lanes:	0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	531	714	0	0	0	0	0	0	0	0	2001	321
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	531	714	0	0	0	0	0	0	0	0	2001	321
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	531	714	0	0	0	0	0	0	0	0	2001	321
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	531	714	0	0	0	0	0	0	0	0	2001	321
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	531	714	0	0	0	0	0	0	0	0	2001	321
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89
Lanes:	1.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.59	0.41
Final Sat.:	1729	3458	0	0	0	0	0	0	0	0	4376	702
Capacity Analysis Module:												
Vol/Sat:	0.31	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.46
Crit Moves:	****										****	
Green/Cycle:	0.38	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.52
Volume/Cap:	0.82	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.88
Delay/Veh:	20.8	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	16.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.8	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	16.7
HCM2k95th:	16	10	0	0	0	0	0	0	0	0	26	26

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 5th St/P St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.897
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	20.7
Optimal Cycle:	72	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	21	21	0	0	0	0	0	0	0	0	29	29
Lanes:	0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	531	714	0	0	0	0	0	0	0	0	2001	321
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	531	714	0	0	0	0	0	0	0	0	2001	321
Added Vol:	0	93	0	0	0	0	0	0	0	0	130	52
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	531	807	0	0	0	0	0	0	0	0	2131	373
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	531	807	0	0	0	0	0	0	0	0	2131	373
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	531	807	0	0	0	0	0	0	0	0	2131	373
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	531	807	0	0	0	0	0	0	0	0	2131	373
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89
Lanes:	1.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.55	0.45
Final Sat.:	1729	3458	0	0	0	0	0	0	0	0	4317	756
Capacity Analysis Module:												
Vol/Sat:	0.31	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.49
Crit Moves:	****										****	
Green/Cycle:	0.38	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.52
Volume/Cap:	0.82	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	0.95
Delay/Veh:	20.5	15.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.4	22.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.5	15.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.4	22.4
HCM2k95th:	16	11	0	0	0	0	0	0	0	0	33	33

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------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
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------------------------------------------------------------------------------
                   Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #13 5th St/Q St
******************************************************************************
Cycle (sec):          50             Critical Vol./Cap. (X):        0.462
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      12.2
Optimal Cycle:        56             Level Of Service:                 B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   21    21     0    0     0    29   29     0     0    0     0
Lanes:       0  0  2  1  0    0  0  0  0  0    1  1  2  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0 1112   122     0    0     0   437  744     0     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0 1112   122     0    0     0   437  744     0     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0 1112   122     0    0     0   437  744     0     0    0     0
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   0 1112   122     0    0     0   437  744     0     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0 1112   122     0    0     0   437  744     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.90  0.90  1.00 1.00  1.00  0.91 0.91  1.00  1.00 1.00  1.00
Lanes:       0.00 2.70  0.30  0.00 0.00  0.00  1.48 2.52  0.00  0.00 0.00  0.00
Final Sat.:    0 4604   505     0    0     0  2559 4357     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.24  0.24  0.00 0.00  0.00  0.17 0.17  0.00  0.00 0.00  0.00
Crit Moves:       ****                         ****
Green/Cycle: 0.00 0.38  0.38  0.00 0.00  0.00  0.52 0.52  0.00  0.00 0.00  0.00
Volume/Cap:  0.00 0.64  0.64  0.00 0.00  0.00  0.33 0.33  0.00  0.00 0.00  0.00
Delay/Veh:    0.0 16.1  16.1   0.0  0.0   0.0   8.1  8.1   0.0   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 16.1  16.1   0.0  0.0   0.0   8.1  8.1   0.0   0.0  0.0   0.0
HCM2k95th:      0   13    13     0    0     0     7    7     0     0    0     0
******************************************************************************
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------------------------------------------------------------------------------
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------------------------------------------------------------------------------
                   Level Of Service Computation Report
         2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #13 5th St/Q St
******************************************************************************
Cycle (sec):          50             Critical Vol./Cap. (X):        0.479
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      12.1
Optimal Cycle:        56             Level Of Service:                 B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   21    21     0    0     0    29   29     0     0    0     0
Lanes:       0  0  2  1  0    0  0  0  0  0    1  1  2  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0 1112   122     0    0     0   437  744     0     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0 1112   122     0    0     0   437  744     0     0    0     0
Added Vol:     0    0     0     0    0     0    93   14     0     0    0     0
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   0 1112   122     0    0     0   530  758     0     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0 1112   122     0    0     0   530  758     0     0    0     0
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   0 1112   122     0    0     0   530  758     0     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0 1112   122     0    0     0   530  758     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.90  0.90  1.00 1.00  1.00  0.91 0.91  1.00  1.00 1.00  1.00
Lanes:       0.00 2.70  0.30  0.00 0.00  0.00  1.65 2.35  0.00  0.00 0.00  0.00
Final Sat.:    0 4604   505     0    0     0  2846 4070     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.24  0.24  0.00 0.00  0.00  0.19 0.19  0.00  0.00 0.00  0.00
Crit Moves:       ****                         ****
Green/Cycle: 0.00 0.38  0.38  0.00 0.00  0.00  0.52 0.52  0.00  0.00 0.00  0.00
Volume/Cap:  0.00 0.64  0.64  0.00 0.00  0.00  0.36 0.36  0.00  0.00 0.00  0.00
Delay/Veh:    0.0 16.1  16.1   0.0  0.0   0.0   8.3  8.3   0.0   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 16.1  16.1   0.0  0.0   0.0   8.3  8.3   0.0   0.0  0.0   0.0
HCM2k95th:      0   13    13     0    0     0     7    7     0     0    0     0
******************************************************************************
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #14 7th St/I St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.339
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	19.0
Optimal Cycle:	106	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	34	34	0	0	0	66	66	0
Lanes:	0 0 0 0 0			0 0 2 0 2			0 0 0 0 0			1 1 2 0 0		
Volume Module:												
Base Vol:	0	0	0	0	473	505	0	0	0	191	1712	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	473	505	0	0	0	191	1712	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	473	505	0	0	0	191	1712	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	473	505	0	0	0	191	1712	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	473	505	0	0	0	191	1712	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.86	0.67	1.00	1.00	1.00	0.82	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	3249	2558	0	0	0	1556	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.15	0.20	0.00	0.00	0.00	0.12	0.37	0.00
Crit Moves:						****				****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.32	0.32	0.00	0.00	0.00	0.62	0.62	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.45	0.62	0.00	0.00	0.00	0.20	0.59	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	30.0	33.9	0.0	0.0	0.0	8.6	12.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	30.0	33.9	0.0	0.0	0.0	8.6	12.7	0.0
HCM2k95th:	0	0	0	0	12	14	0	0	0	6	19	0

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Intersection #14 7th St/I St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.403
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	19.6
Optimal Cycle:	106	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	34	34	0	0	0	66	66	0
Lanes:	0 0 0 0 0			0 0 2 0 2			0 0 0 0 0			1 1 2 0 0		
Volume Module:												
Base Vol:	0	0	0	0	473	505	0	0	0	191	1712	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	473	505	0	0	0	191	1712	0
Added Vol:	0	0	0	0	107	0	0	0	0	94	151	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	580	505	0	0	0	285	1863	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	580	505	0	0	0	285	1863	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	580	505	0	0	0	285	1863	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	580	505	0	0	0	285	1863	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.86	0.67	1.00	1.00	1.00	0.82	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	3249	2558	0	0	0	1556	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.18	0.20	0.00	0.00	0.00	0.18	0.40	0.00
Crit Moves:						****				****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.32	0.32	0.00	0.00	0.00	0.62	0.62	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.56	0.62	0.00	0.00	0.00	0.29	0.64	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	31.9	33.9	0.0	0.0	0.0	9.3	13.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	31.9	33.9	0.0	0.0	0.0	9.3	13.5	0.0
HCM2k95th:	0	0	0	0	15	14	0	0	0	9	22	0

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2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 7th St/J St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.608
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 14.4
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	22	22	0	0	28	28	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	0	0	90	553	0	0	1439	392	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	90	553	0	0	1439	392	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	90	553	0	0	1439	392	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	90	553	0	0	1439	392	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	90	553	0	0	1439	392	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	0.82	1.00	1.00	0.79	0.79	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.42	2.58	0.00	0.00	2.36	0.64	0.00	0.00	0.00
Final Sat.:	0	0	0	653	4015	0	0	3551	967	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.14	0.14	0.00	0.00	0.41	0.41	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.50	0.50	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.35	0.35	0.00	0.00	0.81	0.81	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	12.5	12.5	0.0	0.0	15.0	15.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	12.5	12.5	0.0	0.0	15.0	15.0	0.0	0.0	0.0
HCM2k95th:	0	0	0	6	6	0	0	20	20	0	0	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #15 7th St/J St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.752
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 24.6
Optimal Cycle: 56 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	22	22	0	0	28	28	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	0	0	90	553	0	0	1439	392	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	90	553	0	0	1439	392	0	0	0
Added Vol:	0	0	0	91	109	0	0	397	2	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	181	662	0	0	1836	394	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	181	662	0	0	1836	394	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	181	662	0	0	1836	394	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	181	662	0	0	1836	394	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	0.82	1.00	1.00	0.80	0.80	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.64	2.36	0.00	0.00	2.47	0.53	0.00	0.00	0.00
Final Sat.:	0	0	0	1002	3666	0	0	3740	803	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.18	0.18	0.00	0.00	0.49	0.49	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.50	0.50	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.98	0.98	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	13.4	13.4	0.0	0.0	28.8	28.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	13.4	13.4	0.0	0.0	28.8	28.8	0.0	0.0	0.0
HCM2k95th:	0	0	0	8	8	0	0	33	33	0	0	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #16 7th St/L St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.315
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	15.2
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	0 0 2 1 0	0 0 0 0 0	1 0 3 0 0

Movement:	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Min. Green:	0	0	0	0	29	29	0	0	0	21	21	0
Volume Module:												
Base Vol:	0	0	0	0	584	256	0	0	0	158	1398	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	584	256	0	0	0	158	1398	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	584	256	0	0	0	158	1398	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	584	256	0	0	0	158	1398	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	584	256	0	0	0	158	1398	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.78	0.78	1.00	1.00	1.00	0.90	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.09	0.91	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	3096	1357	0	0	0	1710	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.19	0.19	0.00	0.00	0.00	0.09	0.30	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.52	0.52	0.00	0.00	0.00	0.38	0.38	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.36	0.36	0.00	0.00	0.00	0.25	0.80	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	8.5	8.5	0.0	0.0	0.0	13.0	19.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	8.5	8.5	0.0	0.0	0.0	13.0	19.5	0.0
HCM2k95th:	0	0	0	0	7	7	0	0	0	5	17	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 7th St/L St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.698
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	38.3
Optimal Cycle:	56	Level Of Service:	D

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	0 0 2 1 0	0 0 0 0 0	1 0 3 0 0

Movement:	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Min. Green:	0	0	0	0	29	29	0	0	0	21	21	0
Volume Module:												
Base Vol:	0	0	0	0	584	256	0	0	0	158	1398	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	584	256	0	0	0	158	1398	0
Added Vol:	0	0	0	0	35	76	0	0	0	270	461	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	619	332	0	0	0	428	1859	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	619	332	0	0	0	428	1859	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	619	332	0	0	0	428	1859	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	619	332	0	0	0	428	1859	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.78	0.78	1.00	1.00	1.00	0.90	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	2950	1475	0	0	0	1710	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.21	0.23	0.00	0.00	0.00	0.25	0.40	0.00
Crit Moves:						****					****	
Green/Cycle:	0.00	0.00	0.00	0.00	0.52	0.52	0.00	0.00	0.00	0.38	0.38	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.41	0.43	0.00	0.00	0.00	0.67	1.06	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	8.8	9.0	0.0	0.0	0.0	20.0	57.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	8.8	9.0	0.0	0.0	0.0	20.0	57.6	0.0
HCM2k95th:	0	0	0	0	8	8	0	0	0	14	34	0

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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #17 8th St/I St
*******************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.583
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      18.6
Optimal Cycle:      106              Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:   34   34     0    0    0     0    0    0     0    0   66    66
Lanes:       1  1  2  0  0    0  0  0  0  0    0  0  0  0  0    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     452  637     0    0    0     0    0    0     0    0 1920   100
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:  452  637     0    0    0     0    0    0     0    0 1920   100
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:   452  637     0    0    0     0    0    0     0    0 1920   100
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:  452  637     0    0    0     0    0    0     0    0 1920   100
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:   452  637     0    0    0     0    0    0     0    0 1920   100
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  0.91 0.91  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.90  0.90
Lanes:       1.66 2.34  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 2.85  0.15
Final Sat.:  2871 4045     0    0    0     0    0    0     0    0 4896   255
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.16 0.16  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.39  0.39
Crit Moves:  ****                                                   ****
Green/Cycle: 0.32 0.32  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.62  0.62
Volume/Cap:  0.49 0.49  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.63  0.63
Delay/Veh:   29.2 29.2   0.0  0.0  0.0   0.0  0.0  0.0   0.0  0.0 12.8  12.8
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:  29.2 29.2   0.0  0.0  0.0   0.0  0.0  0.0   0.0  0.0 12.8  12.8
HCM2k95th:     14   14     0    0    0     0    0    0     0    0   24    24
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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #17 8th St/I St
*******************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.642
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      20.2
Optimal Cycle:      106              Level Of Service:                  C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:   34   34     0    0    0     0    0    0     0    0   66    66
Lanes:       1  1  2  0  0    0  0  0  0  0    0  0  0  0  0    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     452  637     0    0    0     0    0    0     0    0 1920   100
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:  452  637     0    0    0     0    0    0     0    0 1920   100
Added Vol:    164   99     0    0    0     0    0    0     0    0   80     9
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:  616  736     0    0    0     0    0    0     0    0 2000   109
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:   616  736     0    0    0     0    0    0     0    0 2000   109
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:  616  736     0    0    0     0    0    0     0    0 2000   109
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:   616  736     0    0    0     0    0    0     0    0 2000   109
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  0.91 0.91  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.90  0.90
Lanes:       1.82 2.18  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 2.84  0.16
Final Sat.:  3151 3765     0    0    0     0    0    0     0    0 4880   266
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.20 0.20  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.41  0.41
Crit Moves:  ****                                                   ****
Green/Cycle: 0.32 0.32  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.62  0.62
Volume/Cap:  0.61 0.61  0.00 0.00 0.00  0.00 0.00 0.00  0.00 0.00 0.66  0.66
Delay/Veh:   30.9 30.9   0.0  0.0  0.0   0.0  0.0  0.0   0.0  0.0 13.3  13.3
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:  30.9 30.9   0.0  0.0  0.0   0.0  0.0  0.0   0.0  0.0 13.3  13.3
HCM2k95th:     18   18     0    0    0     0    0    0     0    0   25    25
*******************************************************************************
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---------------------------------------------------------------------------------
                         Downtown Sacramento Traffic Study
                            2013 Cumulative Conditions
                                   PM Peak Hour
---------------------------------------------------------------------------------
                        Level Of Service Computation Report
               2000 HCM Operations Method (Base Volume Alternative)
*********************************************************************************
Intersection #18 8th S/tJ St
*********************************************************************************
Cycle (sec):           50             Critical Vol./Cap. (X):        0.510
Loss Time (sec):        6 (Y+R =  4 sec) Average Delay (sec/veh):     14.6
Optimal Cycle:         56             Level Of Service:                  B
*********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   25    25    0    0     0    25   25     0    0    0     0
Lanes:       0  0  2  1  0    0  0  0  0  0    1  1  2  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0  660   546    0    0     0   123 1440     0    0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0  660   546    0    0     0   123 1440     0    0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0  660   546    0    0     0   123 1440     0    0    0     0
Reduct Vol:    0    0     0    0    0     0     0    0     0    0    0     0
Reduced Vol:   0  660   546    0    0     0   123 1440     0    0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0  660   546    0    0     0   123 1440     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.76  0.76  1.00 1.00  1.00  0.82 0.82  1.00  1.00 1.00  1.00
Lanes:       0.00 2.00  1.00  0.00 0.00  0.00  1.00 3.00  0.00  0.00 0.00  0.00
Final Sat.:    0 2901  1450    0    0     0  1556 4668     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.23  0.38  0.00 0.00  0.00  0.08 0.31  0.00  0.00 0.00  0.00
Crit Moves:             ****                   ****
Green/Cycle: 0.00 0.45  0.45  0.00 0.00  0.00  0.45 0.45  0.00  0.00 0.00  0.00
Volume/Cap:  0.00 0.51  0.84  0.00 0.00  0.00  0.18 0.69  0.00  0.00 0.00  0.00
Delay/Veh:    0.0 11.9  20.0   0.0  0.0   0.0   9.4 14.2   0.0   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 11.9  20.0   0.0  0.0   0.0   9.4 14.2   0.0   0.0  0.0   0.0
HCM2k95th:     0    9    20    0    0     0     3   12     0    0    0     0
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---------------------------------------------------------------------------------
                         Downtown Sacramento Traffic Study
                            2013 Cumulative Conditions
                                   PM Peak Hour
---------------------------------------------------------------------------------
                        Level Of Service Computation Report
              2000 HCM Operations Method (Future Volume Alternative)
*********************************************************************************
Intersection #18 8th S/tJ St
*********************************************************************************
Cycle (sec):           50             Critical Vol./Cap. (X):        0.712
Loss Time (sec):        6 (Y+R =  4 sec) Average Delay (sec/veh):     31.0
Optimal Cycle:         56             Level Of Service:                  C
*********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   25    25    0    0     0    25   25     0    0    0     0
Lanes:       0  0  2  1  0    0  0  0  0  0    1  1  2  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0  660   546    0    0     0   123 1440     0    0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0  660   546    0    0     0   123 1440     0    0    0     0
Added Vol:     0  137   184    0    0     0    80  409     0    0    0     0
PasserByVol:   0    0     0    0    0     0     0    0     0    0    0     0
Initial Fut:   0  797   730    0    0     0   203 1849     0    0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0  797   730    0    0     0   203 1849     0    0    0     0
Reduct Vol:    0    0     0    0    0     0     0    0     0    0    0     0
Reduced Vol:   0  797   730    0    0     0   203 1849     0    0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0  797   730    0    0     0   203 1849     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.76  0.76  1.00 1.00  1.00  0.82 0.82  1.00  1.00 1.00  1.00
Lanes:       0.00 2.00  1.00  0.00 0.00  0.00  1.00 3.00  0.00  0.00 0.00  0.00
Final Sat.:    0 2888  1444    0    0     0  1556 4668     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.28  0.51  0.00 0.00  0.00  0.13 0.40  0.00  0.00 0.00  0.00
Crit Moves:             ****                   ****
Green/Cycle: 0.00 0.45  0.45  0.00 0.00  0.00  0.45 0.45  0.00  0.00 0.00  0.00
Volume/Cap:  0.00 0.62  1.13  0.00 0.00  0.00  0.29 0.89  0.00  0.00 0.00  0.00
Delay/Veh:    0.0 13.0  84.9   0.0  0.0   0.0  10.0 19.7   0.0   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 13.0  84.9   0.0  0.0   0.0  10.0 19.7   0.0   0.0  0.0   0.0
HCM2k95th:     0   12    44    0    0     0     5   16     0    0    0     0
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 8th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.456
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 16.3
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	29	29	0	0	0	0	0	0	0	0	21	21
Lanes:	1 0 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 1		
Volume Module:												
Base Vol:	158	510	0	0	0	0	0	0	0	0	1448	158
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	158	510	0	0	0	0	0	0	0	0	1448	158
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	158	510	0	0	0	0	0	0	0	0	1448	158
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	158	510	0	0	0	0	0	0	0	0	1448	158
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	158	510	0	0	0	0	0	0	0	0	1448	158
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81	0.81
Lanes:	1.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	1.00
Final Sat.:	1710	3249	0	0	0	0	0	0	0	0	4598	1533
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.10
Crit Moves:	****										****	
Green/Cycle:	0.52	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38
Volume/Cap:	0.18	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.27
Delay/Veh:	7.6	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.6	12.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.6	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.6	12.3
HCM2k95th:	4	6	0	0	0	0	0	0	0	0	18	5

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #19 8th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.625
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 48.3
Optimal Cycle: 56 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	29	29	0	0	0	0	0	0	0	0	21	21
Lanes:	1 0 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 1		
Volume Module:												
Base Vol:	158	510	0	0	0	0	0	0	0	0	1448	158
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	158	510	0	0	0	0	0	0	0	0	1448	158
Added Vol:	89	113	0	0	0	0	0	0	0	0	442	169
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	247	623	0	0	0	0	0	0	0	0	1890	327
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	247	623	0	0	0	0	0	0	0	0	1890	327
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	247	623	0	0	0	0	0	0	0	0	1890	327
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	247	623	0	0	0	0	0	0	0	0	1890	327
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.80
Lanes:	1.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	1.00
Final Sat.:	1710	3249	0	0	0	0	0	0	0	0	4566	1522
Capacity Analysis Module:												
Vol/Sat:	0.14	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.21
Crit Moves:	****										****	
Green/Cycle:	0.52	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38
Volume/Cap:	0.28	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	0.57
Delay/Veh:	8.4	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.4	14.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.4	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.4	14.6
HCM2k95th:	6	7	0	0	0	0	0	0	0	0	37	10

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #20 9th St/I St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.432
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	22.1
Optimal Cycle:	112	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	35	35	0	0	0	65	65	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			1 0 3 0 0		
Volume Module:												
Base Vol:	0	0	0	0	565	341	0	0	0	262	1523	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	565	341	0	0	0	262	1523	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	565	341	0	0	0	262	1523	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	565	341	0	0	0	262	1523	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	565	341	0	0	0	262	1523	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.77	0.77	1.00	1.00	1.00	0.90	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	2938	1469	0	0	0	1710	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.19	0.23	0.00	0.00	0.00	0.15	0.33	0.00
Crit Moves:						****				****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.31	0.31	0.00	0.00	0.00	0.58	0.58	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.62	0.74	0.00	0.00	0.00	0.26	0.56	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	34.7	38.6	0.0	0.0	0.0	12.3	15.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	34.7	38.6	0.0	0.0	0.0	12.3	15.5	0.0
HCM2k95th:	0	0	0	0	16	20	0	0	0	9	19	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #20 9th St/I St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.462
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	22.2
Optimal Cycle:	112	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	35	35	0	0	0	65	65	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			1 0 3 0 0		
Volume Module:												
Base Vol:	0	0	0	0	565	341	0	0	0	262	1523	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	565	341	0	0	0	262	1523	0
Added Vol:	0	0	0	0	7	0	0	0	0	47	89	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	572	341	0	0	0	309	1612	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	572	341	0	0	0	309	1612	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	572	341	0	0	0	309	1612	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	572	341	0	0	0	309	1612	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.77	0.77	1.00	1.00	1.00	0.90	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	2938	1469	0	0	0	1710	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.19	0.23	0.00	0.00	0.00	0.18	0.35	0.00
Crit Moves:						****				****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.31	0.31	0.00	0.00	0.00	0.58	0.58	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.62	0.74	0.00	0.00	0.00	0.31	0.59	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	34.9	38.6	0.0	0.0	0.0	12.9	16.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	34.9	38.6	0.0	0.0	0.0	12.9	16.0	0.0
HCM2k95th:	0	0	0	0	16	20	0	0	0	10	20	0

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2000 HCM Operations Method (Base Volume Alternative)

Intersection #21 9th St/J St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.678
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 16.7
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	25	25	0	0	25	25	0	0	0
Lanes:		0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0	
Volume Module:												
Base Vol:	0	0	0	108	904	0	0	1475	294	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	108	904	0	0	1475	294	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	108	904	0	0	1475	294	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	108	904	0	0	1475	294	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	108	904	0	0	1475	294	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	0.82	1.00	1.00	0.80	0.80	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.32	2.68	0.00	0.00	2.50	0.50	0.00	0.00	0.00
Final Sat.:	0	0	0	498	4170	0	0	3795	756	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.22	0.22	0.00	0.00	0.39	0.39	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.45	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.49	0.49	0.00	0.00	0.87	0.87	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	11.8	11.8	0.0	0.0	19.5	19.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	11.8	11.8	0.0	0.0	19.5	19.5	0.0	0.0	0.0
HCM2k95th:	0	0	0	8	8	0	0	18	18	0	0	0

Downtown Sacramento Traffic Study
2013 Cumulative Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #21 9th St/J St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.837
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 68.6
Optimal Cycle: 57 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	25	25	0	0	25	25	0	0	0
Lanes:		0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0	
Volume Module:												
Base Vol:	0	0	0	108	904	0	0	1475	294	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	108	904	0	0	1475	294	0	0	0
Added Vol:	0	0	0	0	54	0	0	511	83	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	108	958	0	0	1986	377	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	108	958	0	0	1986	377	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	108	958	0	0	1986	377	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	108	958	0	0	1986	377	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	0.82	1.00	1.00	0.80	0.80	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.30	2.70	0.00	0.00	2.52	0.48	0.00	0.00	0.00
Final Sat.:	0	0	0	473	4195	0	0	3829	727	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.52	0.52	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.45	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.51	0.51	0.00	0.00	1.16	1.16	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	12.0	12.0	0.0	0.0	94.2	94.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	12.0	12.0	0.0	0.0	94.2	94.2	0.0	0.0	0.0
HCM2k95th:	0	0	0	9	9	0	0	44	44	0	0	0

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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2013 Cumulative Conditions
                                 PM Peak Hour
-------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #22 9th St/L St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.767
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        14.8
Optimal Cycle:        56               Level Of Service:                 B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   21    21    0    0     0   29   29     0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0  997   159    0    0     0  738 1296     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  997   159    0    0     0  738 1296     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  997   159    0    0     0  738 1296     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  997   159    0    0     0  738 1296     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  997   159    0    0     0  738 1296     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.80  0.80 1.00 1.00  1.00 0.90 0.82  1.00
Lanes:       0.00 0.00  0.00 0.00 2.59  0.41 0.00 0.00  0.00 1.00 3.00  0.00
Final Sat.:     0    0     0    0 3942   629    0    0     0 1710 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.25  0.25 0.00 0.00  0.00 0.43 0.28  0.00
Crit Moves:                       ****                         ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.38  0.38 0.00 0.00  0.00 0.52 0.52  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.67  0.67 0.00 0.00  0.00 0.83 0.54  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 16.8  16.8  0.0  0.0   0.0 20.5  9.9   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 16.8  16.8  0.0  0.0   0.0 20.5  9.9   0.0
HCM2k95th:      0    0     0    0   13    13    0    0     0   19   10     0
*******************************************************************************
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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2013 Cumulative Conditions
                                 PM Peak Hour
-------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #22 9th St/L St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.865
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        18.4
Optimal Cycle:        63               Level Of Service:                 B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   21    21    0    0     0   29   29     0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0  997   159    0    0     0  738 1296     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  997   159    0    0     0  738 1296     0
Added Vol:      0    0     0    0  108   249    0    0     0    5  279     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0    0 1105   408    0    0     0  743 1575     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0 1105   408    0    0     0  743 1575     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0 1105   408    0    0     0  743 1575     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0 1105   408    0    0     0  743 1575     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.79  0.79 1.00 1.00  1.00 0.90 0.82  1.00
Lanes:       0.00 0.00  0.00 0.00 2.19  0.81 0.00 0.00  0.00 1.00 3.00  0.00
Final Sat.:     0    0     0    0 3273  1209    0    0     0 1710 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.34  0.34 0.00 0.00  0.00 0.43 0.34  0.00
Crit Moves:                       ****                         ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.38  0.38 0.00 0.00  0.00 0.52 0.52  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.90  0.90 0.00 0.00  0.00 0.84 0.65  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 24.7  24.7  0.0  0.0   0.0 20.9 11.2   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 24.7  24.7  0.0  0.0   0.0 20.9 11.2   0.0
HCM2k95th:      0    0     0    0   21    21    0    0     0   19   12     0
*******************************************************************************
```

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #23 9th St/P St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.650
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.7
Optimal Cycle: 34 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	10	0	0	0	0	0	10	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			0 1 2 0 0		
Volume Module:												
Base Vol:	0	0	0	0	1197	287	0	0	0	249	1189	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	1197	287	0	0	0	249	1189	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	1197	287	0	0	0	249	1189	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1197	287	0	0	0	249	1189	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	1197	287	0	0	0	249	1189	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.88	0.88	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	2.42	0.58	0.00	0.00	0.00	0.52	2.48	0.00
Final Sat.:	0	0	0	0	4063	974	0	0	0	898	4289	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.29	0.29	0.00	0.00	0.00	0.28	0.28	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.43	0.43	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.65	0.65	0.00	0.00	0.00	0.65	0.65	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	11.3	11.3	0.0	0.0	0.0	12.1	12.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	11.3	11.3	0.0	0.0	0.0	12.1	12.1	0.0
HCM2k95th:	0	0	0	0	13	13	0	0	0	11	11	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 9th St/P St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.714
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.4
Optimal Cycle: 39 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	10	0	0	0	0	0	10	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			0 1 2 0 0		
Volume Module:												
Base Vol:	0	0	0	0	1197	287	0	0	0	249	1189	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	1197	287	0	0	0	249	1189	0
Added Vol:	0	0	0	0	262	3	0	0	0	0	25	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	1459	290	0	0	0	249	1214	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	1459	290	0	0	0	249	1214	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1459	290	0	0	0	249	1214	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	1459	290	0	0	0	249	1214	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.89	0.89	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	2.50	0.50	0.00	0.00	0.00	0.51	2.49	0.00
Final Sat.:	0	0	0	0	4219	839	0	0	0	883	4304	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.35	0.35	0.00	0.00	0.00	0.28	0.28	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.48	0.48	0.00	0.00	0.00	0.40	0.40	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.71	0.71	0.00	0.00	0.00	0.71	0.71	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	11.2	11.2	0.0	0.0	0.0	13.9	13.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	11.2	11.2	0.0	0.0	0.0	13.9	13.9	0.0
HCM2k95th:	0	0	0	0	16	16	0	0	0	12	12	0

```
--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                PM Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #24 9th St/Q St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.476
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        11.6
Optimal Cycle:        56               Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0     0   25   25     0    0   25    25    0    0     0
Lanes:       0  0  0  0  0    0  1  2  0  0    0  0  3  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0     0  188 1281     0    0  761   193    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0     0  188 1281     0    0  761   193    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0    0     0  188 1281     0    0  761   193    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0     0  188 1281     0    0  761   193    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0    0     0  188 1281     0    0  761   193    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.88  0.88 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.38 2.62  0.00 0.00 3.19  0.81 0.00 0.00  0.00
Final Sat.:    0    0     0  664 4523     0    0 5351  1357    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.28 0.28  0.00 0.00 0.14  0.14 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.63 0.63  0.00 0.00 0.32  0.32 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 12.6 12.6   0.0  0.0 10.1  10.1  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 12.6 12.6   0.0  0.0 10.1  10.1  0.0  0.0   0.0
HCM2k95th:     0    0     0   12   12     0    0    6     6    0    0     0
********************************************************************************
```



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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                PM Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #24 9th St/Q St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.537
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        12.8
Optimal Cycle:        56               Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0     0   25   25     0    0   25    25    0    0     0
Lanes:       0  0  0  0  0    0  1  2  0  0    0  0  3  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0     0  188 1281     0    0  761   193    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0     0  188 1281     0    0  761   193    0    0     0
Added Vol:     0    0     0   30  232     0    0   21     0    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   0    0     0  218 1513     0    0  782   193    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0    0     0  218 1513     0    0  782   193    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0     0  218 1513     0    0  782   193    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0    0     0  218 1513     0    0  782   193    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.88  0.88 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.38 2.62  0.00 0.00 3.21  0.79 0.00 0.00  0.00
Final Sat.:    0    0     0  653 4534     0    0 5381  1328    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.33 0.33  0.00 0.00 0.15  0.15 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.75 0.75  0.00 0.00 0.33  0.33 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 14.3 14.3   0.0  0.0 10.1  10.1  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 14.3 14.3   0.0  0.0 10.1  10.1  0.0  0.0   0.0
HCM2k95th:     0    0     0   16   16     0    0    6     6    0    0     0
********************************************************************************
```

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-----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                      2013 Cumulative Conditions
                             PM Peak Hour
-----------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #25 10th St/I St
*****************************************************************************
Cycle (sec):       100              Critical Vol./Cap. (X):        0.678
Loss Time (sec):    12 (Y+R =  4 sec) Average Delay (sec/veh):      23.6
Optimal Cycle:     112              Level Of Service:                  C
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:   35   35    0    0    0    0    0    0    0    0   65   65
Lanes:       0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     279  581    0    0    0    0    0    0    0    0 1592  325
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  279  581    0    0    0    0    0    0    0    0 1592  325
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   279  581    0    0    0    0    0    0    0    0 1592  325
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  279  581    0    0    0    0    0    0    0    0 1592  325
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   279  581    0    0    0    0    0    0    0    0 1592  325
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.82 0.82 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.80 0.80
Lanes:       0.97 2.03 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.49 0.51
Final Sat.:  1514 3154    0    0    0    0    0    0    0    0 3780  772
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.18 0.18 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.42 0.42
Crit Moves:  ****                                                 ****
Green/Cycle: 0.31 0.31 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.58 0.58
Volume/Cap:  0.59 0.59 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.73 0.73
Delay/Veh:   34.2 34.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 18.8 18.8
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  34.2 34.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 18.8 18.8
HCM2k95th:     16   16    0    0    0    0    0    0    0    0   28   28
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-----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                      2013 Cumulative Conditions
                             PM Peak Hour
-----------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*****************************************************************************
Intersection #25 10th St/I St
*****************************************************************************
Cycle (sec):       100              Critical Vol./Cap. (X):        0.725
Loss Time (sec):    12 (Y+R =  4 sec) Average Delay (sec/veh):      24.8
Optimal Cycle:     112              Level Of Service:                  C
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:   35   35    0    0    0    0    0    0    0    0   65   65
Lanes:       0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     279  581    0    0    0    0    0    0    0    0 1592  325
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  279  581    0    0    0    0    0    0    0    0 1592  325
Added Vol:     10   59    0    0    0    0    0    0    0    0  127    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:  289  640    0    0    0    0    0    0    0    0 1719  325
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   289  640    0    0    0    0    0    0    0    0 1719  325
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  289  640    0    0    0    0    0    0    0    0 1719  325
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   289  640    0    0    0    0    0    0    0    0 1719  325
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.82 0.82 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.80 0.80
Lanes:       0.93 2.07 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.52 0.48
Final Sat.:  1452 3216    0    0    0    0    0    0    0    0 3832  724
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.20 0.20 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.45
Crit Moves:  ****                                                 ****
Green/Cycle: 0.31 0.31 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.58 0.58
Volume/Cap:  0.64 0.64 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.77 0.77
Delay/Veh:   35.2 35.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 20.2 20.2
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  35.2 35.2  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 20.2 20.2
HCM2k95th:     17   17    0    0    0    0    0    0    0    0   31   31
*****************************************************************************
```

Downtown Sacramento Traffic Study
2013 Cumulative Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 10th St/J St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.727
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 20.9
Optimal Cycle: 62 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	26	26	0	0	0	24	24	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			0 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	940	161	0	0	0	132	1479	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	940	161	0	0	0	132	1479	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	940	161	0	0	0	132	1479	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	940	161	0	0	0	132	1479	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	940	161	0	0	0	132	1479	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.80	0.80	1.00	1.00	1.00	0.82	0.82	1.00	1.00	1.00	1.00
Lanes:	0.00	2.56	0.44	0.00	0.00	0.00	0.25	2.75	0.00	0.00	0.00	0.00
Final Sat.:	0	3898	668	0	0	0	383	4286	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.24	0.00	0.00	0.00	0.35	0.35	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.42	0.42	0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.58	0.58	0.00	0.00	0.00	0.89	0.89	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	15.0	15.0	0.0	0.0	0.0	24.9	24.9	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	15.0	15.0	0.0	0.0	0.0	24.9	24.9	0.0	0.0	0.0	0.0
HCM2k95th:	0	12	12	0	0	0	18	18	0	0	0	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 10th St/J St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.876
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 72.6
Optimal Cycle: 78 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	26	26	0	0	0	24	24	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			0 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	940	161	0	0	0	132	1479	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	940	161	0	0	0	132	1479	0	0	0	0
Added Vol:	0	52	0	0	0	0	95	416	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	992	161	0	0	0	227	1895	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	992	161	0	0	0	227	1895	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	992	161	0	0	0	227	1895	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	992	161	0	0	0	227	1895	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.80	0.80	1.00	1.00	1.00	0.82	0.82	1.00	1.00	1.00	1.00
Lanes:	0.00	2.58	0.42	0.00	0.00	0.00	0.32	2.68	0.00	0.00	0.00	0.00
Final Sat.:	0	3932	638	0	0	0	499	4169	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.42	0.42	0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.60	0.60	0.00	0.00	0.00	1.17	1.17	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	15.4	15.4	0.0	0.0	0.0	103.6	104	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	15.4	15.4	0.0	0.0	0.0	103.6	104	0.0	0.0	0.0	0.0
HCM2k95th:	0	12	12	0	0	0	41	41	0	0	0	0

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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #27 10th St/L St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):         0.763
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        15.6
Optimal Cycle:        56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Protected        Protected
Rights:           Include          Include           Include          Include
Min. Green:    21   21     0     0    0     0     0    0     0     0   29    29
Lanes:        0  1  2  0  0    0  0  0  0  0    0  0  0  0  0    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      202  967     0     0    0     0     0    0     0     0 1642   320
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   202  967     0     0    0     0     0    0     0     0 1642   320
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    202  967     0     0    0     0     0    0     0     0 1642   320
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   202  967     0     0    0     0     0    0     0     0 1642   320
PCE Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    202  967     0     0    0     0     0    0     0     0 1642   320
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:   0.82 0.82  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 0.80  0.80
Lanes:        0.52 2.48  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 2.51  0.49
Final Sat.:    807 3862     0     0    0     0     0    0     0     0 3813   743
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.25 0.25  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.43  0.43
Crit Moves:   ****                                                   ****
Green/Cycle:  0.38 0.38  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.52  0.52
Volume/Cap:   0.67 0.67  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.83  0.83
Delay/Veh:    16.6 16.6   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 15.0  15.0
User DelAdj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   16.6 16.6   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 15.0  15.0
HCM2k95th:      13   13     0     0    0     0     0    0     0     0   21    21
********************************************************************************
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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #27 10th St/L St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):         0.851
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        19.1
Optimal Cycle:        60              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Protected        Protected
Rights:           Include          Include           Include          Include
Min. Green:    21   21     0     0    0     0     0    0     0     0   29    29
Lanes:        0  1  2  0  0    0  0  0  0  0    0  0  0  0  0    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      202  967     0     0    0     0     0    0     0     0 1642   320
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   202  967     0     0    0     0     0    0     0     0 1642   320
Added Vol:      92   68     0     0    0     0     0    0     0     0  192    14
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   294 1035     0     0    0     0     0    0     0     0 1834   334
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    294 1035     0     0    0     0     0    0     0     0 1834   334
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   294 1035     0     0    0     0     0    0     0     0 1834   334
PCE Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    294 1035     0     0    0     0     0    0     0     0 1834   334
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:   0.82 0.82  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 0.80  0.80
Lanes:        0.66 2.34  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 2.54  0.46
Final Sat.:   1033 3636     0     0    0     0     0    0     0     0 3858   703
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.28 0.28  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.48  0.48
Crit Moves:   ****                                                   ****
Green/Cycle:  0.38 0.38  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.52  0.52
Volume/Cap:   0.76 0.76  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.92  0.92
Delay/Veh:    18.4 18.4   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 19.5  19.5
User DelAdj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   18.4 18.4   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 19.5  19.5
HCM2k95th:      16   16     0     0    0     0     0    0     0     0   27    27
********************************************************************************
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 10th St/P St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.478
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	8.7
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	10	0	0	0	0	0	0	0	0	10	0
Lanes:		0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0	
Volume Module:												
Base Vol:	188	495	0	0	0	0	0	0	0	0	1248	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	188	495	0	0	0	0	0	0	0	0	1248	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	188	495	0	0	0	0	0	0	0	0	1248	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	188	495	0	0	0	0	0	0	0	0	1248	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	188	495	0	0	0	0	0	0	0	0	1248	220
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89
Lanes:	0.83	2.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.55	0.45
Final Sat.:	1428	3759	0	0	0	0	0	0	0	0	4313	760
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.29
Crit Moves:		****									****	
Green/Cycle:	0.28	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.60
Volume/Cap:	0.48	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.48
Delay/Veh:	15.4	15.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	5.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.4	15.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	5.6
HCM2k95th:	6	6	0	0	0	0	0	0	0	0	8	8

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #28 10th St/P St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.514
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	9.3
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	10	0	0	0	0	0	0	0	0	10	0
Lanes:		0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0	
Volume Module:												
Base Vol:	188	495	0	0	0	0	0	0	0	0	1248	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	188	495	0	0	0	0	0	0	0	0	1248	220
Added Vol:	21	91	0	0	0	0	0	0	0	0	5	39
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	209	586	0	0	0	0	0	0	0	0	1253	259
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	209	586	0	0	0	0	0	0	0	0	1253	259
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	209	586	0	0	0	0	0	0	0	0	1253	259
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	209	586	0	0	0	0	0	0	0	0	1253	259
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89
Lanes:	0.79	2.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.49	0.51
Final Sat.:	1364	3823	0	0	0	0	0	0	0	0	4187	865
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.30
Crit Moves:		****									****	
Green/Cycle:	0.30	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.58
Volume/Cap:	0.51	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.51
Delay/Veh:	14.8	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	6.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.8	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	6.4
HCM2k95th:	7	7	0	0	0	0	0	0	0	0	9	9

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #29 10th St/Q St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.332
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 9.2
Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	10	0	0	0	0	0	10	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			0 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	675	144	0	0	0	55	619	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	675	144	0	0	0	55	619	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	675	144	0	0	0	55	619	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	675	144	0	0	0	55	619	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	675	144	0	0	0	55	619	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.89	0.89	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.47	0.53	0.00	0.00	0.00	0.24	2.76	0.00	0.00	0.00	0.00
Final Sat.:	0	4164	888	0	0	0	423	4764	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.16	0.00	0.00	0.00	0.13	0.13	0.00	0.00	0.00	0.00
Crit Moves:		****						****				
Green/Cycle:	0.00	0.49	0.49	0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.33	0.33	0.00	0.00	0.00	0.33	0.33	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	7.9	7.9	0.0	0.0	0.0	10.7	10.7	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	7.9	7.9	0.0	0.0	0.0	10.7	10.7	0.0	0.0	0.0	0.0
HCM2k95th:	0	6	6	0	0	0	5	5	0	0	0	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #29 10th St/Q St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.367
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 9.3
Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	10	0	0	0	0	0	10	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			0 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	675	144	0	0	0	55	619	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	675	144	0	0	0	55	619	0	0	0	0
Added Vol:	0	109	0	0	0	0	3	49	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	784	144	0	0	0	58	668	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	784	144	0	0	0	58	668	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	784	144	0	0	0	58	668	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	784	144	0	0	0	58	668	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.89	0.89	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.53	0.47	0.00	0.00	0.00	0.24	2.76	0.00	0.00	0.00	0.00
Final Sat.:	0	4281	786	0	0	0	414	4773	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.18	0.00	0.00	0.00	0.14	0.14	0.00	0.00	0.00	0.00
Crit Moves:		****						****				
Green/Cycle:	0.00	0.50	0.50	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.37	0.37	0.00	0.00	0.00	0.37	0.37	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	7.8	7.8	0.0	0.0	0.0	11.2	11.2	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	7.8	7.8	0.0	0.0	0.0	11.2	11.2	0.0	0.0	0.0	0.0
HCM2k95th:	0	6	6	0	0	0	5	5	0	0	0	0

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 12th St/H St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.502
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	13.7
Optimal Cycle:	66	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	27	27	0	0	33	33	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	0	0	231	984	0	0	1095	51	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	231	984	0	0	1095	51	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	231	984	0	0	1095	51	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	231	984	0	0	1095	51	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	231	984	0	0	1095	51	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.90	0.90	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.57	2.43	0.00	0.00	2.87	0.13	0.00	0.00	0.00
Final Sat.:	0	0	0	986	4201	0	0	4921	229	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.22	0.22	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.41	0.41	0.00	0.00	0.50	0.50	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.57	0.57	0.00	0.00	0.44	0.44	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	16.2	16.2	0.0	0.0	11.2	11.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	16.2	16.2	0.0	0.0	11.2	11.2	0.0	0.0	0.0
HCM2k95th:	0	0	0	13	13	0	0	10	10	0	0	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #30 12th St/H St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.525
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	14.1
Optimal Cycle:	66	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	27	27	0	0	33	33	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	0	0	231	984	0	0	1095	51	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	231	984	0	0	1095	51	0	0	0
Added Vol:	0	0	0	0	73	0	0	18	12	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	231	1057	0	0	1113	63	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	231	1057	0	0	1113	63	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	231	1057	0	0	1113	63	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	231	1057	0	0	1113	63	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.90	0.90	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.54	2.46	0.00	0.00	2.84	0.16	0.00	0.00	0.00
Final Sat.:	0	0	0	930	4257	0	0	4870	276	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.25	0.25	0.00	0.00	0.23	0.23	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.41	0.41	0.00	0.00	0.50	0.50	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.61	0.61	0.00	0.00	0.46	0.46	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	16.6	16.6	0.0	0.0	11.3	11.3	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	16.6	16.6	0.0	0.0	11.3	11.3	0.0	0.0	0.0
HCM2k95th:	0	0	0	14	14	0	0	11	11	0	0	0

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 12th St/I St

Cycle (sec): 0 Critical Vol./Cap. (X): 0.595
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 7.9
Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	0 0 2 1 0	0 0 0 0 0	0 1 2 0 0

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	7	7	0	0	0	3	7	0
Volume Module:												
Base Vol:	0	0	0	0	822	307	0	0	0	66	1156	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	822	307	0	0	0	66	1156	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	822	307	0	0	0	66	1156	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	822	307	0	0	0	66	1156	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	822	307	0	0	0	66	1156	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.87	0.87	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	2.18	0.82	0.00	0.00	0.00	0.16	2.84	0.00
Final Sat.:	0	0	0	0	3622	1353	0	0	0	280	4907	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.00	0.24	0.24	0.00
Crit Moves:					****						****	
Green/Cycle:	0.00	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.00	0.40	0.40	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.59	0.59	0.00	0.00	0.00	0.59	0.59	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	8.1	8.1	0.0	0.0	0.0	7.7	7.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	8.1	8.1	0.0	0.0	0.0	7.7	7.7	0.0
HCM2k95th:	0	0	0	0	8	8	0	0	0	8	8	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #31 12th St/I St

Cycle (sec): 0 Critical Vol./Cap. (X): 0.629
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 8.4
Optimal Cycle: 28 Level Of Service: A

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	0 0 2 1 0	0 0 0 0 0	0 1 2 0 0

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	7	7	0	0	0	3	7	0
Volume Module:												
Base Vol:	0	0	0	0	822	307	0	0	0	66	1156	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	822	307	0	0	0	66	1156	0
Added Vol:	0	0	0	0	50	7	0	0	0	6	99	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	872	314	0	0	0	72	1255	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	872	314	0	0	0	72	1255	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	872	314	0	0	0	72	1255	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	872	314	0	0	0	72	1255	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.87	0.87	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	2.21	0.79	0.00	0.00	0.00	0.16	2.84	0.00
Final Sat.:	0	0	0	0	3661	1318	0	0	0	281	4906	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.24	0.24	0.00	0.00	0.00	0.26	0.26	0.00
Crit Moves:					****						****	
Green/Cycle:	0.00	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.00	0.41	0.41	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.63	0.63	0.00	0.00	0.00	0.63	0.63	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	8.7	8.7	0.0	0.0	0.0	8.0	8.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	8.7	8.7	0.0	0.0	0.0	8.0	8.0	0.0
HCM2k95th:	0	0	0	0	8	8	0	0	0	9	9	0

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #32 12th St/J St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.650
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	21.7
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Permitted	Permitted	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 1	1 0 2 0 0	0 0 2 1 0	0 0 0 0 0

Movement:	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Min. Green:	0	0	31	31	31	31	0	19	19	0	0	0
Volume Module:												
Base Vol:	0	0	249	373	556	0	0	1519	143	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	249	373	556	0	0	1519	143	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	249	373	556	0	0	1519	143	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	249	373	556	0	0	1519	143	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	249	373	556	0	0	1519	143	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.77	0.95	1.00	1.00	0.90	0.90	1.00	1.00	1.00
Lanes:	0.00	0.00	1.00	1.00	2.00	0.00	0.00	2.74	0.26	0.00	0.00	0.00
Final Sat.:	0	0	1644	1461	3610	0	0	4679	440	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.15	0.26	0.15	0.00	0.00	0.32	0.32	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.55	0.55	0.55	0.00	0.00	0.34	0.34	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.27	0.46	0.28	0.00	0.00	0.96	0.96	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	7.3	9.4	6.9	0.0	0.0	31.6	31.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	7.3	9.4	6.9	0.0	0.0	31.6	31.6	0.0	0.0	0.0
HCM2k95th:	0	0	5	10	6	0	0	25	25	0	0	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #32 12th St/J St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.740
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	73.0
Optimal Cycle:	56	Level Of Service:	E

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Permitted	Permitted	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 1	1 0 2 0 0	0 0 2 1 0	0 0 0 0 0

Movement:	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Min. Green:	0	0	31	31	31	31	0	19	19	0	0	0
Volume Module:												
Base Vol:	0	0	249	373	556	0	0	1519	143	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	249	373	556	0	0	1519	143	0	0	0
Added Vol:	0	0	0	0	55	0	0	417	1	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	249	373	611	0	0	1936	144	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	249	373	611	0	0	1936	144	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	249	373	611	0	0	1936	144	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	249	373	611	0	0	1936	144	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.77	0.95	1.00	1.00	0.90	0.90	1.00	1.00	1.00
Lanes:	0.00	0.00	1.00	1.00	2.00	0.00	0.00	2.79	0.21	0.00	0.00	0.00
Final Sat.:	0	0	1644	1461	3610	0	0	4780	356	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.15	0.26	0.17	0.00	0.00	0.41	0.41	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.55	0.55	0.55	0.00	0.00	0.34	0.34	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.27	0.46	0.31	0.00	0.00	1.19	1.19	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	7.3	9.4	7.1	0.0	0.0	112	111.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	7.3	9.4	7.1	0.0	0.0	112	111.7	0.0	0.0	0.0
HCM2k95th:	0	0	5	10	6	0	0	47	47	0	0	0

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2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 12th St/L St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.590
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	14.6
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	25	25	0	0	0	25	25	25
Lanes:	1 0 0 0 0			0 0 0 1 1			0 0 0 0 0			0 1 1 1 0		
Volume Module:												
Base Vol:	5	0	0	0	0	752	0	0	0	1	1193	146
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	0	0	0	0	752	0	0	0	1	1193	146
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	0	0	0	0	752	0	0	0	1	1193	146
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	0	0	0	0	752	0	0	0	1	1193	146
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	0	0	0	0	752	0	0	0	1	1193	146
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	1.00	1.00	1.00	1.00	0.85	1.00	1.00	1.00	0.88	0.88	0.88
Lanes:	1.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.01	2.67	0.32
Final Sat.:	1758	0	0	0	0	3230	0	0	0	4	4471	547
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.27	0.27	0.27
Crit Moves:						****				****		
Green/Cycle:	0.42	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.42	0.42	0.42
Volume/Cap:	0.01	0.00	0.00	0.00	0.00	0.55	0.00	0.00	0.00	0.63	0.63	0.63
Delay/Veh:	9.8	0.0	0.0	0.0	0.0	14.4	0.0	0.0	0.0	14.8	14.8	14.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.8	0.0	0.0	0.0	0.0	14.4	0.0	0.0	0.0	14.8	14.8	14.8
HCM2k95th:	0	0	0	0	0	10	0	0	0	13	13	13

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #33 12th St/L St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.645
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	15.5
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	25	25	0	0	0	25	25	25
Lanes:	1 0 0 0 0			0 0 0 1 1			0 0 0 0 0			0 1 1 1 0		
Volume Module:												
Base Vol:	5	0	0	0	0	752	0	0	0	1	1193	146
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	0	0	0	0	752	0	0	0	1	1193	146
Added Vol:	0	0	0	0	0	56	0	0	0	0	150	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	0	0	0	808	0	0	0	1	1343	146
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	0	0	0	0	808	0	0	0	1	1343	146
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	0	0	0	0	808	0	0	0	1	1343	146
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	0	0	0	0	808	0	0	0	1	1343	146
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	1.00	1.00	1.00	1.00	0.85	1.00	1.00	1.00	0.88	0.88	0.88
Lanes:	1.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.01	2.70	0.29
Final Sat.:	1758	0	0	0	0	3230	0	0	0	3	4536	493
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.30	0.30	0.30
Crit Moves:						****				****		
Green/Cycle:	0.42	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.42	0.42	0.42
Volume/Cap:	0.01	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.00	0.70	0.70	0.70
Delay/Veh:	9.8	0.0	0.0	0.0	0.0	14.9	0.0	0.0	0.0	15.8	15.8	15.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.8	0.0	0.0	0.0	0.0	14.9	0.0	0.0	0.0	15.8	15.8	15.8
HCM2k95th:	0	0	0	0	0	11	0	0	0	14	14	14

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--------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
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                                PM Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #34 15th St/H St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.585
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       12.7
Optimal Cycle:        56               Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   25   25     0    0   25    25    0    0     0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  165  877     0    0 1201   404    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  165  877     0    0 1201   404    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  165  877     0    0 1201   404    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  165  877     0    0 1201   404    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  165  877     0    0 1201   404    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.88  0.88 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.48 2.52  0.00 0.00 2.24  0.76 0.00 0.00  0.00
Final Sat.:     0    0     0  821 4366     0    0 3734  1256    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.20 0.20  0.00 0.00 0.32  0.32 0.00 0.00  0.00
Crit Moves:                  ****                 ****
Green/Cycle: 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.72  0.72 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 10.9 10.9   0.0  0.0 13.8  13.8  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 10.9 10.9   0.0  0.0 13.8  13.8  0.0  0.0   0.0
HCM2k95th:      0    0     0    9    9     0    0   17    17    0    0     0
********************************************************************************
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--------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                PM Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #34 15th St/H St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.595
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       12.9
Optimal Cycle:        56               Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   25   25     0    0   25    25    0    0     0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  165  877     0    0 1201   404    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  165  877     0    0 1201   404    0    0     0
Added Vol:      0    0     0    0    0     0    0   43     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0  165  877     0    0 1244   404    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  165  877     0    0 1244   404    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  165  877     0    0 1244   404    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  165  877     0    0 1244   404    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.88  0.88 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.48 2.52  0.00 0.00 2.26  0.74 0.00 0.00  0.00
Final Sat.:     0    0     0  821 4366     0    0 3771  1225    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.20 0.20  0.00 0.00 0.33  0.33 0.00 0.00  0.00
Crit Moves:                  ****                 ****
Green/Cycle: 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.74  0.74 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 10.9 10.9   0.0  0.0 14.1  14.1  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 10.9 10.9   0.0  0.0 14.1  14.1  0.0  0.0   0.0
HCM2k95th:      0    0     0    9    9     0    0   18    18    0    0     0
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------------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                      2013 Cumulative Conditions
                             PM Peak Hour
------------------------------------------------------------------------------
                   Level Of Service Computation Report
         2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #35 15th St/J St
******************************************************************************
Cycle (sec):          50                 Critical Vol./Cap. (X):        0.837
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):         46.0
Optimal Cycle:        57                 Level Of Service:                  D
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0    0    0   25   25    0    0   25   25    0    0    0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0    0  286 1062    0    0 1832  603    0    0    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   0    0    0  286 1062    0    0 1832  603    0    0    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    0    0    0  286 1062    0    0 1832  603    0    0    0
Reduct Vol:    0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   0    0    0  286 1062    0    0 1832  603    0    0    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    0    0    0  286 1062    0    0 1832  603    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 0.91 0.91 1.00 1.00 0.88 0.88 1.00 1.00 1.00
Lanes:       0.00 0.00 0.00 0.64 2.36 0.00 0.00 2.26 0.74 0.00 0.00 0.00
Final Sat.:    0    0    0 1101 4086    0    0 3758 1237    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.26 0.26 0.00 0.00 0.49 0.49 0.00 0.00 0.00
Crit Moves:                 ****                ****
Green/Cycle: 0.00 0.00 0.00 0.45 0.45 0.00 0.00 0.45 0.45 0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00 0.58 0.58 0.00 0.00 1.09 1.09 0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0 12.0 12.0  0.0  0.0 64.9 64.9  0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0 12.0 12.0  0.0  0.0 64.9 64.9  0.0  0.0  0.0
HCM2k95th:     0    0    0   13   13    0    0   45   45    0    0    0
******************************************************************************
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------------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                      2013 Cumulative Conditions
                             PM Peak Hour
------------------------------------------------------------------------------
                   Level Of Service Computation Report
         2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #35 15th St/J St
******************************************************************************
Cycle (sec):          50                 Critical Vol./Cap. (X):        0.928
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        100.4
Optimal Cycle:        84                 Level Of Service:                  F
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0    0    0   25   25    0    0   25   25    0    0    0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0    0  286 1062    0    0 1832  603    0    0    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   0    0    0  286 1062    0    0 1832  603    0    0    0
Added Vol:     0    0    0    0    0    0    0  333   75    0    0    0
PasserByVol:   0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:   0    0    0  286 1062    0    0 2165  678    0    0    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    0    0    0  286 1062    0    0 2165  678    0    0    0
Reduct Vol:    0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   0    0    0  286 1062    0    0 2165  678    0    0    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    0    0    0  286 1062    0    0 2165  678    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 0.91 0.91 1.00 1.00 0.88 0.88 1.00 1.00 1.00
Lanes:       0.00 0.00 0.00 0.64 2.36 0.00 0.00 2.28 0.72 0.00 0.00 0.00
Final Sat.:    0    0    0 1101 4086    0    0 3808 1192    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.26 0.26 0.00 0.00 0.57 0.57 0.00 0.00 0.00
Crit Moves:                 ****                ****
Green/Cycle: 0.00 0.00 0.00 0.45 0.45 0.00 0.00 0.45 0.45 0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00 0.58 0.58 0.00 0.00 1.27 1.27 0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0 12.0 12.0  0.0  0.0  142 142.3  0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0 12.0 12.0  0.0  0.0  142 142.3  0.0  0.0  0.0
HCM2k95th:     0    0    0   13   13    0    0   69   69    0    0    0
******************************************************************************
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Downtown Sacramento Traffic Study
2013 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 15th St/L St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.632
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	11.9
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	30	30	0	0	0	20	20	0
Lanes:		0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			0 1 2 0 0	
Volume Module:												
Base Vol:	0	0	0	0	1386	403	0	0	0	161	913	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	1386	403	0	0	0	161	913	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	1386	403	0	0	0	161	913	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1386	403	0	0	0	161	913	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	1386	403	0	0	0	161	913	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.88	0.88	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	2.32	0.68	0.00	0.00	0.00	0.45	2.55	0.00
Final Sat.:	0	0	0	0	3882	1129	0	0	0	778	4409	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.36	0.36	0.00	0.00	0.00	0.21	0.21	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.54	0.54	0.00	0.00	0.00	0.36	0.36	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.67	0.67	0.00	0.00	0.00	0.58	0.58	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	10.0	10.0	0.0	0.0	0.0	15.1	15.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	10.0	10.0	0.0	0.0	0.0	15.1	15.1	0.0
HCM2k95th:	0	0	0	0	16	16	0	0	0	10	10	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #36 15th St/L St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.680
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	12.6
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	30	30	0	0	0	20	20	0
Lanes:		0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			0 1 2 0 0	
Volume Module:												
Base Vol:	0	0	0	0	1386	403	0	0	0	161	913	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	1386	403	0	0	0	161	913	0
Added Vol:	0	0	0	0	75	0	0	0	0	0	150	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	1461	403	0	0	0	161	1063	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	1461	403	0	0	0	161	1063	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1461	403	0	0	0	161	1063	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	1461	403	0	0	0	161	1063	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.88	0.88	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	2.35	0.65	0.00	0.00	0.00	0.39	2.61	0.00
Final Sat.:	0	0	0	0	3935	1086	0	0	0	682	4505	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.37	0.37	0.00	0.00	0.00	0.24	0.24	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.54	0.54	0.00	0.00	0.00	0.36	0.36	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.69	0.69	0.00	0.00	0.00	0.66	0.66	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	10.4	10.4	0.0	0.0	0.0	16.0	16.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	10.4	10.4	0.0	0.0	0.0	16.0	16.0	0.0
HCM2k95th:	0	0	0	0	17	17	0	0	0	11	11	0

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---------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                PM Peak Hour
---------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
*********************************************************************************
Intersection #37 15th St/P St
*********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.587
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       11.8
Optimal Cycle:       56              Level Of Service:                 B
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0    0   28   28    0    0    0   22   22    0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0    0 1287  246    0    0    0  163  985    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0    0    0    0 1287  246    0    0    0  163  985    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0    0    0    0 1287  246    0    0    0  163  985    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0    0    0    0 1287  246    0    0    0  163  985    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0    0    0    0 1287  246    0    0    0  163  985    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 1.00 0.89 0.89 1.00 1.00 1.00 0.91 0.91 1.00
Lanes:       0.00 0.00 0.00 0.00 2.52 0.48 0.00 0.00 0.00 0.43 2.57 0.00
Final Sat.:     0    0    0    0 4250  812    0    0    0  736 4451    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.00 0.30 0.30 0.00 0.00 0.00 0.22 0.22 0.00
Crit Moves:                       ****                          ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.50 0.50 0.00 0.00 0.00 0.39 0.39 0.00
Volume/Cap:  0.00 0.00 0.00 0.00 0.61 0.61 0.00 0.00 0.00 0.56 0.56 0.00
Delay/Veh:    0.0  0.0  0.0  0.0 10.5 10.5  0.0  0.0  0.0 13.6 13.6  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  0.0 10.5 10.5  0.0  0.0  0.0 13.6 13.6  0.0
HCM2k95th:      0    0    0    0   14   14    0    0    0   10   10    0
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---------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2013 Cumulative Conditions
                                PM Peak Hour
---------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*********************************************************************************
Intersection #37 15th St/P St
*********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.636
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       12.4
Optimal Cycle:       56              Level Of Service:                 B
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0    0   28   28    0    0    0   22   22    0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0    0 1287  246    0    0    0  163  985    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0    0    0    0 1287  246    0    0    0  163  985    0
Added Vol:      0    0    0    0  186    0    0    0    0    0   43    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:    0    0    0    0 1473  246    0    0    0  163 1028    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0    0    0    0 1473  246    0    0    0  163 1028    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0    0    0    0 1473  246    0    0    0  163 1028    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0    0    0    0 1473  246    0    0    0  163 1028    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 1.00 0.89 0.89 1.00 1.00 1.00 0.91 0.91 1.00
Lanes:       0.00 0.00 0.00 0.00 2.57 0.43 0.00 0.00 0.00 0.41 2.59 0.00
Final Sat.:     0    0    0    0 4351  727    0    0    0  710 4477    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.00 0.34 0.34 0.00 0.00 0.00 0.23 0.23 0.00
Crit Moves:                       ****                          ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.50 0.50 0.00 0.00 0.00 0.39 0.39 0.00
Volume/Cap:  0.00 0.00 0.00 0.00 0.68 0.68 0.00 0.00 0.00 0.58 0.58 0.00
Delay/Veh:    0.0  0.0  0.0  0.0 11.3 11.3  0.0  0.0  0.0 13.8 13.8  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  0.0 11.3 11.3  0.0  0.0  0.0 13.8 13.8  0.0
HCM2k95th:      0    0    0    0   16   16    0    0    0   10   10    0
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--------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                      2013 Cumulative Conditions
                             PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #38 15th St/Q St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.562
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        11.7
Optimal Cycle:        56               Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   27   27     0    0   23    23    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  148 1297     0    0  982   152    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  148 1297     0    0  982   152    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  148 1297     0    0  982   152    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  148 1297     0    0  982   152    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  148 1297     0    0  982   152    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.89  0.89 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.31 2.69  0.00 0.00 2.60  0.40 0.00 0.00  0.00
Final Sat.:     0    0     0  531 4656     0    0 4402   681    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.28 0.28  0.00 0.00 0.22  0.22 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.48 0.48  0.00 0.00 0.41  0.41 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.58 0.58  0.00 0.00 0.54  0.54 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 10.7 10.7   0.0  0.0 12.8  12.8  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 10.7 10.7   0.0  0.0 12.8  12.8  0.0  0.0   0.0
HCM2k95th:      0    0     0   11   11     0    0   10    10    0    0     0
********************************************************************************
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--------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                      2013 Cumulative Conditions
                             PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #38 15th St/Q St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.613
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        12.2
Optimal Cycle:        56               Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   27   27     0    0   23    23    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  148 1297     0    0  982   152    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  148 1297     0    0  982   152    0    0     0
Added Vol:      0    0     0    4  182     0    0   36    13    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0  152 1479     0    0 1018   165    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  152 1479     0    0 1018   165    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  152 1479     0    0 1018   165    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  152 1479     0    0 1018   165    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.89  0.89 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.28 2.72  0.00 0.00 2.58  0.42 0.00 0.00  0.00
Final Sat.:     0    0     0  483 4704     0    0 4370   708    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.31 0.31  0.00 0.00 0.23  0.23 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.48 0.48  0.00 0.00 0.41  0.41 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.65 0.65  0.00 0.00 0.57  0.57 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 11.6 11.6   0.0  0.0 13.0  13.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 11.6 11.6   0.0  0.0 13.0  13.0  0.0  0.0   0.0
HCM2k95th:      0    0     0   13   13     0    0   10    10    0    0     0
********************************************************************************
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-----------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2013 Cumulative Conditions
                               PM Peak Hour
-----------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #39 15th St/W St
*****************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.529
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      14.6
Optimal Cycle:        76              Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   38    38    0    0     0   32   32     0
Lanes:        0  0  0  0  0   0  0  3  1  0   0  0  0  0  0   1  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0 1691   155    0    0     0  426 1074     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0 1691   155    0    0     0  426 1074     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0 1691   155    0    0     0  426 1074     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0 1691   155    0    0     0  426 1074     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0 1691   155    0    0     0  426 1074     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.90  0.90 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 3.66  0.34 0.00 0.00  0.00 1.14 2.86  0.00
Final Sat.:     0    0     0    0 6253   573    0    0     0 1964 4952     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.27  0.27 0.00 0.00  0.00 0.22 0.22  0.00
Crit Moves:                       ****                        ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.50  0.50 0.00 0.00  0.00 0.42 0.42  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.54  0.54 0.00 0.00  0.00 0.52 0.52  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 13.2  13.2  0.0  0.0   0.0 16.4 16.4   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 13.2  13.2  0.0  0.0   0.0 16.4 16.4   0.0
HCM2k95th:      0    0     0    0   15    15    0    0     0   13   13     0
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-----------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
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                               PM Peak Hour
-----------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*****************************************************************************
Intersection #39 15th St/W St
*****************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.558
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      14.9
Optimal Cycle:        76              Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   38    38    0    0     0   32   32     0
Lanes:        0  0  0  0  0   0  0  3  1  0   0  0  0  0  0   1  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0 1691   155    0    0     0  426 1074     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0 1691   155    0    0     0  426 1074     0
Added Vol:      0    0     0    0  183     0    0    0     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0    0 1874   155    0    0     0  426 1074     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0 1874   155    0    0     0  426 1074     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0 1874   155    0    0     0  426 1074     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0 1874   155    0    0     0  426 1074     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.90  0.90 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 3.69  0.31 0.00 0.00  0.00 1.14 2.86  0.00
Final Sat.:     0    0     0    0 6317   523    0    0     0 1964 4952     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.30  0.30 0.00 0.00  0.00 0.22 0.22  0.00
Crit Moves:                       ****                        ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.50  0.50 0.00 0.00  0.00 0.42 0.42  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.59  0.59 0.00 0.00  0.00 0.52 0.52  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 13.8  13.8  0.0  0.0   0.0 16.4 16.4   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 13.8  13.8  0.0  0.0   0.0 16.4 16.4   0.0
HCM2k95th:      0    0     0    0   17    17    0    0     0   13   13     0
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #40 15th St/X St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.846
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	59.8
Optimal Cycle:	82	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	17	17	24	24	0	0	32	32	0	0	0
Lanes:	0 0 2 1 0			1 1 2 0 0			0 0 1 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	1020	70	853	1270	0	0	527	255	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1020	70	853	1270	0	0	527	255	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1020	70	853	1270	0	0	527	255	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1020	70	853	1270	0	0	527	255	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1020	70	853	1270	0	0	527	255	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	0.89	0.89	1.00	1.00	0.90	0.90	1.00	1.00	1.00
Lanes:	0.00	2.81	0.19	1.61	2.39	0.00	0.00	1.35	0.65	0.00	0.00	0.00
Final Sat.:	0	4805	330	2723	4054	0	0	2314	1119	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.31	0.31	0.00	0.00	0.23	0.23	0.00	0.00	0.00
Crit Moves:			****	****				****				
Green/Cycle:	0.00	0.21	0.21	0.29	0.29	0.00	0.00	0.39	0.39	0.00	0.00	0.00
Volume/Cap:	0.00	1.02	1.02	1.07	1.07	0.00	0.00	0.58	0.58	0.00	0.00	0.00
Delay/Veh:	0.0	66.3	66.3	71.0	71.0	0.0	0.0	20.4	20.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	66.3	66.3	71.0	71.0	0.0	0.0	20.4	20.4	0.0	0.0	0.0
HCM2k95th:	0	27	27	34	34	0	0	16	16	0	0	0

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2000 HCM Operations Method (Future Volume Alternative)

Intersection #40 15th St/X St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.877
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	81.3
Optimal Cycle:	85	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	17	17	24	24	0	0	32	32	0	0	0
Lanes:	0 0 2 1 0			1 1 2 0 0			0 0 1 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	1020	70	853	1270	0	0	527	255	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1020	70	853	1270	0	0	527	255	0	0	0
Added Vol:	0	0	0	183	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1020	70	1036	1270	0	0	527	255	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1020	70	1036	1270	0	0	527	255	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1020	70	1036	1270	0	0	527	255	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1020	70	1036	1270	0	0	527	255	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	0.89	0.89	1.00	1.00	0.90	0.90	1.00	1.00	1.00
Lanes:	0.00	2.81	0.19	1.80	2.20	0.00	0.00	1.35	0.65	0.00	0.00	0.00
Final Sat.:	0	4805	330	3039	3725	0	0	2314	1119	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.34	0.34	0.00	0.00	0.23	0.23	0.00	0.00	0.00
Crit Moves:			****	****				****				
Green/Cycle:	0.00	0.21	0.21	0.29	0.29	0.00	0.00	0.39	0.39	0.00	0.00	0.00
Volume/Cap:	0.00	1.02	1.02	1.16	1.16	0.00	0.00	0.58	0.58	0.00	0.00	0.00
Delay/Veh:	0.0	66.3	66.3	109.1	109	0.0	0.0	20.4	20.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	66.3	66.3	109.1	109	0.0	0.0	20.4	20.4	0.0	0.0	0.0
HCM2k95th:	0	27	27	42	42	0	0	16	16	0	0	0

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Intersection #41 16th St/H St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.759
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 21.5
Optimal Cycle: 56 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	25	25	0	0	0	19	25	0	0	0	6
Lanes:	0 0 2 1 0			0 0 0 0 0			2 1 0 0 0			0 0 0 0 1		
Volume Module:												
Base Vol:	0	2191	20	0	0	0	798	521	0	0	0	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2191	20	0	0	0	798	521	0	0	0	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2191	20	0	0	0	798	521	0	0	0	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2191	20	0	0	0	798	521	0	0	0	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	2191	20	0	0	0	798	521	0	0	0	46
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.91	1.00	1.00	1.00	0.94	0.97	1.00	1.00	1.00	0.87
Lanes:	0.00	2.97	0.03	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00
Final Sat.:	0	5135	47	0	0	0	3579	1845	0	0	0	1644
Capacity Analysis Module:												
Vol/Sat:	0.00	0.43	0.43	0.00	0.00	0.00	0.22	0.28	0.00	0.00	0.00	0.03
Crit Moves:		****					****					****
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.34	0.45	0.00	0.00	0.00	0.11
Volume/Cap:	0.00	0.96	0.96	0.00	0.00	0.00	0.66	0.63	0.00	0.00	0.00	0.26
Delay/Veh:	0.0	25.3	25.3	0.0	0.0	0.0	16.5	12.6	0.0	0.0	0.0	23.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	25.3	25.3	0.0	0.0	0.0	16.5	12.6	0.0	0.0	0.0	23.8
HCM2k95th:	0	26	26	0	0	0	11	13	0	0	0	2

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Intersection #41 16th St/H St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.821
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 37.2
Optimal Cycle: 56 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	25	25	0	0	0	19	25	0	0	0	6
Lanes:	0 0 2 1 0			0 0 0 0 0			2 1 0 0 0			0 0 0 0 1		
Volume Module:												
Base Vol:	0	2191	20	0	0	0	798	521	0	0	0	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2191	20	0	0	0	798	521	0	0	0	46
Added Vol:	0	223	0	0	0	0	43	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2414	20	0	0	0	841	521	0	0	0	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2414	20	0	0	0	841	521	0	0	0	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2414	20	0	0	0	841	521	0	0	0	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	2414	20	0	0	0	841	521	0	0	0	46
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.91	1.00	1.00	1.00	0.94	0.97	1.00	1.00	1.00	0.87
Lanes:	0.00	2.98	0.02	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00
Final Sat.:	0	5139	43	0	0	0	3575	1843	0	0	0	1644
Capacity Analysis Module:												
Vol/Sat:	0.00	0.47	0.47	0.00	0.00	0.00	0.24	0.28	0.00	0.00	0.00	0.03
Crit Moves:		****					****					****
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.34	0.45	0.00	0.00	0.00	0.11
Volume/Cap:	0.00	1.05	1.05	0.00	0.00	0.00	0.69	0.63	0.00	0.00	0.00	0.26
Delay/Veh:	0.0	49.7	49.7	0.0	0.0	0.0	17.1	12.6	0.0	0.0	0.0	23.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	49.7	49.7	0.0	0.0	0.0	17.1	12.6	0.0	0.0	0.0	23.8
HCM2k95th:	0	35	35	0	0	0	12	13	0	0	0	2

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Intersection #42 16th St/I St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.487
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.2
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	30	30	0	0	0	0	0	0	0	0	20	20
Lanes:	1 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	205	1810	0	0	0	0	0	0	0	0	1162	413
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	205	1810	0	0	0	0	0	0	0	0	1162	413
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	205	1810	0	0	0	0	0	0	0	0	1162	413
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	205	1810	0	0	0	0	0	0	0	0	1162	413
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	205	1810	0	0	0	0	0	0	0	0	1162	413
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	0.87
Lanes:	1.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.21	0.79
Final Sat.:	1729	5187	0	0	0	0	0	0	0	0	3678	1307
Capacity Analysis Module:												
Vol/Sat:	0.12	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.32
Crit Moves:	****										****	
Green/Cycle:	0.54	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.36
Volume/Cap:	0.22	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.88
Delay/Veh:	6.9	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.6	22.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.9	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.6	22.6
HCM2k95th:	4	14	0	0	0	0	0	0	0	0	23	23

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PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #42 16th St/I St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.515
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.4
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	30	30	0	0	0	0	0	0	0	0	20	20
Lanes:	1 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	205	1810	0	0	0	0	0	0	0	0	1162	413
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	205	1810	0	0	0	0	0	0	0	0	1162	413
Added Vol:	43	223	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	248	2033	0	0	0	0	0	0	0	0	1162	413
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	248	2033	0	0	0	0	0	0	0	0	1162	413
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	248	2033	0	0	0	0	0	0	0	0	1162	413
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	248	2033	0	0	0	0	0	0	0	0	1162	413
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	0.87
Lanes:	1.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.21	0.79
Final Sat.:	1729	5187	0	0	0	0	0	0	0	0	3678	1307
Capacity Analysis Module:												
Vol/Sat:	0.14	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.32
Crit Moves:	****										****	
Green/Cycle:	0.54	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.36
Volume/Cap:	0.27	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.88
Delay/Veh:	7.1	10.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.6	22.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.1	10.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.6	22.6
HCM2k95th:	4	16	0	0	0	0	0	0	0	0	23	23

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                         Downtown Sacramento Traffic Study
                            2013 Cumulative Conditions
                                  PM Peak Hour
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                         Level Of Service Computation Report
               2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #43 16th St/J St
********************************************************************************
Cycle (sec):           50                 Critical Vol./Cap. (X):          0.716
Loss Time (sec):        6 (Y+R =  4 sec) Average Delay (sec/veh):           13.8
Optimal Cycle:         56                 Level Of Service:                    B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   25    25    0    0     0   25   25     0    0    0     0
Lanes:        0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0 1682   144    0    0     0  535 1419     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:     0 1682   144    0    0     0  535 1419     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:      0 1682   144    0    0     0  535 1419     0    0    0     0
Reduct Vol:      0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:     0 1682   144    0    0     0  535 1419     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:      0 1682   144    0    0     0  535 1419     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.90  0.90 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.76  0.24 0.00 0.00  0.00 1.10 2.90  0.00 0.00 0.00  0.00
Final Sat.:      0 4721   404    0    0     0 1894 5022     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.36  0.36 0.00 0.00  0.00 0.28 0.28  0.00 0.00 0.00  0.00
Crit Moves:       ****                       ****
Green/Cycle: 0.00 0.45  0.45 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.80  0.80 0.00 0.00  0.00 0.63 0.63  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 15.4  15.4  0.0  0.0   0.0 12.4 12.4   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 15.4  15.4  0.0  0.0   0.0 12.4 12.4   0.0  0.0  0.0   0.0
HCM2k95th:      0   21    21    0    0     0   11   11     0    0    0     0
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                         Downtown Sacramento Traffic Study
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                         Level Of Service Computation Report
              2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #43 16th St/J St
********************************************************************************
Cycle (sec):           50                 Critical Vol./Cap. (X):          0.779
Loss Time (sec):        6 (Y+R =  4 sec) Average Delay (sec/veh):           14.8
Optimal Cycle:         56                 Level Of Service:                    B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   25    25    0    0     0   25   25     0    0    0     0
Lanes:        0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0 1682   144    0    0     0  535 1419     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:     0 1682   144    0    0     0  535 1419     0    0    0     0
Added Vol:       0   43     0    0    0     0  223  111     0    0    0     0
PasserByVol:     0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:     0 1725   144    0    0     0  758 1530     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:      0 1725   144    0    0     0  758 1530     0    0    0     0
Reduct Vol:      0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:     0 1725   144    0    0     0  758 1530     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:      0 1725   144    0    0     0  758 1530     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.90  0.90 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.77  0.23 0.00 0.00  0.00 1.33 2.67  0.00 0.00 0.00  0.00
Final Sat.:      0 4730   395    0    0     0 2291 4625     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.36  0.36 0.00 0.00  0.00 0.33 0.33  0.00 0.00 0.00  0.00
Crit Moves:       ****                       ****
Green/Cycle: 0.00 0.45  0.45 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.82  0.82 0.00 0.00  0.00 0.74 0.74  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 15.9  15.9  0.0  0.0   0.0 13.8 13.8   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 15.9  15.9  0.0  0.0   0.0 13.8 13.8   0.0  0.0  0.0   0.0
HCM2k95th:      0   22    22    0    0     0   14   14     0    0    0     0
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                       Downtown Sacramento Traffic Study
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                                 PM Peak Hour
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                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #44 16th St/L St
********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.476
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      12.6
Optimal Cycle:       56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    25   25    0     0    0     0     0    0     0     0   25    25
Lanes:        1  0  2  1  0    0  0  0  0  0    0  0  0  0  0    0  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     296 1556    0     0    0     0     0    0     0     0  714   224
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  296 1556    0     0    0     0     0    0     0     0  714   224
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   296 1556    0     0    0     0     0    0     0     0  714   224
Reduct Vol:     0    0    0     0    0     0     0    0     0     0    0     0
Reduced Vol:  296 1556    0     0    0     0     0    0     0     0  714   224
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   296 1556    0     0    0     0     0    0     0     0  714   224
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.91  0.91  1.00 1.00  1.00  1.00 1.00  1.00  1.00 0.92  0.92
Lanes:       1.00 3.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 1.52  0.48
Final Sat.:  1900 5187    0     0    0     0     0    0     0     0 2649   831
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.16 0.30  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.27  0.27
Crit Moves:  ****                                                   ****
Green/Cycle: 0.45 0.45  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.45  0.45
Volume/Cap:  0.35 0.67  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.60  0.60
Delay/Veh:   10.4 13.0   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 12.4  12.4
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  10.4 13.0   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 12.4  12.4
HCM2k95th:      7   16    0     0    0     0     0    0     0     0   13    13
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                       Downtown Sacramento Traffic Study
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                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #44 16th St/L St
********************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.543
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      13.0
Optimal Cycle:       56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    25   25    0     0    0     0     0    0     0     0   25    25
Lanes:        1  0  2  1  0    0  0  0  0  0    0  0  0  0  0    0  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     296 1556    0     0    0     0     0    0     0     0  714   224
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  296 1556    0     0    0     0     0    0     0     0  714   224
Added Vol:     53   28    0     0    0     0     0    0     0     0   97    15
PasserByVol:    0    0    0     0    0     0     0    0     0     0    0     0
Initial Fut:  349 1584    0     0    0     0     0    0     0     0  811   239
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   349 1584    0     0    0     0     0    0     0     0  811   239
Reduct Vol:     0    0    0     0    0     0     0    0     0     0    0     0
Reduced Vol:  349 1584    0     0    0     0     0    0     0     0  811   239
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   349 1584    0     0    0     0     0    0     0     0  811   239
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.91  0.91  1.00 1.00  1.00  1.00 1.00  1.00  1.00 0.92  0.92
Lanes:       1.00 3.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 1.54  0.46
Final Sat.:  1900 5187    0     0    0     0     0    0     0     0 2693   794
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.18 0.31  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.30  0.30
Crit Moves:  ****                                                   ****
Green/Cycle: 0.45 0.45  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.45  0.45
Volume/Cap:  0.41 0.68  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.67  0.67
Delay/Veh:   10.8 13.2   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 13.5  13.5
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  10.8 13.2   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 13.5  13.5
HCM2k95th:      9   16    0     0    0     0     0    0     0     0   16    16
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Downtown Sacramento Traffic Study
2013 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #45 16th St/P St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.610
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.7
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	29	29	0	0	0	0	0	0	0	0	21	21
Lanes:	0 1 1 1 0			0 0 0 0 0			0 0 0 0 0			0 0 1 1 0		
Volume Module:												
Base Vol:	209	1147	0	0	0	0	0	0	0	0	827	169
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	209	1147	0	0	0	0	0	0	0	0	827	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	209	1147	0	0	0	0	0	0	0	0	827	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	209	1147	0	0	0	0	0	0	0	0	827	169
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	209	1147	0	0	0	0	0	0	0	0	827	169
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93
Lanes:	0.46	2.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.66	0.34
Final Sat.:	799	4388	0	0	0	0	0	0	0	0	2923	597
Capacity Analysis Module:												
Vol/Sat:	0.26	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.28
Crit Moves:	****										****	
Green/Cycle:	0.52	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38
Volume/Cap:	0.50	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.75
Delay/Veh:	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.8	17.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.8	17.8
HCM2k95th:	10	10	0	0	0	0	0	0	0	0	18	18

Downtown Sacramento Traffic Study
2013 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #45 16th St/P St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.639
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 13.0
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	29	29	0	0	0	0	0	0	0	0	21	21
Lanes:	0 1 1 1 0			0 0 0 0 0			0 0 0 0 0			0 0 1 1 0		
Volume Module:												
Base Vol:	209	1147	0	0	0	0	0	0	0	0	827	169
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	209	1147	0	0	0	0	0	0	0	0	827	169
Added Vol:	26	75	0	0	0	0	0	0	0	0	17	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	235	1222	0	0	0	0	0	0	0	0	844	175
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	235	1222	0	0	0	0	0	0	0	0	844	175
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	235	1222	0	0	0	0	0	0	0	0	844	175
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	235	1222	0	0	0	0	0	0	0	0	844	175
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93
Lanes:	0.48	2.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.66	0.34
Final Sat.:	837	4350	0	0	0	0	0	0	0	0	2912	604
Capacity Analysis Module:												
Vol/Sat:	0.28	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.29
Crit Moves:	****										****	
Green/Cycle:	0.52	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38
Volume/Cap:	0.54	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.77
Delay/Veh:	9.3	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.3	18.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.3	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.3	18.3
HCM2k95th:	11	11	0	0	0	0	0	0	0	0	18	18

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---------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                        2013 Cumulative Conditions
                               PM Peak Hour
---------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
*********************************************************************************
Intersection #46 16th St/Q St
*********************************************************************************
Cycle (sec):         50               Critical Vol./Cap. (X):        0.524
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       10.3
Optimal Cycle:       27               Level Of Service:                  B
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0   10    0    0    0    0    0   10    0    0    0    0
Lanes:       0  0  2  1  0   0  0  0  0  0   1  1  1  0  0   0  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0 1069    63    0    0     0  347  869     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:     0 1069    63    0    0     0  347  869     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:      0 1069    63    0    0     0  347  869     0    0    0     0
Reduct Vol:      0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:     0 1069    63    0    0     0  347  869     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:      0 1069    63    0    0     0  347  869     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.90  0.90 1.00 1.00  1.00 0.95 0.95  1.00 1.00 1.00  1.00
Lanes:       0.00 2.83  0.17 0.00 0.00  0.00 1.00 2.00  0.00 0.00 0.00  1.00
Final Sat.:      0 4859   286    0    0     0 1805 3610     0    0    0  1900
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.22  0.22 0.00 0.00  0.00 0.19 0.24  0.00 0.00 0.00  0.00
Crit Moves:       ****                            ****
Green/Cycle: 0.00 0.42  0.42 0.00 0.00  0.00 0.46 0.46  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.52  0.52 0.00 0.00  0.00 0.42 0.52  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 11.0  11.0  0.0  0.0   0.0  9.1  9.8   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 11.0  11.0  0.0  0.0   0.0  9.1  9.8   0.0  0.0  0.0   0.0
HCM2k95th:      0   10    10    0    0     0    7    9     0    0    0     0
*********************************************************************************
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---------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                        2013 Cumulative Conditions
                               PM Peak Hour
---------------------------------------------------------------------------------
                       Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
*********************************************************************************
Intersection #46 16th St/Q St
*********************************************************************************
Cycle (sec):         50               Critical Vol./Cap. (X):        0.559
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       10.6
Optimal Cycle:       28               Level Of Service:                  B
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0   10    0    0    0    0    0   10    0    0    0    0
Lanes:       0  0  2  1  0   0  0  0  0  0   1  1  1  0  0   0  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0 1069    63    0    0     0  347  869     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:     0 1069    63    0    0     0  347  869     0    0    0     0
Added Vol:       0  102     0    0    0     0    0   40     0    0    0     0
PasserByVol:     0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:     0 1171    63    0    0     0  347  909     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:      0 1171    63    0    0     0  347  909     0    0    0     0
Reduct Vol:      0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:     0 1171    63    0    0     0  347  909     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:      0 1171    63    0    0     0  347  909     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.90  0.90 1.00 1.00  1.00 0.95 0.95  1.00 1.00 1.00  1.00
Lanes:       0.00 2.85  0.15 0.00 0.00  0.00 1.00 2.00  0.00 0.00 0.00  1.00
Final Sat.:      0 4883   263    0    0     0 1805 3610     0    0    0  1900
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.24  0.24 0.00 0.00  0.00 0.19 0.25  0.00 0.00 0.00  0.00
Crit Moves:       ****                            ****
Green/Cycle: 0.00 0.43  0.43 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.56  0.56 0.00 0.00  0.00 0.43 0.56  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 11.0  11.0  0.0  0.0   0.0  9.4 10.4   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 11.0  11.0  0.0  0.0   0.0  9.4 10.4   0.0  0.0  0.0   0.0
HCM2k95th:      0   11    11    0    0     0    7   10     0    0    0     0
*********************************************************************************
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------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2013 Cumulative Conditions
                               PM Peak Hour
------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #47 16th St/W St
******************************************************************************
Cycle (sec):          70               Critical Vol./Cap. (X):        0.524
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):        25.4
Optimal Cycle:        79               Level Of Service:                  C
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Split Phase      Split Phase
Rights:          Include          Include          Include          Include
Min. Green:    31   31    0    0    0    0    0   23   23    0   16   16
Lanes:        1  1  2  0  0   0  0  0  0  0   0  0  2  1  0   0  0  1  1  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     173  675    0    0    0    0    0  786  269    0  336  421
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  173  675    0    0    0    0    0  786  269    0  336  421
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   173  675    0    0    0    0    0  786  269    0  336  421
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  173  675    0    0    0    0    0  786  269    0  336  421
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   173  675    0    0    0    0    0  786  269    0  336  421
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.91 0.91 1.00 1.00 1.00 1.00 1.00 0.88 0.88 1.00 0.87 0.87
Lanes:       1.00 3.00 0.00 0.00 0.00 0.00 0.00 2.24 0.76 0.00 1.33 1.67
Final Sat.:  1729 5187    0    0    0    0    0 3718 1272    0 2204 2762
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.10 0.13 0.00 0.00 0.00 0.00 0.00 0.21 0.21 0.00 0.15 0.15
Crit Moves:  ****                                ****                ****
Green/Cycle: 0.39 0.39 0.00 0.00 0.00 0.00 0.00 0.29 0.29 0.00 0.20 0.20
Volume/Cap:  0.25 0.33 0.00 0.00 0.00 0.00 0.00 0.73 0.73 0.00 0.75 0.75
Delay/Veh:   16.2 16.8  0.0  0.0  0.0  0.0  0.0 27.0 27.0  0.0 32.9 32.9
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  16.2 16.8  0.0  0.0  0.0  0.0  0.0 27.0 27.0  0.0 32.9 32.9
HCM2k95th:      6    7    0    0    0    0    0   17   17    0   15   15
******************************************************************************
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------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2013 Cumulative Conditions
                               PM Peak Hour
------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #47 16th St/W St
******************************************************************************
Cycle (sec):          70               Critical Vol./Cap. (X):        0.548
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):        27.3
Optimal Cycle:        79               Level Of Service:                  C
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Split Phase      Split Phase
Rights:          Include          Include          Include          Include
Min. Green:    31   31    0    0    0    0    0   23   23    0   16   16
Lanes:        1  1  2  0  0   0  0  0  0  0   0  0  2  1  0   0  0  1  1  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     173  675    0    0    0    0    0  786  269    0  336  421
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  173  675    0    0    0    0    0  786  269    0  336  421
Added Vol:      0    0    0    0    0    0    0    0    0    0    0  102
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:  173  675    0    0    0    0    0  786  269    0  336  523
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   173  675    0    0    0    0    0  786  269    0  336  523
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  173  675    0    0    0    0    0  786  269    0  336  523
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   173  675    0    0    0    0    0  786  269    0  336  523
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.91 0.91 1.00 1.00 1.00 1.00 1.00 0.88 0.88 1.00 0.86 0.86
Lanes:       1.00 3.00 0.00 0.00 0.00 0.00 0.00 2.24 0.76 0.00 1.17 1.83
Final Sat.:  1729 5187    0    0    0    0    0 3718 1272    0 1925 2997
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.10 0.13 0.00 0.00 0.00 0.00 0.00 0.21 0.21 0.00 0.17 0.17
Crit Moves:  ****                                ****                ****
Green/Cycle: 0.39 0.39 0.00 0.00 0.00 0.00 0.00 0.29 0.29 0.00 0.20 0.20
Volume/Cap:  0.25 0.33 0.00 0.00 0.00 0.00 0.00 0.73 0.73 0.00 0.86 0.86
Delay/Veh:   16.2 16.8  0.0  0.0  0.0  0.0  0.0 27.0 27.0  0.0 38.2 38.2
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  16.2 16.8  0.0  0.0  0.0  0.0  0.0 27.0 27.0  0.0 38.2 38.2
HCM2k95th:      6    7    0    0    0    0    0   17   17    0   18   18
******************************************************************************
```

Downtown Sacramento Traffic Study
2013 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #48 16th St/X St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.570
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	19.1
Optimal Cycle:	76	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	35	35	0	0	0	35	35	0	0	0	0
Lanes:	0 0 3 1 0			0 0 0 0 0			1 0 2 0 1			0 0 0 0 0		
Volume Module:												
Base Vol:	0	689	83	0	0	0	664	1153	265	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	689	83	0	0	0	664	1153	265	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	689	83	0	0	0	664	1153	265	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	689	83	0	0	0	664	1153	265	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	689	83	0	0	0	664	1153	265	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	1.00	1.00	1.00	0.85	0.95	0.85	1.00	1.00	1.00
Lanes:	0.00	3.57	0.43	0.00	0.00	0.00	1.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	6074	732	0	0	0	1615	3610	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.11	0.00	0.00	0.00	0.41	0.32	0.16	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.46	0.46	0.00	0.00	0.00	0.46	0.46	0.46	0.00	0.00	0.00
Volume/Cap:	0.00	0.25	0.25	0.00	0.00	0.00	0.89	0.69	0.36	0.00	0.00	0.00
Delay/Veh:	0.0	12.5	12.5	0.0	0.0	0.0	31.9	17.5	13.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.5	12.5	0.0	0.0	0.0	31.9	17.5	13.5	0.0	0.0	0.0
HCM2k95th:	0	6	6	0	0	0	31	19	8	0	0	0

Downtown Sacramento Traffic Study
2013 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #48 16th St/X St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.570
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	20.4
Optimal Cycle:	76	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	35	35	0	0	0	35	35	0	0	0	0
Lanes:	0 0 3 1 0			0 0 0 0 0			1 0 2 0 1			0 0 0 0 0		
Volume Module:												
Base Vol:	0	689	83	0	0	0	664	1153	265	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	689	83	0	0	0	664	1153	265	0	0	0
Added Vol:	0	0	0	0	0	0	0	183	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	689	83	0	0	0	664	1336	265	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	689	83	0	0	0	664	1336	265	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	689	83	0	0	0	664	1336	265	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	689	83	0	0	0	664	1336	265	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	1.00	1.00	1.00	0.85	0.95	0.85	1.00	1.00	1.00
Lanes:	0.00	3.57	0.43	0.00	0.00	0.00	1.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	6074	732	0	0	0	1615	3610	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.11	0.00	0.00	0.00	0.41	0.37	0.16	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.46	0.46	0.00	0.00	0.00	0.46	0.46	0.46	0.00	0.00	0.00
Volume/Cap:	0.00	0.25	0.25	0.00	0.00	0.00	0.89	0.80	0.36	0.00	0.00	0.00
Delay/Veh:	0.0	12.5	12.5	0.0	0.0	0.0	31.9	20.5	13.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.5	12.5	0.0	0.0	0.0	31.9	20.5	13.5	0.0	0.0	0.0
HCM2k95th:	0	6	6	0	0	0	31	24	8	0	0	0

```
---------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2013 Cumulative Conditions
                                 PM Peak Hour
---------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
*********************************************************************************
Intersection #49 29th St/J St
*********************************************************************************
Cycle (sec):         70              Critical Vol./Cap. (X):        0.765
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):      34.1
Optimal Cycle:       82              Level Of Service:                  C
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:    18   18     0    18   18     0     0   34    34     0    0     0
Lanes:        0  1  2  0  0    0  1  1  0  0    0  0  2  1  0    1  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      56  317     0   222  333     0     0 1200   693     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   56  317     0   222  333     0     0 1200   693     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    56  317     0   222  333     0     0 1200   693     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   56  317     0   222  333     0     0 1200   693     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    56  317     0   222  333     0     0 1200   693     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.90 0.90  1.00  0.93 0.93  1.00  1.00 0.86  0.86  1.00 1.00  1.00
Lanes:       0.45 2.55  0.00  0.80 1.20  0.00  0.00 2.00  1.00  1.00 0.00  0.00
Final Sat.:   773 4377     0  1415 2123     0     0 3268  1634  1900    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.07  0.00  0.16 0.16  0.00  0.00 0.37  0.42  0.00 0.00  0.00
Crit Moves:  ****                  ****                   ****
Green/Cycle: 0.22 0.22  0.00  0.22 0.22  0.00  0.00 0.41  0.41  0.00 0.00  0.00
Volume/Cap:  0.33 0.33  0.00  0.71 0.71  0.00  0.00 0.89  1.02  0.00 0.00  0.00
Delay/Veh:   27.1 27.1   0.0  32.8 32.8   0.0   0.0 27.1  50.9   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  27.1 27.1   0.0  32.8 32.8   0.0   0.0 27.1  50.9   0.0  0.0   0.0
HCM2k95th:      6    6     0    15   15     0     0   31    43     0    0     0
*********************************************************************************
```



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---------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2013 Cumulative Conditions
                                 PM Peak Hour
---------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Future Volume Alternative)
*********************************************************************************
Intersection #49 29th St/J St
*********************************************************************************
Cycle (sec):         70              Critical Vol./Cap. (X):        0.765
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):      34.7
Optimal Cycle:       82              Level Of Service:                  C
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:    18   18     0    18   18     0     0   34    34     0    0     0
Lanes:        0  1  2  0  0    0  1  1  0  0    0  0  2  1  0    1  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      56  317     0   222  333     0     0 1200   693     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   56  317     0   222  333     0     0 1200   693     0    0     0
Added Vol:      0    0     0     0    0     0     0   38     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   56  317     0   222  333     0     0 1238   693     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    56  317     0   222  333     0     0 1238   693     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   56  317     0   222  333     0     0 1238   693     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    56  317     0   222  333     0     0 1238   693     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.90 0.90  1.00  0.93 0.93  1.00  1.00 0.86  0.86  1.00 1.00  1.00
Lanes:       0.45 2.55  0.00  0.80 1.20  0.00  0.00 2.00  1.00  1.00 0.00  0.00
Final Sat.:   773 4377     0  1415 2123     0     0 3271  1636  1900    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.07  0.00  0.16 0.16  0.00  0.00 0.38  0.42  0.00 0.00  0.00
Crit Moves:  ****                  ****                   ****
Green/Cycle: 0.22 0.22  0.00  0.22 0.22  0.00  0.00 0.41  0.41  0.00 0.00  0.00
Volume/Cap:  0.33 0.33  0.00  0.71 0.71  0.00  0.00 0.91  1.02  0.00 0.00  0.00
Delay/Veh:   27.1 27.1   0.0  32.8 32.8   0.0   0.0 29.2  50.4   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  27.1 27.1   0.0  32.8 32.8   0.0   0.0 29.2  50.4   0.0  0.0   0.0
HCM2k95th:      6    6     0    15   15     0     0   33    43     0    0     0
*********************************************************************************
```

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--------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                          2013 Cumulative Conditions
                                 PM Peak Hour
--------------------------------------------------------------------------------
                        Level Of Service Computation Report
              2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #50 30th St/J St
********************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):         0.559
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):       17.7
Optimal Cycle:        79              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   31    31    0    0     0   39   39     0    0    0     0
Lanes:       0  1  1  1  0    0  0  0  0  0    1  0  2  0  0    0  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0 1055   316    0    0     0  422 1052     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0 1055   316    0    0     0  422 1052     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0 1055   316    0    0     0  422 1052     0    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0 1055   316    0    0     0  422 1052     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0 1055   316    0    0     0  422 1052     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  0.91 0.88  0.88 1.00 1.00  1.00 1.00 0.95  1.00 1.00 1.00  1.00
Lanes:       0.00 2.31  0.69 0.00 0.00  0.00 1.00 2.00  0.00 0.00 1.00  0.00
Final Sat.:    0 3856  1155    0    0     0 1900 3610     0    0 1900     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.27  0.27 0.00 0.00  0.00 0.22 0.29  0.00 0.00 0.00  0.00
Crit Moves:       ****                      ****
Green/Cycle: 0.00 0.39  0.39 0.00 0.00  0.00 0.49 0.49  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.70  0.70 0.00 0.00  0.00 0.45 0.59  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 21.2  21.2  0.0  0.0   0.0 13.4 14.8   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 21.2  21.2  0.0  0.0   0.0 13.4 14.8   0.0  0.0  0.0   0.0
HCM2k95th:     0   19    19    0    0     0   12   16     0    0    0     0
********************************************************************************
```



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--------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                          2013 Cumulative Conditions
                                 PM Peak Hour
--------------------------------------------------------------------------------
                        Level Of Service Computation Report
              2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #50 30th St/J St
********************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):         0.559
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):       17.8
Optimal Cycle:        79              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   31    31    0    0     0   39   39     0    0    0     0
Lanes:       0  1  1  1  0    0  0  0  0  0    1  0  2  0  0    0  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0 1055   316    0    0     0  422 1052     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0 1055   316    0    0     0  422 1052     0    0    0     0
Added Vol:     0    0     0    0    0     0    0   38     0    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   0 1055   316    0    0     0  422 1090     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0 1055   316    0    0     0  422 1090     0    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0 1055   316    0    0     0  422 1090     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0 1055   316    0    0     0  422 1090     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  0.91 0.88  0.88 1.00 1.00  1.00 1.00 0.95  1.00 1.00 1.00  1.00
Lanes:       0.00 2.31  0.69 0.00 0.00  0.00 1.00 2.00  0.00 0.00 1.00  0.00
Final Sat.:    0 3856  1155    0    0     0 1900 3610     0    0 1900     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.27  0.27 0.00 0.00  0.00 0.22 0.30  0.00 0.00 0.00  0.00
Crit Moves:       ****                      ****
Green/Cycle: 0.00 0.39  0.39 0.00 0.00  0.00 0.49 0.49  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.70  0.70 0.00 0.00  0.00 0.45 0.61  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 21.2  21.2  0.0  0.0   0.0 13.4 15.1   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 21.2  21.2  0.0  0.0   0.0 13.4 15.1   0.0  0.0  0.0   0.0
HCM2k95th:     0   19    19    0    0     0   12   17     0    0    0     0
********************************************************************************
```

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
AM Peak Hour

Scenario Report

Scenario:	2030 AM Project
Command:	2030 AM PROJ
Volume:	2030 AM NO Project
Geometry:	Cumulative AM
Impact Fee:	Default Impact Fee
Trip Generation:	AM Add Projects
Trip Distribution:	Project
Paths:	Project
Routes:	Default Routes
Configuration:	Default Configuration

```
-----------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                AM Peak Hour
-----------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #1 3rd St/J St
*****************************************************************************
Cycle (sec):        100               Critical Vol./Cap. (X):        1.111
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):      104.0
Optimal Cycle:      109               Level Of Service:                  F
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted      Split Phase      Split Phase
Rights:          Include          Include         Include          Include
Min. Green:    0    0   15    15   15    0    35   35   35    50   50   50
Lanes:       0  0  0  0  2   2  0  1  0  0   0  1  2  1  0   0  1  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0  117   181  200    0     4 1747  635    13 1698  449
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   0    0  117   181  200    0     4 1747  635    13 1698  449
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    0    0  117   181  200    0     4 1747  635    13 1698  449
Reduct Vol:    0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   0    0  117   181  200    0     4 1747  635    13 1698  449
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:    0    0  117   181  200    0     4 1747  635    13 1698  449
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 0.67  0.55 0.90 1.00  0.79 0.79 0.79  0.79 0.79 0.79
Lanes:       0.00 0.00 2.00  2.00 1.00 0.00  0.01 2.99 1.00  0.02 2.36 0.62
Final Sat.:    0    0 2558  2093 1710    0    10 4471 1494    27 3556  940
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.05  0.09 0.12 0.00  0.39 0.39 0.43  0.48 0.48 0.48
Crit Moves:                       ****                  ****             ****
Green/Cycle: 0.00 0.00 0.14  0.14 0.14 0.00  0.32 0.32 0.32  0.46 0.46 0.46
Volume/Cap:  0.00 0.00 0.33  0.63 0.85 0.00  1.22 1.22 1.32  1.04 1.04 1.04
Delay/Veh:    0.0  0.0 45.0  54.3 75.9  0.0 139.5  139 186.7 60.9 60.9 60.9
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0 45.0  54.3 75.9  0.0 139.5  139 186.7 60.9 60.9 60.9
HCM2k95th:     0    0    5    11   16    0    56   56   67    53   53   53
*****************************************************************************
```



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-----------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                AM Peak Hour
-----------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
*****************************************************************************
Intersection #1 3rd St/J St
*****************************************************************************
Cycle (sec):        100               Critical Vol./Cap. (X):        1.194
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):      138.2
Optimal Cycle:      109               Level Of Service:                  F
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted      Split Phase      Split Phase
Rights:          Include          Include         Include          Include
Min. Green:    0    0   15    15   15    0    35   35   35    50   50   50
Lanes:       0  0  0  0  2   2  0  1  0  0   0  1  2  1  0   0  1  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0  117   181  200    0     4 1747  635    13 1698  449
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   0    0  117   181  200    0     4 1747  635    13 1698  449
Added Vol:     0    0    0     0    7    0     0  157   93     0   41    0
PasserByVol:   0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:   0    0  117   181  207    0     4 1904  728    13 1739  449
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    0    0  117   181  207    0     4 1904  728    13 1739  449
Reduct Vol:    0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   0    0  117   181  207    0     4 1904  728    13 1739  449
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:    0    0  117   181  207    0     4 1904  728    13 1739  449
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 0.67  0.55 0.90 1.00  0.79 0.79 0.79  0.79 0.79 0.79
Lanes:       0.00 0.00 2.00  2.00 1.00 0.00  0.01 2.99 1.00  0.02 2.37 0.61
Final Sat.:    0    0 2558  2093 1710    0     9 4468 1492    27 3574  923
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.05  0.09 0.12 0.00  0.43 0.43 0.49  0.49 0.49 0.49
Crit Moves:                       ****                  ****       ****
Green/Cycle: 0.00 0.00 0.14  0.14 0.14 0.00  0.32 0.32 0.32  0.46 0.46 0.46
Volume/Cap:  0.00 0.00 0.33  0.63 0.88 0.00  1.33 1.33 1.52  1.06 1.06 1.06
Delay/Veh:    0.0  0.0 45.0  54.3 80.4  0.0 187.9  188 273.7 67.7 67.7 67.7
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0 45.0  54.3 80.4  0.0 187.9  188 273.7 67.7 67.7 67.7
HCM2k95th:     0    0    5    11   17    0    68   68   89    56   56   56
*****************************************************************************
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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                AM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
              2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #2 3rd St/L St
*******************************************************************************
Cycle (sec):         70              Critical Vol./Cap. (X):        0.477
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):       19.7
Optimal Cycle:       79              Level Of Service:                 B
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    10   44     0     0   34    34     0    0     0    26   26    26
Lanes:        1  0  2  0  0   0  0  2  1  0   0  0  0  0  0   1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      43   30     0     0  845   312     0    0     0   191  381    45
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   43   30     0     0  845   312     0    0     0   191  381    45
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    43   30     0     0  845   312     0    0     0   191  381    45
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   43   30     0     0  845   312     0    0     0   191  381    45
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    43   30     0     0  845   312     0    0     0   191  381    45
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.86 0.86  1.00  1.00 0.79  0.79  1.00 1.00  1.00  0.73 0.73  0.77
Lanes:       1.00 2.00  0.00  0.00 2.19  0.81  0.00 0.00  0.00  1.00 2.00  1.00
Final Sat.:  1625 3249     0     0 3273  1209     0    0     0  1383 2759  1454
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.01  0.00  0.00 0.26  0.26  0.00 0.00  0.00  0.14 0.14  0.03
Crit Moves:  ****                  ****                          ****
Green/Cycle: 0.13 0.56  0.00  0.00 0.43  0.43  0.00 0.00  0.00  0.33 0.33  0.33
Volume/Cap:  0.21 0.02  0.00  0.00 0.60  0.60  0.00 0.00  0.00  0.42 0.42  0.09
Delay/Veh:   33.3  7.8   0.0   0.0 18.7  18.7   0.0  0.0   0.0  21.6 21.6  18.7
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  33.3  7.8   0.0   0.0 18.7  18.7   0.0  0.0   0.0  21.6 21.6  18.7
HCM2k95th:      3    0     0     0   14    14     0    0     0     9    9     2
*******************************************************************************
```



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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                AM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #2 3rd St/L St
*******************************************************************************
Cycle (sec):         70              Critical Vol./Cap. (X):        0.503
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):       20.7
Optimal Cycle:       79              Level Of Service:                 C
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    10   44     0     0   34    34     0    0     0    26   26    26
Lanes:        1  0  2  0  0   0  0  2  1  0   0  0  0  0  0   1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      43   30     0     0  845   312     0    0     0   191  381    45
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   43   30     0     0  845   312     0    0     0   191  381    45
Added Vol:      0    0     0     0   99     0     0    0     0     2  109     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   43   30     0     0  944   312     0    0     0   193  490    45
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    43   30     0     0  944   312     0    0     0   193  490    45
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   43   30     0     0  944   312     0    0     0   193  490    45
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    43   30     0     0  944   312     0    0     0   193  490    45
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.86 0.86  1.00  1.00 0.79  0.79  1.00 1.00  1.00  0.73 0.73  0.77
Lanes:       1.00 2.00  0.00  0.00 2.25  0.75  0.00 0.00  0.00  1.00 2.00  1.00
Final Sat.:  1625 3249     0     0 3379  1117     0    0     0  1381 2762  1454
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.01  0.00  0.00 0.28  0.28  0.00 0.00  0.00  0.14 0.18  0.03
Crit Moves:  ****                  ****                          ****
Green/Cycle: 0.13 0.56  0.00  0.00 0.43  0.43  0.00 0.00  0.00  0.33 0.33  0.33
Volume/Cap:  0.21 0.02  0.00  0.00 0.65  0.65  0.00 0.00  0.00  0.42 0.54  0.09
Delay/Veh:   33.3  7.8   0.0   0.0 19.5  19.5   0.0  0.0   0.0  21.5 23.3  18.7
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  33.3  7.8   0.0   0.0 19.5  19.5   0.0  0.0   0.0  21.5 23.3  18.7
HCM2k95th:      3    0     0     0   16    16     0    0     0     9   12     2
*******************************************************************************
```

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 3rd St/Capitol Mall

Cycle (sec): 70 Critical Vol./Cap. (X): 0.547
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 21.8
Optimal Cycle: 79 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	29	29	0	14	25	0	16	27	0
Lanes:	0 0 0 0 0			0 1 1 1 1			1 0 3 0 0			1 0 1 1 0		
Volume Module:												
Base Vol:	0	0	0	320	714	262	66	809	0	124	189	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	320	714	262	66	809	0	124	189	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	320	714	262	66	809	0	124	189	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	320	714	262	66	809	0	124	189	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	320	714	262	66	809	0	124	189	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.77	0.77	0.77	0.86	0.82	1.00	0.85	0.84	0.84
Lanes:	0.00	0.00	0.00	0.93	2.07	1.00	1.00	3.00	0.00	1.00	1.70	0.30
Final Sat.:	0	0	0	1359	3033	1464	1625	4668	0	1624	2705	472
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.24	0.24	0.18	0.04	0.17	0.00	0.08	0.07	0.07
Crit Moves:				****				****		****		
Green/Cycle:	0.00	0.00	0.00	0.37	0.37	0.37	0.18	0.32	0.00	0.56	0.34	0.34
Volume/Cap:	0.00	0.00	0.00	0.64	0.64	0.49	0.23	0.55	0.00	0.27	0.20	0.20
Delay/Veh:	0.0	0.0	0.0	22.3	22.3	19.9	29.7	23.8	0.0	10.6	18.8	18.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	22.3	22.3	19.9	29.7	23.8	0.0	10.6	18.8	18.8
HCM2k95th:	0	0	0	15	15	11	4	11	0	4	4	4

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 3rd St/Capitol Mall

Cycle (sec): 70 Critical Vol./Cap. (X): 0.637
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 22.7
Optimal Cycle: 79 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	29	29	0	14	25	0	16	27	0
Lanes:	0 0 0 0 0			0 1 1 1 1			1 0 3 0 0			1 0 1 1 0		
Volume Module:												
Base Vol:	0	0	0	320	714	262	66	809	0	124	189	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	320	714	262	66	809	0	124	189	33
Added Vol:	0	0	0	0	102	0	0	106	0	56	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	320	816	262	66	915	0	180	205	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	320	816	262	66	915	0	180	205	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	320	816	262	66	915	0	180	205	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	320	816	262	66	915	0	180	205	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.77	0.77	0.77	0.86	0.82	1.00	0.86	0.84	0.84
Lanes:	0.00	0.00	0.00	0.85	2.15	1.00	1.00	3.00	0.00	1.00	1.72	0.28
Final Sat.:	0	0	0	1242	3168	1470	1625	4668	0	1625	2740	441
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.26	0.26	0.18	0.04	0.20	0.00	0.11	0.07	0.07
Crit Moves:				****				****		****		
Green/Cycle:	0.00	0.00	0.00	0.37	0.37	0.37	0.18	0.32	0.00	0.56	0.34	0.34
Volume/Cap:	0.00	0.00	0.00	0.70	0.70	0.49	0.23	0.62	0.00	0.41	0.22	0.22
Delay/Veh:	0.0	0.0	0.0	23.4	23.4	19.8	29.7	24.9	0.0	12.9	19.0	19.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	23.4	23.4	19.8	29.7	24.9	0.0	12.9	19.0	19.0
HCM2k95th:	0	0	0	17	17	11	4	13	0	7	5	5

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                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #4 3rd St/N St
********************************************************************************
Cycle (sec):         70             Critical Vol./Cap. (X):        0.660
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):        27.5
Optimal Cycle:       79             Level Of Service:                  C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   16    16    33   33     0     0   21    21     0    0     0
Lanes:        0  0  0  1  0    0  1  2  0  0    0  0  1  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0   74     4   630  358     0     0  418   160     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0   74     4   630  358     0     0  418   160     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0   74     4   630  358     0     0  418   160     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0   74     4   630  358     0     0  418   160     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0   74     4   630  358     0     0  418   160     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.99  0.99  0.88 0.88  1.00  1.00 0.91  0.91  1.00 1.00  1.00
Lanes:       0.00 0.95  0.05  1.00 2.00  0.00  0.00 1.45  0.55  0.00 0.00  0.00
Final Sat.:     0 1790    97  1675 3351     0     0 2501   957     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.04  0.04  0.38 0.11  0.00  0.00 0.17  0.17  0.00 0.00  0.00
Crit Moves:       ****        ****                  ****
Green/Cycle: 0.00 0.20  0.20  0.42 0.42  0.00  0.00 0.27  0.27  0.00 0.00  0.00
Volume/Cap:  0.00 0.20  0.20  0.90 0.26  0.00  0.00 0.63  0.63  0.00 0.00  0.00
Delay/Veh:    0.0 27.4  27.4  33.2 15.2   0.0   0.0 28.8  28.8   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 27.4  27.4  33.2 15.2   0.0   0.0 28.8  28.8   0.0  0.0   0.0
HCM2k95th:      0    4     4    28    6     0     0   13    13     0    0     0
********************************************************************************
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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #4 3rd St/N St
********************************************************************************
Cycle (sec):         70             Critical Vol./Cap. (X):        0.741
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):        37.9
Optimal Cycle:       79             Level Of Service:                  D
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   16    16    33   33     0     0   21    21     0    0     0
Lanes:        0  0  0  1  0    0  1  2  0  0    0  0  1  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0   74     4   630  358     0     0  418   160     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0   74     4   630  358     0     0  418   160     0    0     0
Added Vol:      0    0     0    93   65     0     0   62     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0   74     4   723  423     0     0  480   160     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0   74     4   723  423     0     0  480   160     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0   74     4   723  423     0     0  480   160     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0   74     4   723  423     0     0  480   160     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.99  0.99  0.88 0.88  1.00  1.00 0.91  0.91  1.00 1.00  1.00
Lanes:       0.00 0.95  0.05  1.00 2.00  0.00  0.00 1.50  0.50  0.00 0.00  0.00
Final Sat.:     0 1790    97  1675 3351     0     0 2607   869     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.04  0.04  0.43 0.13  0.00  0.00 0.18  0.18  0.00 0.00  0.00
Crit Moves:       ****        ****                  ****
Green/Cycle: 0.00 0.20  0.20  0.42 0.42  0.00  0.00 0.27  0.27  0.00 0.00  0.00
Volume/Cap:  0.00 0.20  0.20  1.03 0.30  0.00  0.00 0.69  0.69  0.00 0.00  0.00
Delay/Veh:    0.0 27.4  27.4  58.9 15.5   0.0   0.0 30.4  30.4   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 27.4  27.4  58.9 15.5   0.0   0.0 30.4  30.4   0.0  0.0   0.0
HCM2k95th:      0    4     4    40    7     0     0   15    15     0    0     0
********************************************************************************
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------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                       2030 Cumulative Conditions
                              AM Peak Hour
------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #5 3rd St/P St
******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.354
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        9.9
Optimal Cycle:       56              Level Of Service:                  A
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   19    19    0    0     0   31   31     0
Lanes:        0  0  0  0  0   0  0  1  1  1   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0  381   220    0    0     0  188  844     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  381   220    0    0     0  188  844     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  381   220    0    0     0  188  844     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  381   220    0    0     0  188  844     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  381   220    0    0     0  188  844     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.90  0.90 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 1.90  1.10 0.00 0.00  0.00 0.55 2.45  0.00
Final Sat.:     0    0     0    0 3244  1873    0    0     0  945 4242     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.12  0.12 0.00 0.00  0.00 0.20 0.20  0.00
Crit Moves:                       ****                       ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.34  0.34 0.00 0.00  0.00 0.55 0.55  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.35  0.35 0.00 0.00  0.00 0.36 0.36  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 14.4  14.4  0.0  0.0   0.0  7.3  7.3   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 14.4  14.4  0.0  0.0   0.0  7.3  7.3   0.0
HCM2k95th:      0    0     0    0    6     6    0    0     0    7    7     0
******************************************************************************
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------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                       2030 Cumulative Conditions
                              AM Peak Hour
------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #5 3rd St/P St
******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.375
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       10.2
Optimal Cycle:       56              Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   19    19    0    0     0   31   31     0
Lanes:        0  0  0  0  0   0  0  1  1  1   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0  381   220    0    0     0  188  844     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  381   220    0    0     0  188  844     0
Added Vol:      0    0     0    0    0    65    0    0     0    0   25     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0    0  381   285    0    0     0  188  869     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  381   285    0    0     0  188  869     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  381   285    0    0     0  188  869     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  381   285    0    0     0  188  869     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.89  0.89 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 1.72  1.28 0.00 0.00  0.00 0.53 2.47  0.00
Final Sat.:     0    0     0    0 2900  2169    0    0     0  923 4264     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.13  0.13 0.00 0.00  0.00 0.20 0.20  0.00
Crit Moves:                       ****                       ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.34  0.34 0.00 0.00  0.00 0.55 0.55  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.39  0.39 0.00 0.00  0.00 0.37 0.37  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 14.7  14.7  0.0  0.0   0.0  7.4  7.4   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 14.7  14.7  0.0  0.0   0.0  7.4  7.4   0.0
HCM2k95th:      0    0     0    0    7     7    0    0     0    7    7     0
******************************************************************************
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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                AM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #6 3rd St/Q St
*******************************************************************************
Cycle (sec):        50               Critical Vol./Cap. (X):        0.776
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      18.4
Optimal Cycle:      56               Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0     0   19   19     0    0   31    31    0    0     0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  3  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0     0  271  290     0    0 2608   891    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0     0  271  290     0    0 2608   891    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0    0     0  271  290     0    0 2608   891    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0     0  271  290     0    0 2608   891    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0    0     0  271  290     0    0 2608   891    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.88  0.88 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 1.00 2.00  0.00 0.00 3.00  1.00 0.00 0.00  0.00
Final Sat.:    0    0     0 1729 3458     0    0 4990  1663    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.16 0.08  0.00 0.00 0.52  0.54 0.00 0.00  0.00
Crit Moves:                  ****                         ****
Green/Cycle: 0.00 0.00  0.00 0.34 0.34  0.00 0.00 0.55  0.55 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.46 0.25  0.00 0.00 0.94  0.97 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 15.8 13.6   0.0  0.0 18.2  21.2  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 15.8 13.6   0.0  0.0 18.2  21.2  0.0  0.0   0.0
HCM2k95th:     0    0     0    8    4     0    0   33    36    0    0     0
*******************************************************************************
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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                AM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #6 3rd St/Q St
*******************************************************************************
Cycle (sec):        50               Critical Vol./Cap. (X):        0.804
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      28.6
Optimal Cycle:      56               Level Of Service:                  C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0     0   19   19     0    0   31    31    0    0     0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  3  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0     0  271  290     0    0 2608   891    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0     0  271  290     0    0 2608   891    0    0     0
Added Vol:     0    0     0    0    0     0    0  240     0    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   0    0     0  271  290     0    0 2848   891    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0    0     0  271  290     0    0 2848   891    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0     0  271  290     0    0 2848   891    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0    0     0  271  290     0    0 2848   891    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.88  0.88 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 1.00 2.00  0.00 0.00 3.05  0.95 0.00 0.00  0.00
Final Sat.:    0    0     0 1729 3458     0    0 5078  1589    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.16 0.08  0.00 0.00 0.56  0.56 0.00 0.00  0.00
Crit Moves:                  ****                    ****
Green/Cycle: 0.00 0.00  0.00 0.34 0.34  0.00 0.00 0.55  0.55 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.46 0.25  0.00 0.00 1.01  1.01 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 15.8 13.6   0.0  0.0 30.6  30.6  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 15.8 13.6   0.0  0.0 30.6  30.6  0.0  0.0   0.0
HCM2k95th:     0    0     0    8    4     0    0   42    42    0    0     0
*******************************************************************************
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------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               AM Peak Hour
------------------------------------------------------------------------------
                       Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #7 5th St/I St
******************************************************************************
Cycle (sec):         50             Critical Vol./Cap. (X):        0.619
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      13.1
Optimal Cycle:       56             Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:   30   30    0    0    0   30    0    0    0    0   20   20
Lanes:       2  0  2  0  0   0  0  0  0  2   0  0  0  0  0   0  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     148 1123    0    0    0   12    0    0    0    0 1180   97
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  148 1123    0    0    0   12    0    0    0    0 1180   97
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   148 1123    0    0    0   12    0    0    0    0 1180   97
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  148 1123    0    0    0   12    0    0    0    0 1180   97
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   148 1123    0    0    0   12    0    0    0    0 1180   97
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.54 0.86 1.00 1.00 1.00 0.67 1.00 1.00 1.00 1.00 0.81 0.81
Lanes:       2.00 2.00 0.00 0.00 0.00 2.00 0.00 0.00 0.00 0.00 3.70 0.30
Final Sat.:  2034 3249    0    0    0 2558    0    0    0    0 5688  468
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.35 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.21 0.21
Crit Moves:       ****      ****                                ****
Green/Cycle: 0.54 0.54 0.00 0.00 0.00 0.54 0.00 0.00 0.00 0.00 0.36 0.36
Volume/Cap:  0.14 0.65 0.00 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.58 0.58
Delay/Veh:    6.8 11.1  0.0  0.0  0.0  6.1  0.0  0.0  0.0  0.0 15.7 15.7
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   6.8 11.1  0.0  0.0  0.0  6.1  0.0  0.0  0.0  0.0 15.7 15.7
HCM2k95th:      2   13    0    0    0    0    0    0    0    0    9    9
******************************************************************************
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------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               AM Peak Hour
------------------------------------------------------------------------------
                       Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #7 5th St/I St
******************************************************************************
Cycle (sec):         50             Critical Vol./Cap. (X):        0.648
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      13.7
Optimal Cycle:       56             Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:   30   30    0    0    0   30    0    0    0    0   20   20
Lanes:       2  0  2  0  0   0  0  0  0  2   0  0  0  0  0   0  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     148 1123    0    0    0   12    0    0    0    0 1180   97
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  148 1123    0    0    0   12    0    0    0    0 1180   97
Added Vol:      8    8    0    0    0    0    0    0    0    0  144    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:  156 1131    0    0    0   12    0    0    0    0 1324   97
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   156 1131    0    0    0   12    0    0    0    0 1324   97
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  156 1131    0    0    0   12    0    0    0    0 1324   97
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   156 1131    0    0    0   12    0    0    0    0 1324   97
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.54 0.86 1.00 1.00 1.00 0.67 1.00 1.00 1.00 1.00 0.81 0.81
Lanes:       2.00 2.00 0.00 0.00 0.00 2.00 0.00 0.00 0.00 0.00 3.73 0.27
Final Sat.:  2034 3249    0    0    0 2558    0    0    0    0 5742  421
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.08 0.35 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.23 0.23
Crit Moves:       ****      ****                                ****
Green/Cycle: 0.54 0.54 0.00 0.00 0.00 0.54 0.00 0.00 0.00 0.00 0.36 0.36
Volume/Cap:  0.14 0.65 0.00 0.00 0.00 0.01 0.00 0.00 0.00 0.00 0.65 0.65
Delay/Veh:    6.8 11.2  0.0  0.0  0.0  6.1  0.0  0.0  0.0  0.0 16.5 16.5
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   6.8 11.2  0.0  0.0  0.0  6.1  0.0  0.0  0.0  0.0 16.5 16.5
HCM2k95th:      2   14    0    0    0    0    0    0    0    0   10   10
******************************************************************************
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 5th St/J St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.716
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 24.0
Optimal Cycle: 106 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	40	40	0	0	0	60	60	60	0	0	0
Lanes:	0 0 1 1 1			0 0 0 0 0			1 1 3 0 1			0 0 0 0 0		
Volume Module:												
Base Vol:	0	500	274	0	0	0	865	2495	135	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	500	274	0	0	0	865	2495	135	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	500	274	0	0	0	865	2495	135	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	500	274	0	0	0	865	2495	135	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	500	274	0	0	0	865	2495	135	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.81	0.81	1.00	1.00	1.00	0.70	0.70	0.77	1.00	1.00	1.00
Lanes:	0.00	1.94	1.06	0.00	0.00	0.00	1.29	3.71	1.00	0.00	0.00	0.00
Final Sat.:	0	2981	1634	0	0	0	1703	4911	1454	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.17	0.00	0.00	0.00	0.51	0.51	0.09	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.38	0.38	0.00	0.00	0.00	0.57	0.57	0.57	0.00	0.00	0.00
Volume/Cap:	0.00	0.44	0.44	0.00	0.00	0.00	0.90	0.90	0.16	0.00	0.00	0.00
Delay/Veh:	0.0	25.5	25.5	0.0	0.0	0.0	24.2	24.2	11.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	25.5	25.5	0.0	0.0	0.0	24.2	24.2	11.4	0.0	0.0	0.0
HCM2k95th:	0	12	12	0	0	0	42	42	5	0	0	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 5th St/J St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.771
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 27.7
Optimal Cycle: 106 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	40	40	0	0	0	60	60	60	0	0	0
Lanes:	0 0 1 1 1			0 0 0 0 0			1 1 3 0 1			0 0 0 0 0		
Volume Module:												
Base Vol:	0	500	274	0	0	0	865	2495	135	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	500	274	0	0	0	865	2495	135	0	0	0
Added Vol:	0	16	77	0	0	0	0	198	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	516	351	0	0	0	865	2693	135	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	516	351	0	0	0	865	2693	135	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	516	351	0	0	0	865	2693	135	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	516	351	0	0	0	865	2693	135	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.80	0.80	1.00	1.00	1.00	0.70	0.70	0.77	1.00	1.00	1.00
Lanes:	0.00	1.79	1.21	0.00	0.00	0.00	1.22	3.78	1.00	0.00	0.00	0.00
Final Sat.:	0	2724	1853	0	0	0	1608	5006	1454	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.19	0.00	0.00	0.00	0.54	0.54	0.09	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.38	0.38	0.00	0.00	0.00	0.57	0.57	0.57	0.00	0.00	0.00
Volume/Cap:	0.00	0.50	0.50	0.00	0.00	0.00	0.95	0.95	0.16	0.00	0.00	0.00
Delay/Veh:	0.0	26.4	26.4	0.0	0.0	0.0	28.6	28.6	11.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	26.4	26.4	0.0	0.0	0.0	28.6	28.6	11.4	0.0	0.0	0.0
HCM2k95th:	0	13	13	0	0	0	50	50	5	0	0	0

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2000 HCM Operations Method (Base Volume Alternative)

Intersection #9 5th St/L St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.317
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 13.9
Optimal Cycle: 79 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	40	40	0	0	0	40	0	0	0	0	30	30
Lanes:	1 0	3	0 0	0 0	0	0 2	0 0	0	0 0	0 0	3	1 0
Volume Module:												
Base Vol:	124	806	0	0	0	137	0	0	0	0	568	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	124	806	0	0	0	137	0	0	0	0	568	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	124	806	0	0	0	137	0	0	0	0	568	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	806	0	0	0	137	0	0	0	0	568	93
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	124	806	0	0	0	137	0	0	0	0	568	93
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.69	0.82	1.00	1.00	1.00	0.67	1.00	1.00	1.00	1.00	0.80	0.80
Lanes:	1.00	3.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	3.44	0.56
Final Sat.:	1315	4668	0	0	0	2558	0	0	0	0	5236	857
Capacity Analysis Module:												
Vol/Sat:	0.09	0.17	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.11	0.11
Crit Moves:		****									****	
Green/Cycle:	0.51	0.51	0.00	0.00	0.00	0.51	0.00	0.00	0.00	0.00	0.38	0.38
Volume/Cap:	0.19	0.34	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.29	0.29
Delay/Veh:	11.2	12.0	0.0	0.0	0.0	10.3	0.0	0.0	0.0	0.0	17.4	17.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.2	12.0	0.0	0.0	0.0	10.3	0.0	0.0	0.0	0.0	17.4	17.4
HCM2k95th:	5	8	0	0	0	2	0	0	0	0	6	6

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 5th St/L St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.388
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 14.9
Optimal Cycle: 79 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	40	40	0	0	0	40	0	0	0	0	30	30
Lanes:	1 0	3	0 0	0 0	0	0 2	0 0	0	0 0	0 0	3	1 0
Volume Module:												
Base Vol:	124	806	0	0	0	137	0	0	0	0	568	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	124	806	0	0	0	137	0	0	0	0	568	93
Added Vol:	14	84	0	0	0	0	0	0	0	0	271	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	138	890	0	0	0	137	0	0	0	0	839	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	138	890	0	0	0	137	0	0	0	0	839	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	890	0	0	0	137	0	0	0	0	839	101
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	138	890	0	0	0	137	0	0	0	0	839	101
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.69	0.82	1.00	1.00	1.00	0.67	1.00	1.00	1.00	1.00	0.81	0.81
Lanes:	1.00	3.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	3.57	0.43
Final Sat.:	1315	4668	0	0	0	2558	0	0	0	0	5467	658
Capacity Analysis Module:												
Vol/Sat:	0.10	0.19	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.15	0.15
Crit Moves:		****									****	
Green/Cycle:	0.51	0.51	0.00	0.00	0.00	0.51	0.00	0.00	0.00	0.00	0.38	0.38
Volume/Cap:	0.21	0.38	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.40	0.40
Delay/Veh:	11.5	12.4	0.0	0.0	0.0	10.3	0.0	0.0	0.0	0.0	18.5	18.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.5	12.4	0.0	0.0	0.0	10.3	0.0	0.0	0.0	0.0	18.5	18.5
HCM2k95th:	5	9	0	0	0	2	0	0	0	0	9	9

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------------------------------------------------------------------------------------
                         Downtown Sacramento Traffic Study
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                                   AM Peak Hour
------------------------------------------------------------------------------------
                         Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
************************************************************************************
Intersection #10 5th St/Capitol Mall
************************************************************************************
Cycle (sec):          70                Critical Vol./Cap. (X):         0.285
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):         28.7
Optimal Cycle:        76                Level Of Service:                   C
************************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    35   35     0     0    0     0    17   35     0     0   18    18
Lanes:        2  0  2  1  0    0  0  0  0  0    2  0  2  0  0    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     168  427   102     0    0     0   695  684     0     0  172    39
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  168  427   102     0    0     0   695  684     0     0  172    39
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   168  427   102     0    0     0   695  684     0     0  172    39
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  168  427   102     0    0     0   695  684     0     0  172    39
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   168  427   102     0    0     0   695  684     0     0  172    39
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.85 0.80  0.80  1.00 1.00  1.00  0.83 0.86  1.00  1.00 0.80  0.80
Lanes:       2.00 2.42  0.58  0.00 0.00  0.00  2.00 2.00  0.00  0.00 2.45  0.55
Final Sat.:  3221 3659   874     0    0     0  3152 3249     0     0 3699   839
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.12  0.12  0.00 0.00  0.00  0.22 0.21  0.00  0.00 0.05  0.05
Crit Moves:  ****                                    ****        ****
Green/Cycle: 0.46 0.46  0.46  0.00 0.00  0.00  0.22 0.46  0.00  0.00 0.24  0.24
Volume/Cap:  0.11 0.25  0.25  0.00 0.00  0.00  0.99 0.46  0.00  0.00 0.20  0.20
Delay/Veh:   11.8 12.8  12.8   0.0  0.0   0.0  60.0 15.0   0.0   0.0 23.6  23.6
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  11.8 12.8  12.8   0.0  0.0   0.0  60.0 15.0   0.0   0.0 23.6  23.6
HCM2k95th:      3    6     6     0    0     0    23   11     0     0    3     3
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------------------------------------------------------------------------------------
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                                   AM Peak Hour
------------------------------------------------------------------------------------
                         Level Of Service Computation Report
             2000 HCM Operations Method (Future Volume Alternative)
************************************************************************************
Intersection #10 5th St/Capitol Mall
************************************************************************************
Cycle (sec):          70                Critical Vol./Cap. (X):         0.379
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):         31.4
Optimal Cycle:        76                Level Of Service:                   C
************************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    35   35     0     0    0     0    17   35     0     0   18    18
Lanes:        2  0  2  1  0    0  0  0  0  0    2  0  2  0  0    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     168  427   102     0    0     0   695  684     0     0  172    39
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  168  427   102     0    0     0   695  684     0     0  172    39
Added Vol:     42   67    17     0    0     0    31   75     0     0   33     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  210  494   119     0    0     0   726  759     0     0  205    39
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   210  494   119     0    0     0   726  759     0     0  205    39
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  210  494   119     0    0     0   726  759     0     0  205    39
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   210  494   119     0    0     0   726  759     0     0  205    39
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.85 0.80  0.80  1.00 1.00  1.00  0.83 0.86  1.00  1.00 0.80  0.80
Lanes:       2.00 2.42  0.58  0.00 0.00  0.00  2.00 2.00  0.00  0.00 2.52  0.48
Final Sat.:  3221 3653   880     0    0     0  3152 3249     0     0 3828   728
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.14  0.14  0.00 0.00  0.00  0.23 0.23  0.00  0.00 0.05  0.05
Crit Moves:  ****                              ****                   ****
Green/Cycle: 0.46 0.46  0.46  0.00 0.00  0.00  0.22 0.46  0.00  0.00 0.24  0.24
Volume/Cap:  0.14 0.29  0.29  0.00 0.00  0.00  1.03 0.51  0.00  0.00 0.23  0.23
Delay/Veh:   12.0 13.1  13.1   0.0  0.0   0.0  71.3 15.7   0.0   0.0 23.9  23.9
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  12.0 13.1  13.1   0.0  0.0   0.0  71.3 15.7   0.0   0.0 23.9  23.9
HCM2k95th:      3    7     7     0    0     0    26   12     0     0    4     4
************************************************************************************
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Downtown Sacramento Traffic Study
2030 Cumulative Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #11 5th St/N St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.413
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	14.2
Optimal Cycle:	76	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	35	35	0	0	0	35	35	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			0 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	795	193	0	0	0	63	894	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	795	193	0	0	0	63	894	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	795	193	0	0	0	63	894	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	795	193	0	0	0	63	894	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	795	193	0	0	0	63	894	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.88	0.88	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.41	0.59	0.00	0.00	0.00	0.20	2.80	0.00	0.00	0.00	0.00
Final Sat.:	0	4053	984	0	0	0	341	4846	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.00	0.00	0.00	0.18	0.18	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.46	0.46	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.43	0.43	0.00	0.00	0.00	0.40	0.40	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	14.3	14.3	0.0	0.0	0.0	14.1	14.1	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	14.3	14.3	0.0	0.0	0.0	14.1	14.1	0.0	0.0	0.0	0.0
HCM2k95th:	0	10	10	0	0	0	10	10	0	0	0	0

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 5th St/N St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.560
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	15.9
Optimal Cycle:	76	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	35	35	0	0	0	35	35	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			0 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	795	193	0	0	0	63	894	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	795	193	0	0	0	63	894	0	0	0	0
Added Vol:	0	100	228	0	0	0	55	279	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	895	421	0	0	0	118	1173	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	895	421	0	0	0	118	1173	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	895	421	0	0	0	118	1173	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	895	421	0	0	0	118	1173	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.87	0.87	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.04	0.96	0.00	0.00	0.00	0.27	2.73	0.00	0.00	0.00	0.00
Final Sat.:	0	3358	1580	0	0	0	474	4713	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.00	0.00	0.00	0.25	0.25	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.46	0.46	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.58	0.58	0.00	0.00	0.00	0.54	0.54	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	16.2	16.2	0.0	0.0	0.0	15.6	15.6	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	16.2	16.2	0.0	0.0	0.0	15.6	15.6	0.0	0.0	0.0	0.0
HCM2k95th:	0	14	14	0	0	0	14	14	0	0	0	0

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------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               AM Peak Hour
------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #12 5th St/P St
******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):         0.431
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        11.3
Optimal Cycle:        56              Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:   30   30    0    0    0    0    0    0    0    0   20   20
Lanes:       0  1  2  0  0    0  0  0  0  0    0  0  0  0  0    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     292  763    0    0    0    0    0    0    0    0  657  246
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  292  763    0    0    0    0    0    0    0    0  657  246
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   292  763    0    0    0    0    0    0    0    0  657  246
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  292  763    0    0    0    0    0    0    0    0  657  246
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   292  763    0    0    0    0    0    0    0    0  657  246
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.91 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.87 0.87
Lanes:       0.83 2.17 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.18 0.82
Final Sat.:  1436 3751    0    0    0    0    0    0    0    0 3619 1355
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.20 0.20 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.18 0.18
Crit Moves:  ****                                                ****
Green/Cycle: 0.54 0.54 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.36 0.36
Volume/Cap:  0.38 0.38 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.51 0.51
Delay/Veh:    8.0  8.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 15.2 15.2
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   8.0  8.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 15.2 15.2
HCM2k95th:      7    7    0    0    0    0    0    0    0    0    9    9
******************************************************************************
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------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               AM Peak Hour
------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #12 5th St/P St
******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):         0.525
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        12.0
Optimal Cycle:        56              Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:   30   30    0    0    0    0    0    0    0    0   20   20
Lanes:       0  1  2  0  0    0  0  0  0  0    0  0  0  0  0    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     292  763    0    0    0    0    0    0    0    0  657  246
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  292  763    0    0    0    0    0    0    0    0  657  246
Added Vol:      0  204    0    0    0    0    0    0    0    0   25  124
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:  292  967    0    0    0    0    0    0    0    0  682  370
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   292  967    0    0    0    0    0    0    0    0  682  370
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  292  967    0    0    0    0    0    0    0    0  682  370
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   292  967    0    0    0    0    0    0    0    0  682  370
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.91 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.86 0.86
Lanes:       0.70 2.30 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.00 1.00
Final Sat.:  1203 3984    0    0    0    0    0    0    0    0 3275 1637
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.24 0.24 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.21 0.23
Crit Moves:  ****                                                     ****
Green/Cycle: 0.54 0.54 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.36 0.36
Volume/Cap:  0.45 0.45 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.58 0.63
Delay/Veh:    8.5  8.5  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 16.0 16.8
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   8.5  8.5  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 16.0 16.8
HCM2k95th:      9    9    0    0    0    0    0    0    0    0   11   12
******************************************************************************
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-----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                       2030 Cumulative Conditions
                              AM Peak Hour
-----------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #13 5th St/Q St
*****************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.598
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      12.0
Optimal Cycle:       56              Level Of Service:                 B
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   19    19    0    0     0   31   31     0    0    0     0
Lanes:       0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0  810    87    0    0     0  620 2184     0    0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0  810    87    0    0     0  620 2184     0    0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0  810    87    0    0     0  620 2184     0    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0  810    87    0    0     0  620 2184     0    0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0  810    87    0    0     0  620 2184     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.90  0.90  1.00 1.00  1.00  0.91 0.91  1.00  1.00 1.00  1.00
Lanes:       0.00 2.71  0.29  0.00 0.00  0.00  1.00 3.00  0.00  0.00 0.00  0.00
Final Sat.:    0 4614   496    0    0     0 1729 5187     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.18  0.18  0.00 0.00  0.00  0.36 0.42  0.00  0.00 0.00  0.00
Crit Moves:       ****                         ****
Green/Cycle: 0.00 0.34  0.34  0.00 0.00  0.00  0.55 0.55  0.00  0.00 0.00  0.00
Volume/Cap:  0.00 0.52  0.52  0.00 0.00  0.00  0.65 0.76  0.00  0.00 0.00  0.00
Delay/Veh:    0.0 15.9  15.9   0.0  0.0   0.0   9.5 11.2   0.0   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 15.9  15.9   0.0  0.0   0.0   9.5 11.2   0.0   0.0  0.0   0.0
HCM2k95th:     0    9     9    0    0     0   13   16     0    0    0     0
*****************************************************************************
```



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-----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                       2030 Cumulative Conditions
                              AM Peak Hour
-----------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*****************************************************************************
Intersection #13 5th St/Q St
*****************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.690
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):      12.7
Optimal Cycle:       56              Level Of Service:                 B
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   19    19    0    0     0   31   31     0    0    0     0
Lanes:       0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0  810    87    0    0     0  620 2184     0    0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0  810    87    0    0     0  620 2184     0    0    0     0
Added Vol:     0    0     0    0    0     0  204   36     0    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   0  810    87    0    0     0  824 2220     0    0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0  810    87    0    0     0  824 2220     0    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0  810    87    0    0     0  824 2220     0    0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0  810    87    0    0     0  824 2220     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.90  0.90  1.00 1.00  1.00  0.91 0.91  1.00  1.00 1.00  1.00
Lanes:       0.00 2.71  0.29  0.00 0.00  0.00  1.08 2.92  0.00  0.00 0.00  0.00
Final Sat.:    0 4614   496    0    0     0 1872 5044     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.18  0.18  0.00 0.00  0.00  0.44 0.44  0.00  0.00 0.00  0.00
Crit Moves:       ****                         ****
Green/Cycle: 0.00 0.34  0.34  0.00 0.00  0.00  0.55 0.55  0.00  0.00 0.00  0.00
Volume/Cap:  0.00 0.52  0.52  0.00 0.00  0.00  0.80 0.80  0.00  0.00 0.00  0.00
Delay/Veh:    0.0 15.9  15.9   0.0  0.0   0.0  11.8 11.8   0.0   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 15.9  15.9   0.0  0.0   0.0  11.8 11.8   0.0   0.0  0.0   0.0
HCM2k95th:     0    9     9    0    0     0   17   17     0    0    0     0
*****************************************************************************
```

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #14 7th St/I St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.395
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	11.3
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	23	23	0	0	0	27	27	0
Lanes:	0 0 0 0 0			0 0 2 0 2			0 0 0 0 0			1 1 2 0 0		
Volume Module:												
Base Vol:	0	0	0	0	619	225	0	0	0	253	1176	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	619	225	0	0	0	253	1176	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	619	225	0	0	0	253	1176	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	619	225	0	0	0	253	1176	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	619	225	0	0	0	253	1176	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.86	0.67	1.00	1.00	1.00	0.82	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	3249	2558	0	0	0	1556	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.19	0.09	0.00	0.00	0.00	0.16	0.25	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.41	0.41	0.00	0.00	0.00	0.48	0.48	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.46	0.21	0.00	0.00	0.00	0.34	0.52	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	13.2	11.1	0.0	0.0	0.0	9.2	10.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	13.2	11.1	0.0	0.0	0.0	9.2	10.8	0.0
HCM2k95th:	0	0	0	0	9	3	0	0	0	6	10	0

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 7th St/I St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.516
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	12.1
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	23	23	0	0	0	27	27	0
Lanes:	0 0 0 0 0			0 0 2 0 2			0 0 0 0 0			1 1 2 0 0		
Volume Module:												
Base Vol:	0	0	0	0	619	225	0	0	0	253	1176	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	619	225	0	0	0	253	1176	0
Added Vol:	0	0	0	0	161	0	0	0	0	90	144	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	780	225	0	0	0	343	1320	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	780	225	0	0	0	343	1320	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	780	225	0	0	0	343	1320	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	780	225	0	0	0	343	1320	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.86	0.67	1.00	1.00	1.00	0.82	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	3249	2558	0	0	0	1556	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.24	0.09	0.00	0.00	0.00	0.22	0.28	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.41	0.41	0.00	0.00	0.00	0.48	0.48	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.58	0.21	0.00	0.00	0.00	0.46	0.59	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	14.7	11.1	0.0	0.0	0.0	10.0	11.4	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	14.7	11.1	0.0	0.0	0.0	10.0	11.4	0.0
HCM2k95th:	0	0	0	0	11	3	0	0	0	8	11	0

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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #15 7th St/J St
********************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.659
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       18.8
Optimal Cycle:      106              Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0   35   35     0    0   65    65    0    0     0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  2  1  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  174  540     0    0 2144   322    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  174  540     0    0 2144   322    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  174  540     0    0 2144   322    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  174  540     0    0 2144   322    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  174  540     0    0 2144   322    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.82 0.82  1.00 1.00 0.80  0.80 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.73 2.27  0.00 0.00 3.00  1.00 0.00 0.00  0.00
Final Sat.:     0    0     0 1138 3531     0    0 4575  1525    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.15 0.15  0.00 0.00 0.47  0.21 0.00 0.00  0.00
Crit Moves:                  ****                 ****
Green/Cycle: 0.00 0.00  0.00 0.33 0.33  0.00 0.00 0.61  0.61 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.46 0.46  0.00 0.00 0.76  0.34 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 29.1 29.1   0.0  0.0 16.7  10.2  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 29.1 29.1   0.0  0.0 16.7  10.2  0.0  0.0   0.0
HCM2k95th:      0    0     0   12   12     0    0   30    10    0    0     0
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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #15 7th St/J St
********************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.781
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       22.4
Optimal Cycle:      106              Level Of Service:                 C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0   35   35     0    0   65    65    0    0     0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  2  1  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  174  540     0    0 2144   322    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  174  540     0    0 2144   322    0    0     0
Added Vol:      0    0     0   82  169     0    0  287     1    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0  256  709     0    0 2431   323    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  256  709     0    0 2431   323    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  256  709     0    0 2431   323    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  256  709     0    0 2431   323    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.82 0.82  1.00 1.00 0.80  0.80 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.80 2.20  0.00 0.00 3.00  1.00 0.00 0.00  0.00
Final Sat.:     0    0     0 1238 3430     0    0 4584  1528    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.21 0.21  0.00 0.00 0.53  0.21 0.00 0.00  0.00
Crit Moves:                  ****                 ****
Green/Cycle: 0.00 0.00  0.00 0.33 0.33  0.00 0.00 0.61  0.61 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.63 0.63  0.00 0.00 0.86  0.34 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 31.9 31.9   0.0  0.0 20.3  10.2  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 31.9 31.9   0.0  0.0 20.3  10.2  0.0  0.0   0.0
HCM2k95th:      0    0     0   16   16     0    0   39    10    0    0     0
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------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               AM Peak Hour
------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #16 7th St/L St
******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.464
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       12.1
Optimal Cycle:        56              Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0    0   29   29    0    0    0   21   21    0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0    0  451  378    0    0    0  262  863    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0    0    0    0  451  378    0    0    0  262  863    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0    0    0    0  451  378    0    0    0  262  863    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0    0    0    0  451  378    0    0    0  262  863    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0    0    0    0  451  378    0    0    0  262  863    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 1.00 0.76 0.76 1.00 1.00 1.00 0.90 0.82 1.00
Lanes:       0.00 0.00 0.00 0.00 2.00 1.00 0.00 0.00 0.00 1.00 3.00 0.00
Final Sat.:     0    0    0    0 2901 1450    0    0    0 1710 4668    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.00 0.16 0.26 0.00 0.00 0.00 0.15 0.18 0.00
Crit Moves:                           ****                 ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.52 0.52 0.00 0.00 0.00 0.38 0.38 0.00
Volume/Cap:  0.00 0.00 0.00 0.00 0.30 0.50 0.00 0.00 0.00 0.41 0.49 0.00
Delay/Veh:    0.0  0.0  0.0  0.0  8.0  9.9  0.0  0.0  0.0 14.8 14.4  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  0.0  8.0  9.9  0.0  0.0  0.0 14.8 14.4  0.0
HCM2k95th:      0    0    0    0    5   10    0    0    0    8    9    0
******************************************************************************
```



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------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               AM Peak Hour
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #16 7th St/L St
******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.618
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       13.5
Optimal Cycle:        56              Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0    0   29   29    0    0    0   21   21    0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0    0  451  378    0    0    0  262  863    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0    0    0    0  451  378    0    0    0  262  863    0
Added Vol:      0    0    0    0   30  145    0    0    0   58  145    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:    0    0    0    0  481  523    0    0    0  320 1008    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0    0    0    0  481  523    0    0    0  320 1008    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0    0    0    0  481  523    0    0    0  320 1008    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0    0    0    0  481  523    0    0    0  320 1008    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 1.00 0.76 0.76 1.00 1.00 1.00 0.90 0.82 1.00
Lanes:       0.00 0.00 0.00 0.00 2.00 1.00 0.00 0.00 0.00 1.00 3.00 0.00
Final Sat.:     0    0    0    0 2869 1435    0    0    0 1710 4668    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.00 0.17 0.36 0.00 0.00 0.00 0.19 0.22 0.00
Crit Moves:                           ****                 ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.52 0.52 0.00 0.00 0.00 0.38 0.38 0.00
Volume/Cap:  0.00 0.00 0.00 0.00 0.32 0.70 0.00 0.00 0.00 0.50 0.58 0.00
Delay/Veh:    0.0  0.0  0.0  0.0  8.1 13.2  0.0  0.0  0.0 16.2 15.3  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  0.0  8.1 13.2  0.0  0.0  0.0 16.2 15.3  0.0
HCM2k95th:      0    0    0    0    6   15    0    0    0   10   11    0
******************************************************************************
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--------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #17 8th St/I St
********************************************************************************
Cycle (sec):          50             Critical Vol./Cap. (X):        0.390
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      11.2
Optimal Cycle:        56             Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    25   25    0    0    0    0    0    0    0    0   25   25
Lanes:        1  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     153  527    0    0    0    0    0    0    0    0 1146  175
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  153  527    0    0    0    0    0    0    0    0 1146  175
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   153  527    0    0    0    0    0    0    0    0 1146  175
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  153  527    0    0    0    0    0    0    0    0 1146  175
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   153  527    0    0    0    0    0    0    0    0 1146  175
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.91 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.89 0.89
Lanes:       1.00 3.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.60 0.40
Final Sat.:  1729 5187    0    0    0    0    0    0    0    0 4410  673
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.09 0.10 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.26 0.26
Crit Moves:  ****                                                ****
Green/Cycle: 0.45 0.45 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.45
Volume/Cap:  0.20 0.23 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.58 0.58
Delay/Veh:    9.4  9.6  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 12.0 12.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   9.4  9.6  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 12.0 12.0
HCM2k95th:      3    4    0    0    0    0    0    0    0    0   11   11
********************************************************************************
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--------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #17 8th St/I St
********************************************************************************
Cycle (sec):          50             Critical Vol./Cap. (X):        0.454
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      11.7
Optimal Cycle:        56             Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    25   25    0    0    0    0    0    0    0    0   25   25
Lanes:        1  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     153  527    0    0    0    0    0    0    0    0 1146  175
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  153  527    0    0    0    0    0    0    0    0 1146  175
Added Vol:    103   32    0    0    0    0    0    0    0    0  131   13
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:  256  559    0    0    0    0    0    0    0    0 1277  188
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   256  559    0    0    0    0    0    0    0    0 1277  188
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  256  559    0    0    0    0    0    0    0    0 1277  188
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   256  559    0    0    0    0    0    0    0    0 1277  188
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.91 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.89 0.89
Lanes:       1.26 2.74 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.62 0.38
Final Sat.:  2172 4744    0    0    0    0    0    0    0    0 4435  653
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.12 0.12 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.29 0.29
Crit Moves:  ****                                                ****
Green/Cycle: 0.45 0.45 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.45 0.45
Volume/Cap:  0.26 0.26 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.64 0.64
Delay/Veh:    9.8  9.8  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 12.7 12.7
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   9.8  9.8  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 12.7 12.7
HCM2k95th:      5    5    0    0    0    0    0    0    0    0   12   12
********************************************************************************
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Downtown Sacramento Traffic Study
2030 Cumulative Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #18 8th S/tJ St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.377
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	19.1
Optimal Cycle:	106	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	35	35	0	0	0	65	65	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	567	270	0	0	0	261	2051	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	567	270	0	0	0	261	2051	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	567	270	0	0	0	261	2051	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	567	270	0	0	0	261	2051	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	567	270	0	0	0	261	2051	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.78	0.78	1.00	1.00	1.00	0.82	0.82	1.00	1.00	1.00	1.00
Lanes:	0.00	2.03	0.97	0.00	0.00	0.00	1.00	3.00	0.00	0.00	0.00	0.00
Final Sat.:	0	3011	1434	0	0	0	1556	4668	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.19	0.00	0.00	0.00	0.17	0.44	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.33	0.33	0.00	0.00	0.00	0.61	0.61	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.57	0.57	0.00	0.00	0.00	0.27	0.72	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	30.9	30.9	0.0	0.0	0.0	9.6	15.5	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	30.9	30.9	0.0	0.0	0.0	9.6	15.5	0.0	0.0	0.0	0.0
HCM2k95th:	0	14	14	0	0	0	8	26	0	0	0	0

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 8th S/tJ St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.440
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	21.6
Optimal Cycle:	106	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	35	35	0	0	0	65	65	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	567	270	0	0	0	261	2051	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	567	270	0	0	0	261	2051	0	0	0	0
Added Vol:	0	77	43	0	0	0	49	320	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	644	313	0	0	0	310	2371	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	644	313	0	0	0	310	2371	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	644	313	0	0	0	310	2371	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	644	313	0	0	0	310	2371	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.78	0.78	1.00	1.00	1.00	0.82	0.82	1.00	1.00	1.00	1.00
Lanes:	0.00	2.02	0.98	0.00	0.00	0.00	1.00	3.00	0.00	0.00	0.00	0.00
Final Sat.:	0	2988	1452	0	0	0	1556	4668	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.00	0.00	0.00	0.20	0.51	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.33	0.33	0.00	0.00	0.00	0.61	0.61	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.65	0.65	0.00	0.00	0.00	0.32	0.83	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	32.6	32.6	0.0	0.0	0.0	10.0	18.7	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	32.6	32.6	0.0	0.0	0.0	10.0	18.7	0.0	0.0	0.0	0.0
HCM2k95th:	0	17	17	0	0	0	9	33	0	0	0	0

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----------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                      2030 Cumulative Conditions
                             AM Peak Hour
----------------------------------------------------------------------------
                  Level Of Service Computation Report
         2000 HCM Operations Method (Base Volume Alternative)
****************************************************************************
Intersection #19 8th St/L St
****************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.368
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      12.2
Optimal Cycle:        56              Level Of Service:                  B
****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:   29   29    0    0    0    0    0    0    0    0   21   21
Lanes:       1  0  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     222  425    0    0    0    0    0    0    0    0  850  335
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  222  425    0    0    0    0    0    0    0    0  850  335
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   222  425    0    0    0    0    0    0    0    0  850  335
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  222  425    0    0    0    0    0    0    0    0  850  335
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   222  425    0    0    0    0    0    0    0    0  850  335
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.90 0.86 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.78 0.78
Lanes:       1.00 2.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.87 1.13
Final Sat.:  1710 3249    0    0    0    0    0    0    0    0 4277 1686
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.13 0.13 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.20 0.20
Crit Moves:  ****                                                ****
Green/Cycle: 0.52 0.52 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.38 0.38
Volume/Cap:  0.25 0.25 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.53 0.53
Delay/Veh:    8.2  7.8  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 14.6 14.6
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   8.2  7.8  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 14.6 14.6
HCM2k95th:      5    5    0    0    0    0    0    0    0    0    9    9
****************************************************************************
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----------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                      2030 Cumulative Conditions
                             AM Peak Hour
----------------------------------------------------------------------------
                  Level Of Service Computation Report
        2000 HCM Operations Method (Future Volume Alternative)
****************************************************************************
Intersection #19 8th St/L St
****************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.540
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      15.9
Optimal Cycle:        56              Level Of Service:                  B
****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:   29   29    0    0    0    0    0    0    0    0   21   21
Lanes:       1  0  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     222  425    0    0    0    0    0    0    0    0  850  335
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  222  425    0    0    0    0    0    0    0    0  850  335
Added Vol:     80   68    0    0    0    0    0    0    0    0  374  249
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:  302  493    0    0    0    0    0    0    0    0 1224  584
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   302  493    0    0    0    0    0    0    0    0 1224  584
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  302  493    0    0    0    0    0    0    0    0 1224  584
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:   302  493    0    0    0    0    0    0    0    0 1224  584
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.90 0.86 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.78 0.78
Lanes:       1.00 2.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.71 1.29
Final Sat.:  1710 3249    0    0    0    0    0    0    0    0 4012 1914
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.18 0.15 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.31 0.31
Crit Moves:  ****                                                ****
Green/Cycle: 0.52 0.52 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.38 0.38
Volume/Cap:  0.34 0.29 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.81 0.81
Delay/Veh:    9.0  8.1  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 19.1 19.1
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   9.0  8.1  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 19.1 19.1
HCM2k95th:      7    6    0    0    0    0    0    0    0    0   17   17
****************************************************************************
```

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #20 9th St/I St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.383
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 14.5
Optimal Cycle: 62 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	22	22	0	0	0	28	28	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			1 0 3 0 0		
Volume Module:												
Base Vol:	0	0	0	0	523	234	0	0	0	238	1205	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	523	234	0	0	0	238	1205	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	523	234	0	0	0	238	1205	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	523	234	0	0	0	238	1205	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	523	234	0	0	0	238	1205	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.78	0.78	1.00	1.00	1.00	0.90	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.07	0.93	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	3077	1377	0	0	0	1710	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.14	0.26	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.35	0.35	0.00	0.00	0.00	0.45	0.45	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.48	0.48	0.00	0.00	0.00	0.31	0.57	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	16.6	16.6	0.0	0.0	0.0	11.9	13.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	16.6	16.6	0.0	0.0	0.0	11.9	13.7	0.0
HCM2k95th:	0	0	0	0	9	9	0	0	0	6	11	0

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #20 9th St/I St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.430
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 15.0
Optimal Cycle: 62 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	22	22	0	0	0	28	28	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			1 0 3 0 0		
Volume Module:												
Base Vol:	0	0	0	0	523	234	0	0	0	238	1205	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	523	234	0	0	0	238	1205	0
Added Vol:	0	0	0	0	5	0	0	0	0	63	144	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	528	234	0	0	0	301	1349	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	528	234	0	0	0	301	1349	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	528	234	0	0	0	301	1349	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	528	234	0	0	0	301	1349	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.78	0.78	1.00	1.00	1.00	0.90	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.08	0.92	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	3086	1368	0	0	0	1710	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.18	0.29	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.35	0.35	0.00	0.00	0.00	0.45	0.45	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.48	0.48	0.00	0.00	0.00	0.39	0.64	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	16.6	16.6	0.0	0.0	0.0	12.8	14.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	16.6	16.6	0.0	0.0	0.0	12.8	14.6	0.0
HCM2k95th:	0	0	0	0	9	9	0	0	0	8	12	0

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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                AM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #21 9th St/J St
*******************************************************************************
Cycle (sec):        100               Critical Vol./Cap. (X):        0.599
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       21.0
Optimal Cycle:      106               Level Of Service:                 C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0    0   40   40    0    0   60   60    0    0    0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0    0   81  511    0    0 1659  337    0    0    0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   0    0    0   81  511    0    0 1659  337    0    0    0
User Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    0    0    0   81  511    0    0 1659  337    0    0    0
Reduct Vol:    0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   0    0    0   81  511    0    0 1659  337    0    0    0
PCE Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    0    0    0   81  511    0    0 1659  337    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 0.82 0.82 1.00 1.00 0.80 0.80 1.00 1.00 1.00
Lanes:      0.00 0.00 0.00 0.41 2.59 0.00 0.00 2.49 0.51 0.00 0.00 0.00
Final Sat.:    0    0    0  639 4030    0    0 3783  768    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.00 0.00 0.00 0.13 0.13 0.00 0.00 0.44 0.44 0.00 0.00 0.00
Crit Moves:                ****                ****
Green/Cycle: 0.00 0.00 0.00 0.38 0.38 0.00 0.00 0.57 0.57 0.00 0.00 0.00
Volume/Cap: 0.00 0.00 0.00 0.34 0.34 0.00 0.00 0.77 0.77 0.00 0.00 0.00
Delay/Veh:   0.0  0.0  0.0 24.0 24.0  0.0  0.0 20.1 20.1  0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  0.0  0.0  0.0 24.0 24.0  0.0  0.0 20.1 20.1  0.0  0.0  0.0
HCM2k95th:     0    0    0    9    9    0    0   28   28    0    0    0
*******************************************************************************
```



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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                AM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #21 9th St/J St
*******************************************************************************
Cycle (sec):        100               Critical Vol./Cap. (X):        0.705
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       27.4
Optimal Cycle:      106               Level Of Service:                 C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0    0    0   40   40    0    0   60   60    0    0    0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0    0   81  511    0    0 1659  337    0    0    0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   0    0    0   81  511    0    0 1659  337    0    0    0
Added Vol:     0    0    0    0   68    0    0  131  231    0    0    0
PasserByVol:   0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:   0    0    0   81  579    0    0 1790  568    0    0    0
User Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    0    0    0   81  579    0    0 1790  568    0    0    0
Reduct Vol:    0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   0    0    0   81  579    0    0 1790  568    0    0    0
PCE Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    0    0    0   81  579    0    0 1790  568    0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 0.82 0.82 1.00 1.00 0.79 0.79 1.00 1.00 1.00
Lanes:      0.00 0.00 0.00 0.37 2.63 0.00 0.00 2.28 0.72 0.00 0.00 0.00
Final Sat.:    0    0    0  573 4095    0    0 3416 1084    0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.00 0.00 0.00 0.14 0.14 0.00 0.00 0.52 0.52 0.00 0.00 0.00
Crit Moves:                ****                ****
Green/Cycle: 0.00 0.00 0.00 0.38 0.38 0.00 0.00 0.57 0.57 0.00 0.00 0.00
Volume/Cap: 0.00 0.00 0.00 0.37 0.37 0.00 0.00 0.93 0.93 0.00 0.00 0.00
Delay/Veh:   0.0  0.0  0.0 24.5 24.5  0.0  0.0 28.2 28.2  0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  0.0  0.0  0.0 24.5 24.5  0.0  0.0 28.2 28.2  0.0  0.0  0.0
HCM2k95th:     0    0    0   10   10    0    0   41   41    0    0    0
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--------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                          2030 Cumulative Conditions
                                 AM Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
              2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #22 9th St/L St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.316
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       10.4
Optimal Cycle:        56              Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected         Protected
Rights:           Include          Include          Include           Include
Min. Green:     0    0     0     0   21    21     0    0     0    29   29     0
Lanes:        0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     0  406   156     0    0     0   267 1239     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0  406   156     0    0     0   267 1239     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     0  406   156     0    0     0   267 1239     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0     0  406   156     0    0     0   267 1239     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0     0     0  406   156     0    0     0   267 1239     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  1.00 0.78  0.78  1.00 1.00  1.00  0.90 0.82  1.00
Lanes:       0.00 0.00  0.00  0.00 2.17  0.83  0.00 0.00  0.00  1.00 3.00  0.00
Final Sat.:     0    0     0     0 3231  1241     0    0     0  1710 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.00 0.13  0.13  0.00 0.00  0.00  0.16 0.27  0.00
Crit Moves:                        ****                         ****
Green/Cycle: 0.00 0.00  0.00  0.00 0.38  0.38  0.00 0.00  0.00  0.52 0.52  0.00
Volume/Cap:  0.00 0.00  0.00  0.00 0.34  0.34  0.00 0.00  0.00  0.30 0.51  0.00
Delay/Veh:    0.0  0.0   0.0   0.0 13.0  13.0   0.0  0.0   0.0   8.6  9.6   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   0.0 13.0  13.0   0.0  0.0   0.0   8.6  9.6   0.0
HCM2k95th:      0    0     0     0    6     6     0    0     0     6    9     0
********************************************************************************
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--------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                          2030 Cumulative Conditions
                                 AM Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #22 9th St/L St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.469
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       13.3
Optimal Cycle:        56              Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected         Protected
Rights:           Include          Include          Include           Include
Min. Green:     0    0     0     0   21    21     0    0     0    29   29     0
Lanes:        0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     0  406   156     0    0     0   267 1239     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0  406   156     0    0     0   267 1239     0
Added Vol:      0    0     0     0   48   222     0    0     0     4  577     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     0  454   378     0    0     0   271 1816     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     0  454   378     0    0     0   271 1816     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0     0  454   378     0    0     0   271 1816     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0     0     0  454   378     0    0     0   271 1816     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  1.00 0.76  0.76  1.00 1.00  1.00  0.90 0.82  1.00
Lanes:       0.00 0.00  0.00  0.00 2.00  1.00  0.00 0.00  0.00  1.00 3.00  0.00
Final Sat.:     0    0     0     0 2901  1450     0    0     0  1710 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.00 0.16  0.26  0.00 0.00  0.00  0.16 0.39  0.00
Crit Moves:                              ****                   ****
Green/Cycle: 0.00 0.00  0.00  0.00 0.38  0.38  0.00 0.00  0.00  0.52 0.52  0.00
Volume/Cap:  0.00 0.00  0.00  0.00 0.42  0.70  0.00 0.00  0.00  0.31 0.75  0.00
Delay/Veh:    0.0  0.0   0.0   0.0 13.6  18.1   0.0  0.0   0.0   8.6 12.9   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   0.0 13.6  18.1   0.0  0.0   0.0   8.6 12.9   0.0
HCM2k95th:      0    0     0     0    7    13     0    0     0     6   15     0
********************************************************************************
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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                AM Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #23 9th St/P St
********************************************************************************
Cycle (sec):           50               Critical Vol./Cap. (X):        0.407
Loss Time (sec):        6 (Y+R =  4 sec) Average Delay (sec/veh):         9.7
Optimal Cycle:         26               Level Of Service:                  A
********************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0     0   10     0     0    0     0     0   10     0
Lanes:        0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     0  720   199     0    0     0   153  753     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0  720   199     0    0     0   153  753     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     0  720   199     0    0     0   153  753     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0     0  720   199     0    0     0   153  753     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0     0     0  720   199     0    0     0   153  753     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  1.00 0.88  0.88  1.00 1.00  1.00  0.91 0.91  1.00
Lanes:       0.00 0.00  0.00  0.00 2.35  0.65  0.00 0.00  0.00  0.51 2.49  0.00
Final Sat.:     0    0     0     0 3930  1086     0    0     0   876 4311     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.00 0.18  0.18  0.00 0.00  0.00  0.17 0.17  0.00
Crit Moves:                        ****                               ****
Green/Cycle: 0.00 0.00  0.00  0.00 0.45  0.45  0.00 0.00  0.00  0.43 0.43  0.00
Volume/Cap:  0.00 0.00  0.00  0.00 0.41  0.41  0.00 0.00  0.00  0.41 0.41  0.00
Delay/Veh:    0.0  0.0   0.0   0.0  9.4   9.4   0.0  0.0   0.0  10.0 10.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   0.0  9.4   9.4   0.0  0.0   0.0  10.0 10.0   0.0
HCM2k95th:      0    0     0     0    7     7     0    0     0     6    6     0
********************************************************************************
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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                AM Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #23 9th St/P St
********************************************************************************
Cycle (sec):           50               Critical Vol./Cap. (X):        0.446
Loss Time (sec):        6 (Y+R =  4 sec) Average Delay (sec/veh):         9.9
Optimal Cycle:         26               Level Of Service:                  A
********************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0     0   10     0     0    0     0     0   10     0
Lanes:        0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     0  720   199     0    0     0   153  753     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0  720   199     0    0     0   153  753     0
Added Vol:      0    0     0     0   74     2     0    0     0     0  103     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     0  794   201     0    0     0   153  856     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     0  794   201     0    0     0   153  856     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0     0  794   201     0    0     0   153  856     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0     0     0  794   201     0    0     0   153  856     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  1.00 0.88  0.88  1.00 1.00  1.00  0.91 0.91  1.00
Lanes:       0.00 0.00  0.00  0.00 2.39  0.61  0.00 0.00  0.00  0.45 2.55  0.00
Final Sat.:     0    0     0     0 4015  1016     0    0     0   787 4400     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.00 0.20  0.20  0.00 0.00  0.00  0.19 0.19  0.00
Crit Moves:                        ****                               ****
Green/Cycle: 0.00 0.00  0.00  0.00 0.44  0.44  0.00 0.00  0.00  0.44 0.44  0.00
Volume/Cap:  0.00 0.00  0.00  0.00 0.45  0.45  0.00 0.00  0.00  0.45 0.45  0.00
Delay/Veh:    0.0  0.0   0.0   0.0  9.8   9.8   0.0  0.0   0.0  10.0 10.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   0.0  9.8   9.8   0.0  0.0   0.0  10.0 10.0   0.0
HCM2k95th:      0    0     0     0    8     8     0    0     0     7    7     0
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-------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               AM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #24 9th St/Q St
*******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.527
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       12.1
Optimal Cycle:       56              Level Of Service:                 B
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0   25   25     0    0   25    25    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  3  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  194  685     0    0 1528   479    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  194  685     0    0 1528   479    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  194  685     0    0 1528   479    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  194  685     0    0 1528   479    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  194  685     0    0 1528   479    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.88  0.88 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.66 2.34  0.00 0.00 3.05  0.95 0.00 0.00  0.00
Final Sat.:     0    0     0 1145 4042     0    0 5076  1591    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.17 0.17  0.00 0.00 0.30  0.30 0.00 0.00  0.00
Crit Moves:                  ****                 ****
Green/Cycle: 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.38 0.38  0.00 0.00 0.67  0.67 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 10.4 10.4   0.0  0.0 12.9  12.9  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 10.4 10.4   0.0  0.0 12.9  12.9  0.0  0.0   0.0
HCM2k95th:      0    0     0    7    7     0    0   15    15    0    0     0
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-------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               AM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #24 9th St/Q St
*******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.543
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       12.2
Optimal Cycle:       56              Level Of Service:                 B
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0   25   25     0    0   25    25    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  3  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  194  685     0    0 1528   479    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  194  685     0    0 1528   479    0    0     0
Added Vol:      0    0     0    9   65     0    0    2     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0  203  750     0    0 1530   479    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  203  750     0    0 1530   479    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  203  750     0    0 1530   479    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  203  750     0    0 1530   479    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.88  0.88 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.64 2.36  0.00 0.00 3.05  0.95 0.00 0.00  0.00
Final Sat.:     0    0     0 1105 4082     0    0 5077  1590    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.18 0.18  0.00 0.00 0.30  0.30 0.00 0.00  0.00
Crit Moves:                  ****                 ****
Green/Cycle: 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.41 0.41  0.00 0.00 0.67  0.67 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 10.6 10.6   0.0  0.0 12.9  12.9  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 10.6 10.6   0.0  0.0 12.9  12.9  0.0  0.0   0.0
HCM2k95th:      0    0     0    7    7     0    0   15    15    0    0     0
*******************************************************************************
```

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 10th St/I St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.566
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 16.2
Optimal Cycle: 62 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	26	26	0	0	0	0	0	0	0	0	24	24
Lanes:	0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	262	630	0	0	0	0	0	0	0	0	1012	196
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	262	630	0	0	0	0	0	0	0	0	1012	196
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	262	630	0	0	0	0	0	0	0	0	1012	196
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	262	630	0	0	0	0	0	0	0	0	1012	196
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	262	630	0	0	0	0	0	0	0	0	1012	196
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.80
Lanes:	0.88	2.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.51	0.49
Final Sat.:	1371	3297	0	0	0	0	0	0	0	0	3817	739
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.27
Crit Moves:	****										****	
Green/Cycle:	0.42	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.39
Volume/Cap:	0.46	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.68
Delay/Veh:	13.7	13.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0	18.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.7	13.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0	18.0
HCM2k95th:	9	9	0	0	0	0	0	0	0	0	14	14

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #25 10th St/I St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.626
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 17.4
Optimal Cycle: 62 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	26	26	0	0	0	0	0	0	0	0	24	24
Lanes:	0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	262	630	0	0	0	0	0	0	0	0	1012	196
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	262	630	0	0	0	0	0	0	0	0	1012	196
Added Vol:	62	10	0	0	0	0	0	0	0	0	146	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	324	640	0	0	0	0	0	0	0	0	1158	196
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	324	640	0	0	0	0	0	0	0	0	1158	196
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	324	640	0	0	0	0	0	0	0	0	1158	196
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	324	640	0	0	0	0	0	0	0	0	1158	196
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.80
Lanes:	1.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.57	0.43
Final Sat.:	1556	3112	0	0	0	0	0	0	0	0	3905	661
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.30
Crit Moves:	****										****	
Green/Cycle:	0.42	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.39
Volume/Cap:	0.50	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.77
Delay/Veh:	14.1	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.8	19.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.1	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.8	19.8
HCM2k95th:	10	10	0	0	0	0	0	0	0	0	17	17

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--------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
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--------------------------------------------------------------------------------
                         Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #26 10th St/J St
********************************************************************************
Cycle (sec):        100               Critical Vol./Cap. (X):        0.629
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):        24.2
Optimal Cycle:      112               Level Of Service:                 C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   40    40    0    0     0   60   60     0    0    0     0
Lanes:       0  0  2  1  1    0  0  0  0  0    0  1  2  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0  801   294    0    0     0  382 1386     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0  801   294    0    0     0  382 1386     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0  801   294    0    0     0  382 1386     0    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0  801   294    0    0     0  382 1386     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0  801   294    0    0     0  382 1386     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.79  0.79 1.00 1.00  1.00 0.82 0.82  1.00 1.00 1.00  1.00
Lanes:       0.00 2.93  1.07 0.00 0.00  0.00 0.65 2.35  0.00 0.00 0.00  0.00
Final Sat.:    0 4371  1604    0    0     0 1009 3660     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.18  0.18 0.00 0.00  0.00 0.38 0.38  0.00 0.00 0.00  0.00
Crit Moves:       ****                        ****
Green/Cycle: 0.00 0.36  0.36 0.00 0.00  0.00 0.54 0.54  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.51  0.51 0.00 0.00  0.00 0.71 0.71  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 29.2  29.2  0.0  0.0   0.0 21.1 21.1   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 29.2  29.2  0.0  0.0   0.0 21.1 21.1   0.0  0.0  0.0   0.0
HCM2k95th:     0   14    14    0    0     0   25   25     0    0    0     0
********************************************************************************
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--------------------------------------------------------------------------------
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--------------------------------------------------------------------------------
                         Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #26 10th St/J St
********************************************************************************
Cycle (sec):        100               Critical Vol./Cap. (X):        0.659
Loss Time (sec):     12 (Y+R =  4 sec) Average Delay (sec/veh):        25.0
Optimal Cycle:      112               Level Of Service:                 C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   40    40    0    0     0   60   60     0    0    0     0
Lanes:       0  0  2  1  1    0  0  0  0  0    0  1  2  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0  801   294    0    0     0  382 1386     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0  801   294    0    0     0  382 1386     0    0    0     0
Added Vol:     0  -11     0    0    0     0   -3  135     0    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   0  790   294    0    0     0  379 1521     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0  790   294    0    0     0  379 1521     0    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0  790   294    0    0     0  379 1521     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0  790   294    0    0     0  379 1521     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.79  0.79 1.00 1.00  1.00 0.82 0.82  1.00 1.00 1.00  1.00
Lanes:       0.00 2.92  1.08 0.00 0.00  0.00 0.60 2.40  0.00 0.00 0.00  0.00
Final Sat.:    0 4350  1619    0    0     0  931 3737     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.18  0.18 0.00 0.00  0.00 0.41 0.41  0.00 0.00 0.00  0.00
Crit Moves:       ****                        ****
Green/Cycle: 0.00 0.36  0.36 0.00 0.00  0.00 0.54 0.54  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.51  0.51 0.00 0.00  0.00 0.76 0.76  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 29.1  29.1  0.0  0.0   0.0 22.6 22.6   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 29.1  29.1  0.0  0.0   0.0 22.6 22.6   0.0  0.0  0.0   0.0
HCM2k95th:     0   14    14    0    0     0   27   27     0    0    0     0
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-------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
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-------------------------------------------------------------------------------
                    Level Of Service Computation Report
         2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #27 10th St/L St
********************************************************************************
Cycle (sec):           50              Critical Vol./Cap. (X):        0.717
Loss Time (sec):        6 (Y+R =  4 sec) Average Delay (sec/veh):       15.3
Optimal Cycle:         56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    21   21     0     0    0     0     0    0     0     0   29    29
Lanes:        0  1  2  0  0    0  0  0  0  0    0  0  0  0  0    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     298 1114     0     0    0     0     0    0     0     0 1236   296
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  298 1114     0     0    0     0     0    0     0     0 1236   296
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   298 1114     0     0    0     0     0    0     0     0 1236   296
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  298 1114     0     0    0     0     0    0     0     0 1236   296
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   298 1114     0     0    0     0     0    0     0     0 1236   296
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.82 0.82  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 0.80  0.80
Lanes:       0.63 2.37  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 2.42  0.58
Final Sat.:   985 3683     0     0    0     0     0    0     0     0 3657   876
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.30 0.30  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.34  0.34
Crit Moves:  ****                                                   ****
Green/Cycle: 0.38 0.38  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.52  0.52
Volume/Cap:  0.81 0.81  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.65  0.65
Delay/Veh:   19.8 19.8   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 11.3  11.3
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  19.8 19.8   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 11.3  11.3
HCM2k95th:     17   17     0     0    0     0     0    0     0     0   14    14
********************************************************************************
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-------------------------------------------------------------------------------
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                    Level Of Service Computation Report
         2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #27 10th St/L St
********************************************************************************
Cycle (sec):           50              Critical Vol./Cap. (X):        0.856
Loss Time (sec):        6 (Y+R =  4 sec) Average Delay (sec/veh):       19.1
Optimal Cycle:         61              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    21   21     0     0    0     0     0    0     0     0   29    29
Lanes:        0  1  2  0  0    0  0  0  0  0    0  0  0  0  0    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     298 1114     0     0    0     0     0    0     0     0 1236   296
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  298 1114     0     0    0     0     0    0     0     0 1236   296
Added Vol:    166    1     0     0    0     0     0    0     0     0  414    -2
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  464 1115     0     0    0     0     0    0     0     0 1650   294
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   464 1115     0     0    0     0     0    0     0     0 1650   294
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  464 1115     0     0    0     0     0    0     0     0 1650   294
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   464 1115     0     0    0     0     0    0     0     0 1650   294
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.82 0.82  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 0.80  0.80
Lanes:       0.88 2.12  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 2.55  0.45
Final Sat.:  1372 3296     0     0    0     0     0    0     0     0 3871   690
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.34 0.34  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.43  0.43
Crit Moves:  ****                                                   ****
Green/Cycle: 0.38 0.38  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.52  0.52
Volume/Cap:  0.90 0.90  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.82  0.82
Delay/Veh:   24.5 24.5   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 14.7  14.7
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  24.5 24.5   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 14.7  14.7
HCM2k95th:     22   22     0     0    0     0     0    0     0     0   21    21
********************************************************************************
```

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2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 10th St/P St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.590
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.9
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	0	0	0	0	0	0	25	25
Lanes:	0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	168	1545	0	0	0	0	0	0	0	0	737	246
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	168	1545	0	0	0	0	0	0	0	0	737	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	168	1545	0	0	0	0	0	0	0	0	737	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	168	1545	0	0	0	0	0	0	0	0	737	246
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	168	1545	0	0	0	0	0	0	0	0	737	246
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.88	0.88
Lanes:	0.29	2.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.75
Final Sat.:	509	4678	0	0	0	0	0	0	0	0	3745	1250
Capacity Analysis Module:												
Vol/Sat:	0.33	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20
Crit Moves:	****										****	
Green/Cycle:	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Volume/Cap:	0.74	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.44
Delay/Veh:	14.1	14.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8	10.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.1	14.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8	10.8
HCM2k95th:	16	16	0	0	0	0	0	0	0	0	8	8

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2000 HCM Operations Method (Future Volume Alternative)

Intersection #28 10th St/P St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.643
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 14.6
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	0	0	0	0	0	0	25	25
Lanes:	0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	168	1545	0	0	0	0	0	0	0	0	737	246
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	168	1545	0	0	0	0	0	0	0	0	737	246
Added Vol:	90	131	0	0	0	0	0	0	0	0	12	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	258	1676	0	0	0	0	0	0	0	0	749	255
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	258	1676	0	0	0	0	0	0	0	0	749	255
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	258	1676	0	0	0	0	0	0	0	0	749	255
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	258	1676	0	0	0	0	0	0	0	0	749	255
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.88	0.88
Lanes:	0.40	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.24	0.76
Final Sat.:	692	4495	0	0	0	0	0	0	0	0	3723	1267
Capacity Analysis Module:												
Vol/Sat:	0.37	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20
Crit Moves:	****										****	
Green/Cycle:	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Volume/Cap:	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Delay/Veh:	16.5	16.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.9	10.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.5	16.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.9	10.9
HCM2k95th:	19	19	0	0	0	0	0	0	0	0	8	8

```
----------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
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                               AM Peak Hour
----------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
****************************************************************************
Intersection #29 10th St/Q St
****************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.542
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      11.7
Optimal Cycle:        56              Level Of Service:                  B
****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   25    25    0    0     0   25   25     0    0    0     0
Lanes:        0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1103   178    0    0     0  401 1322     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0 1103   178    0    0     0  401 1322     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0 1103   178    0    0     0  401 1322     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0 1103   178    0    0     0  401 1322     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0 1103   178    0    0     0  401 1322     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.89  0.89 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.58  0.42 0.00 0.00  0.00 1.00 3.00  0.00 0.00 0.00  0.00
Final Sat.:     0 4372   706    0    0     0 1729 5187     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.25  0.25 0.00 0.00  0.00 0.23 0.25  0.00 0.00 0.00  0.00
Crit Moves:       ****                      ****
Green/Cycle: 0.00 0.45  0.45 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.57  0.57 0.00 0.00  0.00 0.52 0.57  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 11.8  11.8  0.0  0.0   0.0 11.3 11.8   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 11.8  11.8  0.0  0.0   0.0 11.3 11.8   0.0  0.0  0.0   0.0
HCM2k95th:      0   12    12    0    0     0    9   11     0    0    0     0
****************************************************************************
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----------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
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                               AM Peak Hour
----------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
****************************************************************************
Intersection #29 10th St/Q St
****************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.590
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      12.3
Optimal Cycle:        56              Level Of Service:                  B
****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   25    25    0    0     0   25   25     0    0    0     0
Lanes:        0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1103   178    0    0     0  401 1322     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0 1103   178    0    0     0  401 1322     0    0    0     0
Added Vol:      0  221     0    0    0     0    0   10     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0 1324   178    0    0     0  401 1332     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0 1324   178    0    0     0  401 1332     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0 1324   178    0    0     0  401 1332     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0 1324   178    0    0     0  401 1332     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.89  0.89 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.64  0.36 0.00 0.00  0.00 1.00 3.00  0.00 0.00 0.00  0.00
Final Sat.:     0 4490   604    0    0     0 1729 5187     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.29  0.29 0.00 0.00  0.00 0.23 0.26  0.00 0.00 0.00  0.00
Crit Moves:       ****                      ****
Green/Cycle: 0.00 0.45  0.45 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.66  0.66 0.00 0.00  0.00 0.52 0.58  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 12.9  12.9  0.0  0.0   0.0 11.3 11.8   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 12.9  12.9  0.0  0.0   0.0 11.3 11.8   0.0  0.0  0.0   0.0
HCM2k95th:      0   15    15    0    0     0    9   11     0    0    0     0
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #30 12th St/H St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.584
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	16.8
Optimal Cycle:	66	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	27	27	0	0	33	33	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	0	0	288	1415	0	0	914	119	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	288	1415	0	0	914	119	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	288	1415	0	0	914	119	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	288	1415	0	0	914	119	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	288	1415	0	0	914	119	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.89	0.89	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.51	2.49	0.00	0.00	2.65	0.35	0.00	0.00	0.00
Final Sat.:	0	0	0	877	4310	0	0	4511	587	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.33	0.33	0.00	0.00	0.20	0.20	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.41	0.41	0.00	0.00	0.50	0.50	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.80	0.80	0.00	0.00	0.41	0.41	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	20.5	20.5	0.0	0.0	10.8	10.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	20.5	20.5	0.0	0.0	10.8	10.8	0.0	0.0	0.0
HCM2k95th:	0	0	0	21	21	0	0	9	9	0	0	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #30 12th St/H St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.615
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	18.3
Optimal Cycle:	66	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	27	27	0	0	33	33	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	0	0	288	1415	0	0	914	119	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	288	1415	0	0	914	119	0	0	0
Added Vol:	0	0	0	0	123	0	0	12	9	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	288	1538	0	0	926	128	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	288	1538	0	0	926	128	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	288	1538	0	0	926	128	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	288	1538	0	0	926	128	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.89	0.89	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.47	2.53	0.00	0.00	2.64	0.36	0.00	0.00	0.00
Final Sat.:	0	0	0	818	4369	0	0	4475	619	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.35	0.35	0.00	0.00	0.21	0.21	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.41	0.41	0.00	0.00	0.50	0.50	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.86	0.86	0.00	0.00	0.41	0.41	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	22.6	22.6	0.0	0.0	10.9	10.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	22.6	22.6	0.0	0.0	10.9	10.9	0.0	0.0	0.0
HCM2k95th:	0	0	0	24	24	0	0	9	9	0	0	0

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2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 12th St/I St

Cycle (sec): 0 Critical Vol./Cap. (X): 0.624
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 8.3
Optimal Cycle: 29 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	7	7	0	0	0	3	7	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			0 1 2 0 0		
Volume Module:												
Base Vol:	0	0	0	0	859	464	0	0	0	64	1034	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	859	464	0	0	0	64	1034	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	859	464	0	0	0	64	1034	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	859	464	0	0	0	64	1034	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	859	464	0	0	0	64	1034	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.86	0.86	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	0.17	2.83	0.00
Final Sat.:	0	0	0	0	3275	1637	0	0	0	302	4885	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.26	0.28	0.00	0.00	0.00	0.21	0.21	0.00
Crit Moves:						****					****	
Green/Cycle:	0.00	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.34	0.34	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.58	0.62	0.00	0.00	0.00	0.62	0.62	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	6.9	7.4	0.0	0.0	0.0	9.7	9.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	6.9	7.4	0.0	0.0	0.0	9.7	9.7	0.0
HCM2k95th:	0	0	0	0	8	9	0	0	0	8	8	0

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2000 HCM Operations Method (Future Volume Alternative)

Intersection #31 12th St/I St

Cycle (sec): 0 Critical Vol./Cap. (X): 0.644
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 8.8
Optimal Cycle: 30 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	7	7	0	0	0	3	7	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			0 1 2 0 0		
Volume Module:												
Base Vol:	0	0	0	0	859	464	0	0	0	64	1034	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	859	464	0	0	0	64	1034	0
Added Vol:	0	0	0	0	116	-7	0	0	0	3	68	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	975	457	0	0	0	67	1102	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	975	457	0	0	0	67	1102	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	975	457	0	0	0	67	1102	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	975	457	0	0	0	67	1102	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.87	0.87	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	2.04	0.96	0.00	0.00	0.00	0.17	2.83	0.00
Final Sat.:	0	0	0	0	3362	1576	0	0	0	297	4890	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.29	0.29	0.00	0.00	0.00	0.23	0.23	0.00
Crit Moves:					****						****	
Green/Cycle:	0.00	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.35	0.35	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.64	0.64	0.00	0.00	0.00	0.64	0.64	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	7.8	7.8	0.0	0.0	0.0	10.0	10.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	7.8	7.8	0.0	0.0	0.0	10.0	10.0	0.0
HCM2k95th:	0	0	0	0	10	10	0	0	0	9	9	0

```
--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #32 12th St/J St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.632
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       18.8
Optimal Cycle:        56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Permitted        Permitted        Protected        Protected
Rights:         Include          Include          Include          Include
Min. Green:    0    0    31    31   31    31     0   19    19     0    0     0
Lanes:       0  0  0  0  1    1  0  2  0  0    0  0  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0   114   375  549     0     0 1424   149     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0    0   114   375  549     0     0 1424   149     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0    0   114   375  549     0     0 1424   149     0    0     0
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   0    0   114   375  549     0     0 1424   149     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0    0   114   375  549     0     0 1424   149     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  0.87  0.77 0.95  1.00  1.00 0.90  0.90  1.00 1.00  1.00
Lanes:       0.00 0.00  1.00  1.00 2.00  0.00  0.00 2.72  0.28  0.00 0.00  0.00
Final Sat.:    0    0  1644  1461 3610     0     0 4630   484     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.07  0.26 0.15  0.00  0.00 0.31  0.31  0.00 0.00  0.00
Crit Moves:                   ****                  ****
Green/Cycle: 0.00 0.00  0.55  0.55 0.55  0.00  0.00 0.34  0.34  0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.13  0.46 0.27  0.00  0.00 0.91  0.91  0.00 0.00  0.00
Delay/Veh:    0.0  0.0   6.3   9.4  6.9   0.0   0.0 26.0  26.0   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   6.3   9.4  6.9   0.0   0.0 26.0  26.0   0.0  0.0   0.0
HCM2k95th:     0    0     2    10    6     0     0   22    22     0    0     0
********************************************************************************
```



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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #32 12th St/J St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.677
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       31.3
Optimal Cycle:        56              Level Of Service:                  C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Permitted        Permitted        Protected        Protected
Rights:         Include          Include          Include          Include
Min. Green:    0    0    31    31   31    31     0   19    19     0    0     0
Lanes:       0  0  0  0  1    1  0  2  0  0    0  0  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0   114   375  549     0     0 1424   149     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0    0   114   375  549     0     0 1424   149     0    0     0
Added Vol:     0    0     0     0  119     0     0  186    19     0    0     0
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   0    0   114   375  668     0     0 1610   168     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0    0   114   375  668     0     0 1610   168     0    0     0
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   0    0   114   375  668     0     0 1610   168     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0    0   114   375  668     0     0 1610   168     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  0.87  0.77 0.95  1.00  1.00 0.90  0.90  1.00 1.00  1.00
Lanes:       0.00 0.00  1.00  1.00 2.00  0.00  0.00 2.72  0.28  0.00 0.00  0.00
Final Sat.:    0    0  1644  1461 3610     0     0 4631   483     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.07  0.26 0.19  0.00  0.00 0.35  0.35  0.00 0.00  0.00
Crit Moves:                   ****                  ****
Green/Cycle: 0.00 0.00  0.55  0.55 0.55  0.00  0.00 0.34  0.34  0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.13  0.46 0.33  0.00  0.00 1.02  1.02  0.00 0.00  0.00
Delay/Veh:    0.0  0.0   6.3   9.4  7.3   0.0   0.0 46.6  46.6   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   6.3   9.4  7.3   0.0   0.0 46.6  46.6   0.0  0.0   0.0
HCM2k95th:     0    0     2    10    7     0     0   30    30     0    0     0
********************************************************************************
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Downtown Sacramento Traffic Study
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AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #33 12th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.474
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 13.3
Optimal Cycle: 59 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	25	25	0	0	0	25	25	25
Lanes:	0 1 0 0 0			0 0 0 1 1			0 0 0 0 0			0 1 1 1 0		
Volume Module:												
Base Vol:	5	1	0	0	1	595	0	0	0	3	913	162
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	1	0	0	1	595	0	0	0	3	913	162
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	1	0	0	1	595	0	0	0	3	913	162
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	1	0	0	1	595	0	0	0	3	913	162
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	1	0	0	1	595	0	0	0	3	913	162
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	1.00	1.00	0.85	0.85	1.00	1.00	1.00	0.87	0.87	0.87
Lanes:	0.83	0.17	0.00	0.00	0.01	1.99	0.00	0.00	0.00	0.01	2.54	0.45
Final Sat.:	1454	291	0	0	5	3225	0	0	0	14	4202	746
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.18	0.18	0.00	0.00	0.00	0.22	0.22	0.22
Crit Moves:					****					****		
Green/Cycle:	0.42	0.42	0.00	0.00	0.42	0.42	0.00	0.00	0.00	0.42	0.42	0.42
Volume/Cap:	0.01	0.01	0.00	0.00	0.44	0.44	0.00	0.00	0.00	0.51	0.51	0.51
Delay/Veh:	9.9	9.9	0.0	0.0	13.0	13.0	0.0	0.0	0.0	13.4	13.4	13.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.9	9.9	0.0	0.0	13.0	13.0	0.0	0.0	0.0	13.4	13.4	13.4
HCM2k95th:	0	0	0	0	8	8	0	0	0	10	10	10

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #33 12th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.587
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 14.6
Optimal Cycle: 59 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	25	25	0	0	0	25	25	25
Lanes:	0 1 0 0 0			0 0 0 1 1			0 0 0 0 0			0 1 1 1 0		
Volume Module:												
Base Vol:	5	1	0	0	1	595	0	0	0	3	913	162
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	1	0	0	1	595	0	0	0	3	913	162
Added Vol:	0	0	0	0	0	138	0	0	0	0	275	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	1	0	0	1	733	0	0	0	3	1188	162
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	1	0	0	1	733	0	0	0	3	1188	162
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	1	0	0	1	733	0	0	0	3	1188	162
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	1	0	0	1	733	0	0	0	3	1188	162
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	1.00	1.00	0.85	0.85	1.00	1.00	1.00	0.88	0.88	0.88
Lanes:	0.83	0.17	0.00	0.00	0.01	1.99	0.00	0.00	0.00	0.01	2.63	0.36
Final Sat.:	1454	291	0	0	4	3226	0	0	0	11	4392	599
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.00	0.27	0.27	0.27
Crit Moves:					****					****		
Green/Cycle:	0.42	0.42	0.00	0.00	0.42	0.42	0.00	0.00	0.00	0.42	0.42	0.42
Volume/Cap:	0.01	0.01	0.00	0.00	0.54	0.54	0.00	0.00	0.00	0.64	0.64	0.64
Delay/Veh:	9.9	9.9	0.0	0.0	14.2	14.2	0.0	0.0	0.0	14.9	14.9	14.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.9	9.9	0.0	0.0	14.2	14.2	0.0	0.0	0.0	14.9	14.9	14.9
HCM2k95th:	0	0	0	0	10	10	0	0	0	12	12	12

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-------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                       2030 Cumulative Conditions
                              AM Peak Hour
-------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #34 15th St/H St
*******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.388
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       10.4
Optimal Cycle:       56              Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   25   25     0    0   25    25    0    0     0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0   39  766     0    0  544   312    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0   39  766     0    0  544   312    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0   39  766     0    0  544   312    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0   39  766     0    0  544   312    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0   39  766     0    0  544   312    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.86  0.86 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.15 2.85  0.00 0.00 2.00  1.00 0.00 0.00  0.00
Final Sat.:     0    0     0  251 4936     0    0 3268  1634    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.16 0.16  0.00 0.00 0.17  0.19 0.00 0.00  0.00
Crit Moves:                  ****                         ****
Green/Cycle: 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.35 0.35  0.00 0.00 0.37  0.43 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 10.2 10.2   0.0  0.0 10.4  10.8  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 10.2 10.2   0.0  0.0 10.4  10.8  0.0  0.0   0.0
HCM2k95th:      0    0     0    7    7     0    0    7     8    0    0     0
*******************************************************************************
```



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-------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                       2030 Cumulative Conditions
                              AM Peak Hour
-------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #34 15th St/H St
*******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):        0.387
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       10.4
Optimal Cycle:       56              Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   25   25     0    0   25    25    0    0     0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0   39  766     0    0  544   312    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0   39  766     0    0  544   312    0    0     0
Added Vol:      0    0     0    0    0     0    0   20     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0   39  766     0    0  564   312    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0   39  766     0    0  564   312    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0   39  766     0    0  564   312    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0   39  766     0    0  564   312    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.86  0.86 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.15 2.85  0.00 0.00 2.00  1.00 0.00 0.00  0.00
Final Sat.:     0    0     0  251 4936     0    0 3275  1637    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.16 0.16  0.00 0.00 0.17  0.19 0.00 0.00  0.00
Crit Moves:                  ****                         ****
Green/Cycle: 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.35 0.35  0.00 0.00 0.39  0.43 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 10.2 10.2   0.0  0.0 10.5  10.7  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 10.2 10.2   0.0  0.0 10.5  10.7  0.0  0.0   0.0
HCM2k95th:      0    0     0    7    7     0    0    7     8    0    0     0
*******************************************************************************
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 15th St/J St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.529
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	11.7
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	25	25	0	0	25	25	0	0	0
Lanes:	0 0	0 0	0	0 1	2 0	0	0 0	2 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	0	0	318	709	0	0	990	375	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	318	709	0	0	990	375	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	318	709	0	0	990	375	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	318	709	0	0	990	375	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	318	709	0	0	990	375	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.87	0.87	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.93	2.07	0.00	0.00	2.18	0.82	0.00	0.00	0.00
Final Sat.:	0	0	0	1606	3581	0	0	3608	1367	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.27	0.27	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.45	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.44	0.44	0.00	0.00	0.61	0.61	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	10.8	10.8	0.0	0.0	12.3	12.3	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	10.8	10.8	0.0	0.0	12.3	12.3	0.0	0.0	0.0
HCM2k95th:	0	0	0	9	9	0	0	13	13	0	0	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #35 15th St/J St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.567
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	12.3
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	25	25	0	0	25	25	0	0	0
Lanes:	0 0	0 0	0	0 1	2 0	0	0 0	2 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	0	0	318	709	0	0	990	375	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	318	709	0	0	990	375	0	0	0
Added Vol:	0	0	0	0	0	0	0	109	59	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	318	709	0	0	1099	434	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	318	709	0	0	1099	434	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	318	709	0	0	1099	434	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	318	709	0	0	1099	434	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.87	0.87	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.93	2.07	0.00	0.00	2.15	0.85	0.00	0.00	0.00
Final Sat.:	0	0	0	1606	3581	0	0	3562	1407	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.31	0.31	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.45	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.44	0.44	0.00	0.00	0.69	0.69	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	10.8	10.8	0.0	0.0	13.4	13.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	10.8	10.8	0.0	0.0	13.4	13.4	0.0	0.0	0.0
HCM2k95th:	0	0	0	9	9	0	0	16	16	0	0	0

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2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 15th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.435
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.5
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	30	30	0	0	0	20	20	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			0 1 2 0 0		
Volume Module:												
Base Vol:	0	0	0	0	677	243	0	0	0	59	999	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	677	243	0	0	0	59	999	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	677	243	0	0	0	59	999	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	677	243	0	0	0	59	999	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	677	243	0	0	0	59	999	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.87	0.87	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	2.21	0.79	0.00	0.00	0.00	0.17	2.83	0.00
Final Sat.:	0	0	0	0	3664	1315	0	0	0	289	4898	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.18	0.18	0.00	0.00	0.00	0.20	0.20	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.54	0.54	0.00	0.00	0.00	0.36	0.36	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.34	0.34	0.00	0.00	0.00	0.57	0.57	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	7.5	7.5	0.0	0.0	0.0	15.0	15.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	7.5	7.5	0.0	0.0	0.0	15.0	15.0	0.0
HCM2k95th:	0	0	0	0	6	6	0	0	0	10	10	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #36 15th St/L St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.507
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 13.0
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	30	30	0	0	0	20	20	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			0 1 2 0 0		
Volume Module:												
Base Vol:	0	0	0	0	677	243	0	0	0	59	999	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	677	243	0	0	0	59	999	0
Added Vol:	0	0	0	0	59	0	0	0	0	0	275	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	736	243	0	0	0	59	1274	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	736	243	0	0	0	59	1274	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	736	243	0	0	0	59	1274	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	736	243	0	0	0	59	1274	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.88	0.88	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	2.26	0.74	0.00	0.00	0.00	0.13	2.87	0.00
Final Sat.:	0	0	0	0	3755	1240	0	0	0	230	4957	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.00	0.26	0.26	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.54	0.54	0.00	0.00	0.00	0.36	0.36	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.37	0.37	0.00	0.00	0.00	0.72	0.72	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	7.6	7.6	0.0	0.0	0.0	17.0	17.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	7.6	7.6	0.0	0.0	0.0	17.0	17.0	0.0
HCM2k95th:	0	0	0	0	7	7	0	0	0	13	13	0

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                      Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
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-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #37 15th St/P St
*******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):         0.437
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       11.7
Optimal Cycle:        56              Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0   28    28     0    0     0    22   22     0
Lanes:        0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     0  571   217     0    0     0   107 1096     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0  571   217     0    0     0   107 1096     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     0  571   217     0    0     0   107 1096     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0     0  571   217     0    0     0   107 1096     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0     0     0  571   217     0    0     0   107 1096     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  1.00 0.87  0.87  1.00 1.00  1.00  0.91 0.91  1.00
Lanes:       0.00 0.00  0.00  0.00 2.17  0.83  0.00 0.00  0.00  0.27 2.73  0.00
Final Sat.:     0    0     0     0 3604  1370     0    0     0   461 4726     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.00 0.16  0.16  0.00 0.00  0.00  0.23 0.23  0.00
Crit Moves:                        ****                          ****
Green/Cycle: 0.00 0.00  0.00  0.00 0.50  0.50  0.00 0.00  0.00  0.39 0.39  0.00
Volume/Cap:  0.00 0.00  0.00  0.00 0.32  0.32  0.00 0.00  0.00  0.59 0.59  0.00
Delay/Veh:    0.0  0.0   0.0   0.0  8.4   8.4   0.0  0.0   0.0  13.9 13.9   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   0.0  8.4   8.4   0.0  0.0   0.0  13.9 13.9   0.0
HCM2k95th:      0    0     0     0    6     6     0    0     0    10   10     0
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                      Downtown Sacramento Traffic Study
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-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #37 15th St/P St
*******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):         0.459
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       11.8
Optimal Cycle:        56              Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0   28    28     0    0     0    22   22     0
Lanes:        0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     0  571   217     0    0     0   107 1096     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0  571   217     0    0     0   107 1096     0
Added Vol:      0    0     0     0   81     0     0    0     0     0   22     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     0  652   217     0    0     0   107 1118     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     0  652   217     0    0     0   107 1118     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0     0  652   217     0    0     0   107 1118     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0     0     0  652   217     0    0     0   107 1118     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 1.00  1.00  1.00 0.88  0.88  1.00 1.00  1.00  0.91 0.91  1.00
Lanes:       0.00 0.00  0.00  0.00 2.25  0.75  0.00 0.00  0.00  0.26 2.74  0.00
Final Sat.:     0    0     0     0 3748  1247     0    0     0   453 4734     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.00 0.17  0.17  0.00 0.00  0.00  0.24 0.24  0.00
Crit Moves:                        ****                          ****
Green/Cycle: 0.00 0.00  0.00  0.00 0.50  0.50  0.00 0.00  0.00  0.39 0.39  0.00
Volume/Cap:  0.00 0.00  0.00  0.00 0.35  0.35  0.00 0.00  0.00  0.60 0.60  0.00
Delay/Veh:    0.0  0.0   0.0   0.0  8.6   8.6   0.0  0.0   0.0  14.0 14.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   0.0  8.6   8.6   0.0  0.0   0.0  14.0 14.0   0.0
HCM2k95th:      0    0     0     0    7     7     0    0     0    10   10     0
*******************************************************************************
```

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--------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #38 15th St/Q St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.376
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       10.9
Optimal Cycle:        56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0    0    27   27    0     0   23   23     0    0    0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0   112  590    0     0  903  117     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0   112  590    0     0  903  117     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0   112  590    0     0  903  117     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0   112  590    0     0  903  117     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0   112  590    0     0  903  117     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.91 0.91 1.00  1.00 0.89 0.89  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  0.48 2.52 0.00  0.00 2.66 0.34  0.00 0.00 0.00
Final Sat.:     0    0    0   828 4359    0     0 4514  585     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.14 0.14 0.00  0.00 0.20 0.20  0.00 0.00 0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00 0.00  0.48 0.48 0.00  0.00 0.41 0.41  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.28 0.28 0.00  0.00 0.49 0.49  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0   8.7  8.7  0.0   0.0 12.3 12.3   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0   8.7  8.7  0.0   0.0 12.3 12.3   0.0  0.0  0.0
HCM2k95th:      0    0    0     5    5    0     0    8    8     0    0    0
********************************************************************************
```



```
--------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #38 15th St/Q St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.395
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       10.9
Optimal Cycle:        56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0    0    27   27    0     0   23   23     0    0    0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0   112  590    0     0  903  117     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0   112  590    0     0  903  117     0    0    0
Added Vol:      0    0    0     6   75    0     0    9    1     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    0    0    0   118  665    0     0  912  118     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0   118  665    0     0  912  118     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0   118  665    0     0  912  118     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0   118  665    0     0  912  118     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.91 0.91 1.00  1.00 0.89 0.89  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  0.45 2.55 0.00  0.00 2.66 0.34  0.00 0.00 0.00
Final Sat.:     0    0    0   782 4405    0     0 4515  584     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.15 0.15 0.00  0.00 0.20 0.20  0.00 0.00 0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00 0.00  0.48 0.48 0.00  0.00 0.41 0.41  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.31 0.31 0.00  0.00 0.49 0.49  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0   8.9  8.9  0.0   0.0 12.4 12.4   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0   8.9  8.9  0.0   0.0 12.4 12.4   0.0  0.0  0.0
HCM2k95th:      0    0    0     5    5    0     0    8    8     0    0    0
********************************************************************************
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-----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                      2030 Cumulative Conditions
                             AM Peak Hour
-----------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #39 15th St/W St
*****************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):         0.230
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        12.7
Optimal Cycle:        76              Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0    0     0    0   32    32    0    0     0   38   38     0
Lanes:       0  0  0  0  0   0  0  3  1  0   0  0  0  0  0   1  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0     0    0  617    24    0    0     0  205 1141     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0     0    0  617    24    0    0     0  205 1141     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0    0     0    0  617    24    0    0     0  205 1141     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0     0    0  617    24    0    0     0  205 1141     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0    0     0    0  617    24    0    0     0  205 1141     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.90  0.90 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 3.85  0.15 0.00 0.00  0.00 1.00 3.00  0.00
Final Sat.:    0    0     0    0 6617   257    0    0     0 1729 5187     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.09  0.09 0.00 0.00  0.00 0.12 0.22  0.00
Crit Moves:                       ****                          ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.42  0.42 0.00 0.00  0.00 0.50 0.50  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.22  0.22 0.00 0.00  0.00 0.24 0.44  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 14.1  14.1  0.0  0.0   0.0 10.8 12.3   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 14.1  14.1  0.0  0.0   0.0 10.8 12.3   0.0
HCM2k95th:     0    0     0    0    5     5    0    0     0    6   11     0
*****************************************************************************
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-----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                      2030 Cumulative Conditions
                             AM Peak Hour
-----------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*****************************************************************************
Intersection #39 15th St/W St
*****************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):         0.240
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        12.8
Optimal Cycle:        76              Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0    0     0    0   32    32    0    0     0   38   38     0
Lanes:       0  0  0  0  0   0  0  3  1  0   0  0  0  0  0   1  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0     0    0  617    24    0    0     0  205 1141     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0     0    0  617    24    0    0     0  205 1141     0
Added Vol:     0    0     0    0   64     0    0    0     0    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   0    0     0    0  681    24    0    0     0  205 1141     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0    0     0    0  681    24    0    0     0  205 1141     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0    0     0    0  681    24    0    0     0  205 1141     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0    0     0    0  681    24    0    0     0  205 1141     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.91  0.91 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 3.86  0.14 0.00 0.00  0.00 1.00 3.00  0.00
Final Sat.:    0    0     0    0 6647   234    0    0     0 1729 5187     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.10  0.10 0.00 0.00  0.00 0.12 0.22  0.00
Crit Moves:                       ****                          ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.42  0.42 0.00 0.00  0.00 0.50 0.50  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.24  0.24 0.00 0.00  0.00 0.24 0.44  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 14.2  14.2  0.0  0.0   0.0 10.8 12.3   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 14.2  14.2  0.0  0.0   0.0 10.8 12.3   0.0
HCM2k95th:     0    0     0    0    5     5    0    0     0    6   11     0
*****************************************************************************
```

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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2030 Cumulative Conditions
                                 AM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #40 15th St/X St
*******************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.515
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):       25.0
Optimal Cycle:        79              Level Of Service:                  C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase       Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   14    14    24   24     0     0   32    32     0    0     0
Lanes:       0  0  2  1  0    1  1  2  0  0    0  0  1  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0  693    26   349  370     0     0  656    91     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0  693    26   349  370     0     0  656    91     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0  693    26   349  370     0     0  656    91     0    0     0
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   0  693    26   349  370     0     0  656    91     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0  693    26   349  370     0     0  656    91     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.91  0.91  0.89 0.89  1.00  1.00 0.93  0.93  1.00 1.00  1.00
Lanes:       0.00 2.89  0.11  1.94 2.06  0.00  0.00 1.76  0.24  0.00 0.00  0.00
Final Sat.:    0 4974   187  3276 3474     0     0 3113   432     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.14  0.14  0.11 0.11  0.00  0.00 0.21  0.21  0.00 0.00  0.00
Crit Moves:       ****             ****             ****
Green/Cycle: 0.00 0.18  0.18  0.30 0.30  0.00  0.00 0.41  0.41  0.00 0.00  0.00
Volume/Cap:  0.00 0.79  0.79  0.35 0.35  0.00  0.00 0.52  0.52  0.00 0.00  0.00
Delay/Veh:    0.0 35.6  35.6  21.5 21.5   0.0   0.0 18.1  18.1   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 35.6  35.6  21.5 21.5   0.0   0.0 18.1  18.1   0.0  0.0   0.0
HCM2k95th:     0   15    15     7    7     0     0   14    14     0    0     0
*******************************************************************************
```



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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2030 Cumulative Conditions
                                 AM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #40 15th St/X St
*******************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.533
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):       25.0
Optimal Cycle:        79              Level Of Service:                  C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase       Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   14    14    24   24     0     0   32    32     0    0     0
Lanes:       0  0  2  1  0    1  1  2  0  0    0  0  1  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0  693    26   349  370     0     0  656    91     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0  693    26   349  370     0     0  656    91     0    0     0
Added Vol:     0    0     0    64    0     0     0    0     0     0    0     0
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   0  693    26   413  370     0     0  656    91     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0  693    26   413  370     0     0  656    91     0    0     0
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   0  693    26   413  370     0     0  656    91     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0  693    26   413  370     0     0  656    91     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.91  0.91  0.89 0.89  1.00  1.00 0.93  0.93  1.00 1.00  1.00
Lanes:       0.00 2.89  0.11  2.00 2.00  0.00  0.00 1.76  0.24  0.00 0.00  0.00
Final Sat.:    0 4974   187  3368 3368     0     0 3113   432     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.14  0.14  0.12 0.11  0.00  0.00 0.21  0.21  0.00 0.00  0.00
Crit Moves:       ****      ****                    ****
Green/Cycle: 0.00 0.18  0.18  0.30 0.30  0.00  0.00 0.41  0.41  0.00 0.00  0.00
Volume/Cap:  0.00 0.79  0.79  0.40 0.36  0.00  0.00 0.52  0.52  0.00 0.00  0.00
Delay/Veh:    0.0 35.6  35.6  22.0 21.6   0.0   0.0 18.1  18.1   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 35.6  35.6  22.0 21.6   0.0   0.0 18.1  18.1   0.0  0.0   0.0
HCM2k95th:     0   15    15     8    7     0     0   14    14     0    0     0
*******************************************************************************
```

```
-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                AM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #41 16th St/H St
*******************************************************************************
Cycle (sec):          50             Critical Vol./Cap. (X):        0.419
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):     11.9
Optimal Cycle:        56             Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0   25    25    0    0     0   16   25     0    0    0     9
Lanes:       0  0  2  1  0    0  0  0  0  0    2  1  0  0  0    0  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0 1058    23    0    0     0  304  306     0    0    0    39
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0 1058    23    0    0     0  304  306     0    0    0    39
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0 1058    23    0    0     0  304  306     0    0    0    39
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0 1058    23    0    0     0  304  306     0    0    0    39
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0 1058    23    0    0     0  304  306     0    0    0    39
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.91  0.91  1.00 1.00  1.00  0.95 0.98  1.00  1.00 1.00  0.87
Lanes:       0.00 2.94  0.06  0.00 0.00  0.00  2.00 1.00  0.00  0.00 0.00  1.00
Final Sat.:    0 5061   110    0    0     0 3598 1854     0    0    0  1644
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.21  0.21  0.00 0.00  0.00  0.08 0.17  0.00  0.00 0.00  0.02
Crit Moves:       ****                              ****        ****
Green/Cycle: 0.00 0.45  0.45  0.00 0.00  0.00  0.29 0.45  0.00  0.00 0.00  0.16
Volume/Cap:  0.00 0.47  0.47  0.00 0.00  0.00  0.30 0.37  0.00  0.00 0.00  0.15
Delay/Veh:    0.0 11.0  11.0   0.0  0.0   0.0  15.7 10.4   0.0   0.0  0.0  20.5
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 11.0  11.0   0.0  0.0   0.0  15.7 10.4   0.0   0.0  0.0  20.5
HCM2k95th:     0    8     8    0    0     0    4    7     0    0    0     1
*******************************************************************************
```



```
-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                AM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #41 16th St/H St
*******************************************************************************
Cycle (sec):          50             Critical Vol./Cap. (X):        0.429
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):     12.1
Optimal Cycle:        56             Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0   25    25    0    0     0   16   25     0    0    0     9
Lanes:       0  0  2  1  0    0  0  0  0  0    2  1  0  0  0    0  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0 1058    23    0    0     0  304  306     0    0    0    39
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0 1058    23    0    0     0  304  306     0    0    0    39
Added Vol:     0   46     0    0    0     0   20    0     0    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   0 1104    23    0    0     0  324  306     0    0    0    39
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0 1104    23    0    0     0  324  306     0    0    0    39
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0 1104    23    0    0     0  324  306     0    0    0    39
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0 1104    23    0    0     0  324  306     0    0    0    39
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.91  0.91  1.00 1.00  1.00  0.95 0.98  1.00  1.00 1.00  0.87
Lanes:       0.00 2.94  0.06  0.00 0.00  0.00  2.00 1.00  0.00  0.00 0.00  1.00
Final Sat.:    0 5066   106    0    0     0 3594 1853     0    0    0  1644
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.22  0.22  0.00 0.00  0.00  0.09 0.17  0.00  0.00 0.00  0.02
Crit Moves:       ****                              ****        ****
Green/Cycle: 0.00 0.45  0.45  0.00 0.00  0.00  0.29 0.45  0.00  0.00 0.00  0.16
Volume/Cap:  0.00 0.49  0.49  0.00 0.00  0.00  0.32 0.37  0.00  0.00 0.00  0.15
Delay/Veh:    0.0 11.1  11.1   0.0  0.0   0.0  15.8 10.4   0.0   0.0  0.0  20.5
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 11.1  11.1   0.0  0.0   0.0  15.8 10.4   0.0   0.0  0.0  20.5
HCM2k95th:     0    9     9    0    0     0    4    7     0    0    0     1
*******************************************************************************
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #42 16th St/I St

Cycle (sec): 50   Critical Vol./Cap. (X): 0.510
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.4
Optimal Cycle: 56   Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	0	0	0	0	0	0	25	25
Lanes:	1 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	403	891	0	0	0	0	0	0	0	0	1135	223
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	403	891	0	0	0	0	0	0	0	0	1135	223
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	403	891	0	0	0	0	0	0	0	0	1135	223
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	403	891	0	0	0	0	0	0	0	0	1135	223
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	403	891	0	0	0	0	0	0	0	0	1135	223
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89
Lanes:	1.25	2.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.51	0.49
Final Sat.:	2154	4762	0	0	0	0	0	0	0	0	4227	830
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.27
Crit Moves:	****										****	
Green/Cycle:	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Volume/Cap:	0.42	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.60
Delay/Veh:	10.6	10.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2	12.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.6	10.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2	12.2
HCM2k95th:	7	7	0	0	0	0	0	0	0	0	13	13

Downtown Sacramento Traffic Study
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AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #42 16th St/I St

Cycle (sec): 50   Critical Vol./Cap. (X): 0.523
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.5
Optimal Cycle: 56   Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	0	0	0	0	0	0	25	25
Lanes:	1 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	403	891	0	0	0	0	0	0	0	0	1135	223
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	403	891	0	0	0	0	0	0	0	0	1135	223
Added Vol:	33	46	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	436	937	0	0	0	0	0	0	0	0	1135	223
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	436	937	0	0	0	0	0	0	0	0	1135	223
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	436	937	0	0	0	0	0	0	0	0	1135	223
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	436	937	0	0	0	0	0	0	0	0	1135	223
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89
Lanes:	1.27	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.51	0.49
Final Sat.:	2196	4720	0	0	0	0	0	0	0	0	4227	830
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.27
Crit Moves:	****										****	
Green/Cycle:	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Volume/Cap:	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.60
Delay/Veh:	10.8	10.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2	12.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.8	10.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2	12.2
HCM2k95th:	8	8	0	0	0	0	0	0	0	0	13	13

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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                AM Peak Hour
--------------------------------------------------------------------------------

                       Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #43 16th St/J St
********************************************************************************
Cycle (sec):         50               Critical Vol./Cap. (X):        0.540
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        13.1
Optimal Cycle:       56               Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0   25    25    0    0     0   25   25     0    0    0     0
Lanes:       0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1562   160    0    0     0  251 1373     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0 1562   160    0    0     0  251 1373     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0 1562   160    0    0     0  251 1373     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0 1562   160    0    0     0  251 1373     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0 1562   160    0    0     0  251 1373     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.90  0.90 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.72  0.28 0.00 0.00  0.00 1.00 3.00  0.00 0.00 0.00  0.00
Final Sat.:     0 4639   475    0    0     0 1729 5187     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.34  0.34 0.00 0.00  0.00 0.15 0.26  0.00 0.00 0.00  0.00
Crit Moves:       ****                      ****
Green/Cycle: 0.00 0.45  0.45 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.75  0.75 0.00 0.00  0.00 0.33 0.59  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 14.4  14.4  0.0  0.0   0.0 10.1 12.0   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 14.4  14.4  0.0  0.0   0.0 10.1 12.0   0.0  0.0  0.0   0.0
HCM2k95th:      0   19    19    0    0     0    5   11     0    0    0     0
********************************************************************************
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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
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                       Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #43 16th St/J St
********************************************************************************
Cycle (sec):         50               Critical Vol./Cap. (X):        0.577
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        13.3
Optimal Cycle:       56               Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0   25    25    0    0     0   25   25     0    0    0     0
Lanes:       0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1562   160    0    0     0  251 1373     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0 1562   160    0    0     0  251 1373     0    0    0     0
Added Vol:      0   33     0    0    0     0   46   63     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0 1595   160    0    0     0  297 1436     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0 1595   160    0    0     0  297 1436     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0 1595   160    0    0     0  297 1436     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0 1595   160    0    0     0  297 1436     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.90  0.90 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.73  0.27 0.00 0.00  0.00 1.00 3.00  0.00 0.00 0.00  0.00
Final Sat.:     0 4648   466    0    0     0 1729 5187     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.34  0.34 0.00 0.00  0.00 0.17 0.28  0.00 0.00 0.00  0.00
Crit Moves:       ****                      ****
Green/Cycle: 0.00 0.45  0.45 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.77  0.77 0.00 0.00  0.00 0.38 0.62  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 14.7  14.7  0.0  0.0   0.0 10.4 12.3   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 14.7  14.7  0.0  0.0   0.0 10.4 12.3   0.0  0.0  0.0   0.0
HCM2k95th:      0   19    19    0    0     0    7   12     0    0    0     0
********************************************************************************
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #44 16th St/L St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.465
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	11.9
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	0	0	0	0	0	0	25	25
Lanes:	1 0 2 1 0			0 0 0 0 0			0 0 0 0 0			0 0 1 1 0		
Volume Module:												
Base Vol:	334	1411	0	0	0	0	0	0	0	0	701	143
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	334	1411	0	0	0	0	0	0	0	0	701	143
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	334	1411	0	0	0	0	0	0	0	0	701	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	334	1411	0	0	0	0	0	0	0	0	701	143
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	334	1411	0	0	0	0	0	0	0	0	701	143
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93
Lanes:	1.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.66	0.34
Final Sat.:	1900	5187	0	0	0	0	0	0	0	0	2923	596
Capacity Analysis Module:												
Vol/Sat:	0.18	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.24
Crit Moves:	****										****	
Green/Cycle:	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Volume/Cap:	0.39	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.54
Delay/Veh:	10.7	12.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7	11.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.7	12.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7	11.7
HCM2k95th:	8	13	0	0	0	0	0	0	0	0	11	11

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #44 16th St/L St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.592
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	12.5
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	25	25	0	0	0	0	0	0	0	0	25	25
Lanes:	1 0 2 1 0			0 0 0 0 0			0 0 0 0 0			0 0 1 1 0		
Volume Module:												
Base Vol:	334	1411	0	0	0	0	0	0	0	0	701	143
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	334	1411	0	0	0	0	0	0	0	0	701	143
Added Vol:	135	23	0	0	0	0	0	0	0	0	140	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	469	1434	0	0	0	0	0	0	0	0	841	154
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	469	1434	0	0	0	0	0	0	0	0	841	154
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	469	1434	0	0	0	0	0	0	0	0	841	154
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	469	1434	0	0	0	0	0	0	0	0	841	154
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93
Lanes:	1.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.69	0.31
Final Sat.:	1900	5187	0	0	0	0	0	0	0	0	2981	546
Capacity Analysis Module:												
Vol/Sat:	0.25	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.28
Crit Moves:	****										****	
Green/Cycle:	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Volume/Cap:	0.55	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.63
Delay/Veh:	12.2	12.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.8	12.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.2	12.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.8	12.8
HCM2k95th:	13	14	0	0	0	0	0	0	0	0	14	14

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2000 HCM Operations Method (Base Volume Alternative)

Intersection #45 16th St/P St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.773
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.1
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	29	29	0	0	0	0	0	0	0	0	21	21
Lanes:	0 1 1 1 0			0 0 0 0 0			0 0 0 0 0			0 0 1 1 0		
Volume Module:												
Base Vol:	244	1677	0	0	0	0	0	0	0	0	961	167
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	244	1677	0	0	0	0	0	0	0	0	961	167
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	244	1677	0	0	0	0	0	0	0	0	961	167
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	244	1677	0	0	0	0	0	0	0	0	961	167
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	244	1677	0	0	0	0	0	0	0	0	961	167
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93
Lanes:	0.38	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.70	0.30
Final Sat.:	659	4528	0	0	0	0	0	0	0	0	3008	523
Capacity Analysis Module:												
Vol/Sat:	0.37	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.32
Crit Moves:	****										****	
Green/Cycle:	0.52	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38
Volume/Cap:	0.72	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.85
Delay/Veh:	11.3	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6	21.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.3	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6	21.6
HCM2k95th:	16	16	0	0	0	0	0	0	0	0	22	22

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #45 16th St/P St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.814
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 16.2
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	29	29	0	0	0	0	0	0	0	0	21	21
Lanes:	0 1 1 1 0			0 0 0 0 0			0 0 0 0 0			0 0 1 1 0		
Volume Module:												
Base Vol:	244	1677	0	0	0	0	0	0	0	0	961	167
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	244	1677	0	0	0	0	0	0	0	0	961	167
Added Vol:	-9	155	0	0	0	0	0	0	0	0	30	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	235	1832	0	0	0	0	0	0	0	0	991	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	235	1832	0	0	0	0	0	0	0	0	991	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	235	1832	0	0	0	0	0	0	0	0	991	169
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	235	1832	0	0	0	0	0	0	0	0	991	169
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93
Lanes:	0.34	2.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.71	0.29
Final Sat.:	590	4597	0	0	0	0	0	0	0	0	3016	514
Capacity Analysis Module:												
Vol/Sat:	0.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.33
Crit Moves:	****										****	
Green/Cycle:	0.52	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38
Volume/Cap:	0.77	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.88
Delay/Veh:	12.2	12.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.2	23.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.2	12.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.2	23.2
HCM2k95th:	18	18	0	0	0	0	0	0	0	0	24	24

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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
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                                 AM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #46 16th St/Q St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.679
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        13.3
Optimal Cycle:        56               Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   25    25     0    0     0    25   25     0     0    0     0
Lanes:       0  0  2  1  0   0  0  0  0  0   0  1  1  0  0   0  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1534    45     0    0     0   385  701     0     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0 1534    45     0    0     0   385  701     0     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0 1534    45     0    0     0   385  701     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 1534    45     0    0     0   385  701     0     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0 1534    45     0    0     0   385  701     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.91  0.91  1.00 1.00  1.00  0.95 0.95  1.00  1.00 1.00  1.00
Lanes:       0.00 2.91  0.09  0.00 0.00  0.00  0.71 1.29  0.00  0.00 0.00  1.00
Final Sat.:     0 5019   147     0    0     0  1280 2330     0     0    0  1900
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.31  0.31  0.00 0.00  0.00  0.30 0.30  0.00  0.00 0.00  0.00
Crit Moves:       ****                         ****
Green/Cycle: 0.00 0.45  0.45  0.00 0.00  0.00  0.45 0.45  0.00  0.00 0.00  0.00
Volume/Cap:  0.00 0.68  0.68  0.00 0.00  0.00  0.67 0.67  0.00  0.00 0.00  0.00
Delay/Veh:    0.0 13.2  13.2   0.0  0.0   0.0  13.4 13.4   0.0   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 13.2  13.2   0.0  0.0   0.0  13.4 13.4   0.0   0.0  0.0   0.0
HCM2k95th:      0   16    16     0    0     0    14   14     0     0    0     0
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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
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-------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #46 16th St/Q St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.716
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        14.0
Optimal Cycle:        56               Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   25    25     0    0     0    25   25     0     0    0     0
Lanes:       0  0  2  1  0   0  0  0  0  0   0  1  1  0  0   0  0  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1534    45     0    0     0   385  701     0     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0 1534    45     0    0     0   385  701     0     0    0     0
Added Vol:      0  146     0     0    0     0     0   15     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0 1680    45     0    0     0   385  716     0     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0 1680    45     0    0     0   385  716     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 1680    45     0    0     0   385  716     0     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0 1680    45     0    0     0   385  716     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.91  0.91  1.00 1.00  1.00  0.95 0.95  1.00  1.00 1.00  1.00
Lanes:       0.00 2.92  0.08  0.00 0.00  0.00  0.70 1.30  0.00  0.00 0.00  1.00
Final Sat.:     0 5031   135     0    0     0  1262 2348     0     0    0  1900
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.33  0.33  0.00 0.00  0.00  0.30 0.30  0.00  0.00 0.00  0.00
Crit Moves:       ****                         ****
Green/Cycle: 0.00 0.45  0.45  0.00 0.00  0.00  0.45 0.45  0.00  0.00 0.00  0.00
Volume/Cap:  0.00 0.75  0.75  0.00 0.00  0.00  0.68 0.68  0.00  0.00 0.00  0.00
Delay/Veh:    0.0 14.3  14.3   0.0  0.0   0.0  13.6 13.6   0.0   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 14.3  14.3   0.0  0.0   0.0  13.6 13.6   0.0   0.0  0.0   0.0
HCM2k95th:      0   19    19     0    0     0    14   14     0     0    0     0
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #47 16th St/W St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.506
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 27.4
Optimal Cycle: 79 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	30	30	0	0	0	0	0	16	16	0	24	24
Lanes:	1 1 2 0 0			0 0 0 0 0			0 0 2 1 0			0 0 1 1 1		
Volume Module:												
Base Vol:	156	1316	0	0	0	0	0	718	190	0	286	686
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	156	1316	0	0	0	0	0	718	190	0	286	686
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	156	1316	0	0	0	0	0	718	190	0	286	686
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	156	1316	0	0	0	0	0	718	190	0	286	686
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	156	1316	0	0	0	0	0	718	190	0	286	686
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.88	0.88	1.00	0.85	0.85
Lanes:	1.00	3.00	0.00	0.00	0.00	0.00	0.00	2.37	0.63	0.00	1.00	2.00
Final Sat.:	1729	5187	0	0	0	0	0	3974	1052	0	1614	3227
Capacity Analysis Module:												
Vol/Sat:	0.09	0.25	0.00	0.00	0.00	0.00	0.00	0.18	0.18	0.00	0.18	0.21
Crit Moves:	****							****			****	
Green/Cycle:	0.38	0.38	0.00	0.00	0.00	0.00	0.00	0.20	0.20	0.00	0.30	0.30
Volume/Cap:	0.24	0.67	0.00	0.00	0.00	0.00	0.00	0.89	0.89	0.00	0.58	0.70
Delay/Veh:	16.7	21.2	0.0	0.0	0.0	0.0	0.0	40.7	40.7	0.0	23.8	25.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.7	21.2	0.0	0.0	0.0	0.0	0.0	40.7	40.7	0.0	23.8	25.9
HCM2k95th:	5	16	0	0	0	0	0	20	20	0	13	16

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #47 16th St/W St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.507
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 28.7
Optimal Cycle: 79 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	30	30	0	0	0	0	0	16	16	0	24	24
Lanes:	1 1 2 0 0			0 0 0 0 0			0 0 2 1 0			0 0 1 1 1		
Volume Module:												
Base Vol:	156	1316	0	0	0	0	0	718	190	0	286	686
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	156	1316	0	0	0	0	0	718	190	0	286	686
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	146
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	156	1316	0	0	0	0	0	718	190	0	286	832
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	156	1316	0	0	0	0	0	718	190	0	286	832
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	156	1316	0	0	0	0	0	718	190	0	286	832
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	156	1316	0	0	0	0	0	718	190	0	286	832
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.88	0.88	1.00	0.84	0.84
Lanes:	1.00	3.00	0.00	0.00	0.00	0.00	0.00	2.37	0.63	0.00	1.00	2.00
Final Sat.:	1729	5187	0	0	0	0	0	3974	1052	0	1603	3206
Capacity Analysis Module:												
Vol/Sat:	0.09	0.25	0.00	0.00	0.00	0.00	0.00	0.18	0.18	0.00	0.18	0.26
Crit Moves:	****							****			****	
Green/Cycle:	0.38	0.38	0.00	0.00	0.00	0.00	0.00	0.20	0.20	0.00	0.30	0.30
Volume/Cap:	0.24	0.67	0.00	0.00	0.00	0.00	0.00	0.89	0.89	0.00	0.59	0.85
Delay/Veh:	16.7	21.2	0.0	0.0	0.0	0.0	0.0	40.7	40.7	0.0	23.8	31.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.7	21.2	0.0	0.0	0.0	0.0	0.0	40.7	40.7	0.0	23.8	31.5
HCM2k95th:	5	16	0	0	0	0	0	20	20	0	13	23

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #48 16th St/X St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.522
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	14.8
Optimal Cycle:	76	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	35	35	0	0	0	35	35	0	0	0	0
Lanes:		0 0 3 1 0			0 0 0 0 0			2 0 2 0 0			0 0 0 0 0	
Volume Module:												
Base Vol:	0	1631	139	0	0	0	816	777	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1631	139	0	0	0	816	777	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1631	139	0	0	0	816	777	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1631	139	0	0	0	816	777	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1631	139	0	0	0	816	777	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	1.00	1.00	1.00	0.97	0.95	1.00	1.00	1.00	1.00
Lanes:	0.00	3.69	0.31	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00
Final Sat.:	0	6296	537	0	0	0	3686	3610	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.00	0.00	0.00	0.22	0.22	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.46	0.46	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.56	0.56	0.00	0.00	0.00	0.48	0.47	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	15.2	15.2	0.0	0.0	0.0	14.4	14.3	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	15.2	15.2	0.0	0.0	0.0	14.4	14.3	0.0	0.0	0.0	0.0
HCM2k95th:	0	15	15	0	0	0	12	12	0	0	0	0

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Intersection #48 16th St/X St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.522
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	14.9
Optimal Cycle:	76	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	35	35	0	0	0	35	35	0	0	0	0
Lanes:		0 0 3 1 0			0 0 0 0 0			2 0 2 0 0			0 0 0 0 0	
Volume Module:												
Base Vol:	0	1631	139	0	0	0	816	777	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1631	139	0	0	0	816	777	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	64	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1631	139	0	0	0	816	841	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1631	139	0	0	0	816	841	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1631	139	0	0	0	816	841	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1631	139	0	0	0	816	841	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	1.00	1.00	1.00	0.97	0.95	1.00	1.00	1.00	1.00
Lanes:	0.00	3.69	0.31	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00
Final Sat.:	0	6296	537	0	0	0	3686	3610	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.00	0.00	0.00	0.22	0.23	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.46	0.46	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.56	0.56	0.00	0.00	0.00	0.48	0.51	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	15.2	15.2	0.0	0.0	0.0	14.4	14.7	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	15.2	15.2	0.0	0.0	0.0	14.4	14.7	0.0	0.0	0.0	0.0
HCM2k95th:	0	15	15	0	0	0	12	13	0	0	0	0

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2000 HCM Operations Method (Base Volume Alternative)

Intersection #49 29th St/J St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.700
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 39.7
Optimal Cycle: 82 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	18	18	0	26	26	0	0	26	26	0	0	0
Lanes:	0 1 2 0 0			0 1 1 0 0			0 0 2 1 0			1 0 0 0 0		
Volume Module:												
Base Vol:	47	287	0	426	699	0	0	703	396	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	47	287	0	426	699	0	0	703	396	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	47	287	0	426	699	0	0	703	396	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	287	0	426	699	0	0	703	396	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	47	287	0	426	699	0	0	703	396	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.90	1.00	0.93	0.93	1.00	1.00	0.86	0.86	1.00	1.00	1.00
Lanes:	0.42	2.58	0.00	0.76	1.24	0.00	0.00	2.00	1.00	1.00	0.00	0.00
Final Sat.:	725	4426	0	1341	2200	0	0	3271	1636	1900	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.00	0.32	0.32	0.00	0.00	0.21	0.24	0.00	0.00	0.00
Crit Moves:		****		****				****				
Green/Cycle:	0.22	0.22	0.00	0.32	0.32	0.00	0.00	0.32	0.32	0.00	0.00	0.00
Volume/Cap:	0.30	0.30	0.00	1.00	1.00	0.00	0.00	0.68	0.76	0.00	0.00	0.00
Delay/Veh:	27.4	27.4	0.0	55.3	55.3	0.0	0.0	26.7	29.1	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.4	27.4	0.0	55.3	55.3	0.0	0.0	26.7	29.1	0.0	0.0	0.0
HCM2k95th:	6	6	0	35	35	0	0	16	19	0	0	0

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2000 HCM Operations Method (Future Volume Alternative)

Intersection #49 29th St/J St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.704
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 39.7
Optimal Cycle: 82 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	18	18	0	26	26	0	0	26	26	0	0	0
Lanes:	0 1 2 0 0			0 1 1 0 0			0 0 2 1 0			1 0 0 0 0		
Volume Module:												
Base Vol:	47	287	0	426	699	0	0	703	396	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	47	287	0	426	699	0	0	703	396	0	0	0
Added Vol:	0	0	0	0	0	0	0	11	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	287	0	426	699	0	0	714	396	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	47	287	0	426	699	0	0	714	396	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	287	0	426	699	0	0	714	396	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	47	287	0	426	699	0	0	714	396	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.90	1.00	0.93	0.93	1.00	1.00	0.86	0.86	1.00	1.00	1.00
Lanes:	0.42	2.58	0.00	0.76	1.24	0.00	0.00	2.00	1.00	1.00	0.00	0.00
Final Sat.:	725	4426	0	1341	2200	0	0	3271	1636	1900	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.00	0.32	0.32	0.00	0.00	0.22	0.24	0.00	0.00	0.00
Crit Moves:		****		****				****				
Green/Cycle:	0.22	0.22	0.00	0.32	0.32	0.00	0.00	0.32	0.32	0.00	0.00	0.00
Volume/Cap:	0.30	0.30	0.00	1.00	1.00	0.00	0.00	0.69	0.76	0.00	0.00	0.00
Delay/Veh:	27.4	27.4	0.0	55.3	55.3	0.0	0.0	26.9	29.1	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.4	27.4	0.0	55.3	55.3	0.0	0.0	26.9	29.1	0.0	0.0	0.0
HCM2k95th:	6	6	0	35	35	0	0	16	19	0	0	0

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #50 30th St/J St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.485
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 16.6
Optimal Cycle: 79 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	31	31	0	0	0	39	39	0	0	0	0
Lanes:	0 1	1	1 0	0 0	0	0 0	1 0	2	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	0	462	483	0	0	0	242	904	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	462	483	0	0	0	242	904	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	462	483	0	0	0	242	904	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	462	483	0	0	0	242	904	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	462	483	0	0	0	242	904	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.84	0.84	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	0.00	0.00	0.00	1.00	2.00	0.00	0.00	1.00	0.00
Final Sat.:	0	3192	1596	0	0	0	1900	3610	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.30	0.00	0.00	0.00	0.13	0.25	0.00	0.00	0.00	0.00
Crit Moves:			****				****					
Green/Cycle:	0.00	0.39	0.39	0.00	0.00	0.00	0.49	0.49	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.37	0.77	0.00	0.00	0.00	0.26	0.51	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	17.1	24.0	0.0	0.0	0.0	11.8	13.8	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	17.1	24.0	0.0	0.0	0.0	11.8	13.8	0.0	0.0	0.0	0.0
HCM2k95th:	0	8	22	0	0	0	6	14	0	0	0	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #50 30th St/J St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.485
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 16.6
Optimal Cycle: 79 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	31	31	0	0	0	39	39	0	0	0	0
Lanes:	0 1	1	1 0	0 0	0	0 0	1 0	2	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	0	462	483	0	0	0	242	904	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	462	483	0	0	0	242	904	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	11	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	462	483	0	0	0	242	915	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	462	483	0	0	0	242	915	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	462	483	0	0	0	242	915	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	462	483	0	0	0	242	915	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.84	0.84	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	0.00	0.00	0.00	1.00	2.00	0.00	0.00	1.00	0.00
Final Sat.:	0	3192	1596	0	0	0	1900	3610	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.30	0.00	0.00	0.00	0.13	0.25	0.00	0.00	0.00	0.00
Crit Moves:			****				****					
Green/Cycle:	0.00	0.39	0.39	0.00	0.00	0.00	0.49	0.49	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.37	0.77	0.00	0.00	0.00	0.26	0.51	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	17.1	24.0	0.0	0.0	0.0	11.8	13.8	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	17.1	24.0	0.0	0.0	0.0	11.8	13.8	0.0	0.0	0.0	0.0
HCM2k95th:	0	8	22	0	0	0	6	14	0	0	0	0

Downtown Sacramento Traffic Study
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Scenario Report

Scenario: 2030 PM Project

Command: 2030 PM PROJ
Volume: 2030 PM NO Project
Geometry: Cumulative PM
Impact Fee: Default Impact Fee
Trip Generation: PM Add Projects
Trip Distribution: Project
Paths: Project
Routes: Default Routes
Configuration: Default Configuration

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 3rd St/J St

Cycle (sec): 0 Critical Vol./Cap. (X): 0.930
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 40.4
Optimal Cycle: 85 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Permitted			Permitted			Split Phase			Split Phase	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	4	4	4	0	4	4	4	4	4	4
Lanes:	0 0 0 0 2			2 0 1 0 0			0 1 2 1 0			0 1 1 1 0		
Volume Module:												
Base Vol:	0	0	315	421	375	0	2	472	436	10	968	407
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	315	421	375	0	2	472	436	10	968	407
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	315	421	375	0	2	472	436	10	968	407
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	315	421	375	0	2	472	436	10	968	407
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	315	421	375	0	2	472	436	10	968	407
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.67	0.54	0.90	1.00	0.76	0.76	0.76	0.78	0.78	0.78
Lanes:	0.00	0.00	2.00	2.00	1.00	0.00	0.01	2.99	1.00	0.02	2.10	0.88
Final Sat.:	0	0	2558	2067	1710	0	18	4314	1444	32	3119	1311
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.12	0.20	0.22	0.00	0.11	0.11	0.30	0.31	0.31	0.31
Crit Moves:					****				****			****
Green/Cycle:	0.00	0.00	0.24	0.24	0.24	0.00	0.32	0.32	0.32	0.33	0.33	0.33
Volume/Cap:	0.00	0.00	0.52	0.86	0.93	0.00	0.34	0.34	0.93	0.93	0.93	0.93
Delay/Veh:	0.0	0.0	31.5	49.3	62.1	0.0	22.1	22.1	43.9	39.1	39.1	39.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	31.5	49.3	62.1	0.0	22.1	22.1	43.9	39.1	39.1	39.1
HCM2k95th:	0	0	9	20	23	0	7	7	26	27	27	27

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 3rd St/J St

Cycle (sec): 0 Critical Vol./Cap. (X): 0.990
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 47.2
Optimal Cycle: 85 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Permitted			Permitted			Split Phase			Split Phase	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	4	4	4	0	4	4	4	4	4	4
Lanes:	0 0 0 0 2			2 0 1 0 0			0 1 2 1 0			0 1 1 1 0		
Volume Module:												
Base Vol:	0	0	315	421	375	0	2	472	436	10	968	407
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	315	421	375	0	2	472	436	10	968	407
Added Vol:	0	0	0	0	8	0	0	149	35	0	129	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	315	421	383	0	2	621	471	10	1097	407
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	315	421	383	0	2	621	471	10	1097	407
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	315	421	383	0	2	621	471	10	1097	407
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	315	421	383	0	2	621	471	10	1097	407
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.67	0.54	0.90	1.00	0.77	0.77	0.77	0.79	0.79	0.79
Lanes:	0.00	0.00	2.00	2.00	1.00	0.00	0.01	2.99	1.00	0.02	2.17	0.81
Final Sat.:	0	0	2558	2070	1710	0	14	4351	1455	30	3247	1205
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.12	0.20	0.22	0.00	0.14	0.14	0.32	0.34	0.34	0.34
Crit Moves:					****				****			****
Green/Cycle:	0.00	0.00	0.23	0.23	0.23	0.00	0.33	0.33	0.33	0.34	0.34	0.34
Volume/Cap:	0.00	0.00	0.54	0.90	0.99	0.00	0.44	0.44	0.99	0.99	0.99	0.99
Delay/Veh:	0.0	0.0	32.7	54.8	76.2	0.0	23.0	23.0	53.3	48.7	48.7	48.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	32.7	54.8	76.2	0.0	23.0	23.0	53.3	48.7	48.7	48.7
HCM2k95th:	0	0	9	21	26	0	9	9	30	32	32	32

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 3rd St/L St

Cycle (sec):	70	Critical Vol./Cap. (X):	1.001
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	64.5
Optimal Cycle:	85	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	0	0	20	20	0	0	0	40	40	0
Lanes:	1 0 2 0 0			0 0 2 1 0			0 0 0 0 0			1 1 1 0 1		
Volume Module:												
Base Vol:	82	70	0	0	824	437	0	0	0	447	1492	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	82	70	0	0	824	437	0	0	0	447	1492	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	82	70	0	0	824	437	0	0	0	447	1492	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	70	0	0	824	437	0	0	0	447	1492	190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	82	70	0	0	824	437	0	0	0	447	1492	190
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	1.00	1.00	0.78	0.78	1.00	1.00	1.00	0.73	0.73	0.77
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	2.00	1.00
Final Sat.:	1625	3249	0	0	2950	1475	0	0	0	1381	2762	1454
Capacity Analysis Module:												
Vol/Sat:	0.05	0.02	0.00	0.00	0.28	0.30	0.00	0.00	0.00	0.32	0.54	0.13
Crit Moves:	****					****					****	
Green/Cycle:	0.13	0.38	0.00	0.00	0.25	0.25	0.00	0.00	0.00	0.51	0.51	0.51
Volume/Cap:	0.40	0.06	0.00	0.00	1.10	1.17	0.00	0.00	0.00	0.64	1.07	0.26
Delay/Veh:	37.4	15.6	0.0	0.0	89.1	116.2	0.0	0.0	0.0	15.3	61.1	11.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.4	15.6	0.0	0.0	89.1	116.2	0.0	0.0	0.0	15.3	61.1	11.9
HCM2k95th:	5	1	0	0	31	35	0	0	0	18	54	6

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 3rd St/L St

Cycle (sec):	70	Critical Vol./Cap. (X):	1.120
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	108.6
Optimal Cycle:	85	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	30	0	0	20	20	0	0	0	40	40	0
Lanes:	1 0 2 0 0			0 0 2 1 0			0 0 0 0 0			1 1 1 0 1		
Volume Module:												
Base Vol:	82	70	0	0	824	437	0	0	0	447	1492	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	82	70	0	0	824	437	0	0	0	447	1492	190
Added Vol:	0	0	0	0	42	0	0	0	0	36	293	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	82	70	0	0	866	437	0	0	0	483	1785	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	82	70	0	0	866	437	0	0	0	483	1785	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	70	0	0	866	437	0	0	0	483	1785	190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	82	70	0	0	866	437	0	0	0	483	1785	190
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	1.00	1.00	0.78	0.78	1.00	1.00	1.00	0.73	0.73	0.77
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	2.00	1.00
Final Sat.:	1625	3249	0	0	2957	1478	0	0	0	1381	2762	1454
Capacity Analysis Module:												
Vol/Sat:	0.05	0.02	0.00	0.00	0.29	0.30	0.00	0.00	0.00	0.35	0.65	0.13
Crit Moves:	****					****					****	
Green/Cycle:	0.13	0.38	0.00	0.00	0.25	0.25	0.00	0.00	0.00	0.51	0.51	0.51
Volume/Cap:	0.40	0.06	0.00	0.00	1.16	1.17	0.00	0.00	0.00	0.69	1.28	0.26
Delay/Veh:	37.4	15.6	0.0	0.0	110	114.9	0.0	0.0	0.0	16.0	148	11.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.4	15.6	0.0	0.0	110	114.9	0.0	0.0	0.0	16.0	148	11.9
HCM2k95th:	5	1	0	0	35	35	0	0	0	20	89	6

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--------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2030 Cumulative Conditions
                                 PM Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #3 3rd St/Capitol Mall
********************************************************************************
Cycle (sec):         70              Critical Vol./Cap. (X):        0.699
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):       24.4
Optimal Cycle:       79              Level Of Service:                 C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected       Prot+Permit
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   29   29     0   14   21     0   20   27     0
Lanes:        0  0  0  0  0   0  1  1  1  1   1  0  3  0  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  138 1114   210  176  521     0  361  637    98
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  138 1114   210  176  521     0  361  637    98
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  138 1114   210  176  521     0  361  637    98
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  138 1114   210  176  521     0  361  637    98
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  138 1114   210  176  521     0  361  637    98
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.78 0.78  0.78 0.86 0.82  1.00 0.86 0.84  0.84
Lanes:       0.00 0.00  0.00 0.33 2.67  1.00 1.00 3.00  0.00 1.00 1.73  0.27
Final Sat.:     0    0     0  492 3973  1488 1625 4668     0 1625 2759   425
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.28 0.28  0.14 0.11 0.11  0.00 0.22 0.23  0.23
Crit Moves:                  ****            ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.37 0.37  0.37 0.18 0.27  0.00 0.56 0.34  0.34
Volume/Cap:  0.00 0.00  0.00 0.76 0.76  0.38 0.61 0.42  0.00 0.62 0.68  0.68
Delay/Veh:    0.0  0.0   0.0 24.9 24.9  18.7 39.3 25.0   0.0 15.4 25.6  25.6
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 24.9 24.9  18.7 39.3 25.0   0.0 15.4 25.6  25.6
HCM2k95th:      0    0     0   19   19     8   10    8     0   13   16    16
********************************************************************************
```



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--------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2030 Cumulative Conditions
                                 PM Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #3 3rd St/Capitol Mall
********************************************************************************
Cycle (sec):         70              Critical Vol./Cap. (X):        0.863
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):       28.0
Optimal Cycle:       79              Level Of Service:                 C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected       Prot+Permit
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   29   29     0   14   21     0   20   27     0
Lanes:        0  0  0  0  0   0  1  1  1  1   1  0  3  0  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  138 1114   210  176  521     0  361  637    98
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  138 1114   210  176  521     0  361  637    98
Added Vol:      0    0     0    0   78     0    0  105     0  150   56     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0  138 1192   210  176  626     0  511  693    98
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  138 1192   210  176  626     0  511  693    98
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  138 1192   210  176  626     0  511  693    98
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  138 1192   210  176  626     0  511  693    98
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.79 0.79  0.79 0.86 0.82  1.00 0.57 0.84  0.84
Lanes:       0.00 0.00  0.00 0.31 2.69  1.00 1.00 3.00  0.00 1.00 1.75  0.25
Final Sat.:     0    0     0  465 4018  1494 1625 4668     0 1092 2792   395
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.30 0.30  0.14 0.11 0.13  0.00 0.47 0.25  0.25
Crit Moves:                  ****                              ****
Green/Cycle: 0.00 0.00  0.00 0.37 0.37  0.37 0.18 0.27  0.00 0.57 0.34  0.34
Volume/Cap:  0.00 0.00  0.00 0.81 0.81  0.38 0.61 0.50  0.00 0.92 0.73  0.73
Delay/Veh:    0.0  0.0   0.0 26.3 26.3  18.7 39.3 26.1   0.0 36.3 27.0  27.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 26.3 26.3  18.7 39.3 26.1   0.0 36.3 27.0  27.0
HCM2k95th:      0    0     0   21   21     8   10   10     0   27   17    17
********************************************************************************
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-------------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                      2030 Cumulative Conditions
                             PM Peak Hour
-------------------------------------------------------------------------------
                   Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #4 3rd St/N St
*******************************************************************************
Cycle (sec):         70              Critical Vol./Cap. (X):        0.597
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):       22.6
Optimal Cycle:       79              Level Of Service:                  C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase       Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0   16    16    36   36     0     0   18    18     0    0     0
Lanes:       0  0  0  1  0    0  1  2  0  0    0  0  1  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0  117    25   303 1183     0     0  296   253     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0  117    25   303 1183     0     0  296   253     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0  117    25   303 1183     0     0  296   253     0    0     0
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   0  117    25   303 1183     0     0  296   253     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0  117    25   303 1183     0     0  296   253     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.98  0.98  0.90 0.90  1.00  1.00 0.88  0.88  1.00 1.00  1.00
Lanes:       0.00 0.82  0.18  0.61 2.39  0.00  0.00 1.08  0.92  0.00 0.00  0.00
Final Sat.:    0 1528   326  1047 4088     0     0 1812  1549     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.08  0.08  0.29 0.29  0.00  0.00 0.16  0.16  0.00 0.00  0.00
Crit Moves:       ****        ****                  ****
Green/Cycle: 0.00 0.20  0.20  0.46 0.46  0.00  0.00 0.23  0.23  0.00 0.00  0.00
Volume/Cap:  0.00 0.38  0.38  0.64 0.64  0.00  0.00 0.72  0.72  0.00 0.00  0.00
Delay/Veh:    0.0 30.1  30.1  17.8 17.8   0.0   0.0 33.8  33.8   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 30.1  30.1  17.8 17.8   0.0   0.0 33.8  33.8   0.0  0.0   0.0
HCM2k95th:     0    7     7    16   16     0     0   14    14     0    0     0
*******************************************************************************
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-------------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                      2030 Cumulative Conditions
                             PM Peak Hour
-------------------------------------------------------------------------------
                   Level Of Service Computation Report
         2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #4 3rd St/N St
*******************************************************************************
Cycle (sec):         70              Critical Vol./Cap. (X):        0.655
Loss Time (sec):      9 (Y+R =  4 sec) Average Delay (sec/veh):       23.8
Optimal Cycle:       79              Level Of Service:                  C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase       Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0   16    16    36   36     0     0   18    18     0    0     0
Lanes:       0  0  0  1  0    0  1  2  0  0    0  0  1  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0  117    25   303 1183     0     0  296   253     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0  117    25   303 1183     0     0  296   253     0    0     0
Added Vol:     0    0     0    35  193     0     0   23     0     0    0     0
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   0  117    25   338 1376     0     0  319   253     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    0  117    25   338 1376     0     0  319   253     0    0     0
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   0  117    25   338 1376     0     0  319   253     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    0  117    25   338 1376     0     0  319   253     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.98  0.98  0.90 0.90  1.00  1.00 0.89  0.89  1.00 1.00  1.00
Lanes:       0.00 0.82  0.18  0.59 2.41  0.00  0.00 1.12  0.88  0.00 0.00  0.00
Final Sat.:    0 1528   326  1013 4122     0     0 1880  1491     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.08  0.08  0.33 0.33  0.00  0.00 0.17  0.17  0.00 0.00  0.00
Crit Moves:       ****              ****            ****
Green/Cycle: 0.00 0.20  0.20  0.46 0.46  0.00  0.00 0.23  0.23  0.00 0.00  0.00
Volume/Cap:  0.00 0.38  0.38  0.73 0.73  0.00  0.00 0.74  0.74  0.00 0.00  0.00
Delay/Veh:    0.0 30.1  30.1  19.6 19.6   0.0   0.0 34.8  34.8   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 30.1  30.1  19.6 19.6   0.0   0.0 34.8  34.8   0.0  0.0   0.0
HCM2k95th:     0    7     7    20   20     0     0   15    15     0    0     0
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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #5 3rd St/P St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):         0.916
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        28.7
Optimal Cycle:        79              Level Of Service:                   C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0    0   19   19    0    0    0   31   31    0
Lanes:        0  0  0  0  0   0  0  1  1  2   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0    0  744  833    0    0    0  170 2753    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0    0    0    0  744  833    0    0    0  170 2753    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0    0    0    0  744  833    0    0    0  170 2753    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0    0    0    0  744  833    0    0    0  170 2753    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0    0    0    0  744  833    0    0    0  170 2753    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 1.00 0.87 0.77 1.00 1.00 1.00 0.91 0.91 1.00
Lanes:       0.00 0.00 0.00 0.00 1.76 2.24 0.00 0.00 0.00 0.17 2.83 0.00
Final Sat.:     0    0    0    0 2926 3276    0    0    0  302 4885    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.00 0.25 0.25 0.00 0.00 0.00 0.56 0.56 0.00
Crit Moves:                       ****                     ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.34 0.34 0.00 0.00 0.00 0.55 0.55 0.00
Volume/Cap:  0.00 0.00 0.00 0.00 0.75 0.75 0.00 0.00 0.00 1.02 1.02 0.00
Delay/Veh:    0.0  0.0  0.0  0.0 18.9 18.9  0.0  0.0  0.0 34.0 34.0  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  0.0 18.9 18.9  0.0  0.0  0.0 34.0 34.0  0.0
HCM2k95th:      0    0    0    0   15   14    0    0    0   35   35    0
********************************************************************************
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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #5 3rd St/P St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):         0.984
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        39.2
Optimal Cycle:        85              Level Of Service:                   D
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0    0   19   19    0    0    0   31   31    0
Lanes:        0  0  0  0  0   0  0  1  1  2   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0    0  744  833    0    0    0  170 2753    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0    0    0    0  744  833    0    0    0  170 2753    0
Added Vol:      0    0    0    0    0  193    0    0    0    0  130    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:    0    0    0    0  744 1026    0    0    0  170 2883    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0    0    0    0  744 1026    0    0    0  170 2883    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0    0    0    0  744 1026    0    0    0  170 2883    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0    0    0    0  744 1026    0    0    0  170 2883    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 1.00 0.87 0.76 1.00 1.00 1.00 0.91 0.91 1.00
Lanes:       0.00 0.00 0.00 0.00 1.56 2.44 0.00 0.00 0.00 0.17 2.83 0.00
Final Sat.:     0    0    0    0 2568 3541    0    0    0  289 4898    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.00 0.29 0.29 0.00 0.00 0.00 0.59 0.59 0.00
Crit Moves:                       ****                     ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.34 0.34 0.00 0.00 0.00 0.55 0.55 0.00
Volume/Cap:  0.00 0.00 0.00 0.00 0.85 0.85 0.00 0.00 0.00 1.06 1.06 0.00
Delay/Veh:    0.0  0.0  0.0  0.0 21.9 21.9  0.0  0.0  0.0 49.1 49.1  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  0.0 21.9 21.9  0.0  0.0  0.0 49.1 49.1  0.0
HCM2k95th:      0    0    0    0   19   18    0    0    0   40   40    0
********************************************************************************
```

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------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                PM Peak Hour
------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #6 3rd St/Q St
******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.565
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       11.2
Optimal Cycle:        56               Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0    0    19   19    0     0   31   31     0    0    0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  3  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0   267  683    0     0  839  523     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0   267  683    0     0  839  523     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0   267  683    0     0  839  523     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0   267  683    0     0  839  523     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0   267  683    0     0  839  523     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.91 0.91 1.00  1.00 0.86 0.86  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  0.84 2.16 0.00  0.00 3.00 1.00  0.00 0.00 0.00
Final Sat.:     0    0    0  1458 3729    0     0 4886 1629     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.18 0.18 0.00  0.00 0.17 0.32  0.00 0.00 0.00
Crit Moves:                  ****                       ****
Green/Cycle: 0.00 0.00 0.00  0.34 0.34 0.00  0.00 0.55 0.55  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.54 0.54 0.00  0.00 0.31 0.58  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0  16.2 16.2  0.0   0.0  6.9  9.3   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  16.2 16.2  0.0   0.0  6.9  9.3   0.0  0.0  0.0
HCM2k95th:      0    0    0     9    9    0     0    6   12     0    0    0
******************************************************************************
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------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                PM Peak Hour
------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #6 3rd St/Q St
******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.563
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       11.1
Optimal Cycle:        56               Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0    0    19   19    0     0   31   31     0    0    0
Lanes:       0  0  0  0  0   0  1  2  0  0   0  0  3  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0   267  683    0     0  839  523     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0   267  683    0     0  839  523     0    0    0
Added Vol:      0    0    0     0    0    0     0  107    0     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    0    0    0   267  683    0     0  946  523     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0   267  683    0     0  946  523     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0   267  683    0     0  946  523     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0   267  683    0     0  946  523     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.91 0.91 1.00  1.00 0.86 0.86  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  0.84 2.16 0.00  0.00 3.00 1.00  0.00 0.00 0.00
Final Sat.:     0    0    0  1458 3729    0     0 4912 1637     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.18 0.18 0.00  0.00 0.19 0.32  0.00 0.00 0.00
Crit Moves:                  ****                       ****
Green/Cycle: 0.00 0.00 0.00  0.34 0.34 0.00  0.00 0.55 0.55  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.54 0.54 0.00  0.00 0.35 0.58  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0  16.2 16.2  0.0   0.0  7.1  9.2   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  16.2 16.2  0.0   0.0  7.1  9.2   0.0  0.0  0.0
HCM2k95th:      0    0    0     9    9    0     0    7   12     0    0    0
******************************************************************************
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----------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                       2030 Cumulative Conditions
                              PM Peak Hour
----------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
**********************************************************************************
Intersection #7 5th St/I St
**********************************************************************************
Cycle (sec):       100              Critical Vol./Cap. (X):        0.815
Loss Time (sec):     6 (Y+R =  4 sec) Average Delay (sec/veh):       72.7
Optimal Cycle:     106              Level Of Service:                  E
**********************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Permitted        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    21   21    0     0    0   21     0    0    0     0   79   79
Lanes:        2  0  2  0  0    0  0  0  0  2    0  0  0  0  0    0  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     419  954    0     0    0   46     0    0    0     0 2877   70
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:  419  954    0     0    0   46     0    0    0     0 2877   70
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:   419  954    0     0    0   46     0    0    0     0 2877   70
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:  419  954    0     0    0   46     0    0    0     0 2877   70
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:   419  954    0     0    0   46     0    0    0     0 2877   70
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  0.54 0.86 1.00  1.00 1.00 0.67  1.00 1.00 1.00  1.00 0.82 0.82
Lanes:       2.00 2.00 0.00  0.00 0.00 2.00  0.00 0.00 0.00  0.00 3.90 0.10
Final Sat.:  2063 3249    0     0    0 2558     0    0    0     0 6052  147
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.20 0.29 0.00  0.00 0.00 0.02  0.00 0.00 0.00  0.00 0.48 0.48
Crit Moves:       ****       ****                                    ****
Green/Cycle: 0.20 0.20 0.00  0.00 0.00 0.20  0.00 0.00 0.00  0.00 0.75 0.75
Volume/Cap:  1.03 1.48 0.00  0.00 0.00 0.09  0.00 0.00 0.00  0.00 0.64 0.64
Delay/Veh:   93.6  268  0.0   0.0  0.0 35.1   0.0  0.0  0.0   0.0  7.2  7.2
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:  93.6  268  0.0   0.0  0.0 35.1   0.0  0.0  0.0   0.0  7.2  7.2
HCM2k95th:     17   56    0     0    0    2     0    0    0     0   20   20
**********************************************************************************
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----------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                       2030 Cumulative Conditions
                              PM Peak Hour
----------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
**********************************************************************************
Intersection #7 5th St/I St
**********************************************************************************
Cycle (sec):       100              Critical Vol./Cap. (X):        0.844
Loss Time (sec):     6 (Y+R =  4 sec) Average Delay (sec/veh):       78.8
Optimal Cycle:     106              Level Of Service:                  E
**********************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Permitted        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    21   21    0     0    0   21     0    0    0     0   79   79
Lanes:        2  0  2  0  0    0  0  0  0  2    0  0  0  0  0    0  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     419  954    0     0    0   46     0    0    0     0 2877   70
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:  419  954    0     0    0   46     0    0    0     0 2877   70
Added Vol:     64   11    0     0    0    0     0    0    0     0  151    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:  483  965    0     0    0   46     0    0    0     0 3028   70
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:   483  965    0     0    0   46     0    0    0     0 3028   70
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:  483  965    0     0    0   46     0    0    0     0 3028   70
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:   483  965    0     0    0   46     0    0    0     0 3028   70
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  0.54 0.86 1.00  1.00 1.00 0.67  1.00 1.00 1.00  1.00 0.82 0.82
Lanes:       2.00 2.00 0.00  0.00 0.00 2.00  0.00 0.00 0.00  0.00 3.91 0.09
Final Sat.:  2063 3249    0     0    0 2558     0    0    0     0 6066  140
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.23 0.30 0.00  0.00 0.00 0.02  0.00 0.00 0.00  0.00 0.50 0.50
Crit Moves:       ****       ****                                    ****
Green/Cycle: 0.20 0.20 0.00  0.00 0.00 0.20  0.00 0.00 0.00  0.00 0.75 0.75
Volume/Cap:  1.18 1.50 0.00  0.00 0.00 0.09  0.00 0.00 0.00  0.00 0.67 0.67
Delay/Veh:  146.7  275  0.0   0.0  0.0 35.1   0.0  0.0  0.0   0.0  7.7  7.7
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh: 146.7  275  0.0   0.0  0.0 35.1   0.0  0.0  0.0   0.0  7.7  7.7
HCM2k95th:     23   57    0     0    0    2     0    0    0     0   22   22
**********************************************************************************
```

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 5th St/J St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.602
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	13.0
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	25	25	0	0	0	25	25	25	0	0	0
Lanes:	0 0 1 1 1			0 0 0 0 0			1 1 3 0 1			0 0 0 0 0		
Volume Module:												
Base Vol:	0	635	434	0	0	0	662	1349	243	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	635	434	0	0	0	662	1349	243	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	635	434	0	0	0	662	1349	243	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	635	434	0	0	0	662	1349	243	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	635	434	0	0	0	662	1349	243	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.80	0.80	1.00	1.00	1.00	0.70	0.70	0.77	1.00	1.00	1.00
Lanes:	0.00	1.78	1.22	0.00	0.00	0.00	1.65	3.35	1.00	0.00	0.00	0.00
Final Sat.:	0	2718	1858	0	0	0	2177	4436	1454	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.23	0.00	0.00	0.00	0.30	0.30	0.17	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.45	0.45	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.52	0.52	0.00	0.00	0.00	0.68	0.68	0.37	0.00	0.00	0.00
Delay/Veh:	0.0	12.2	12.2	0.0	0.0	0.0	13.6	13.6	12.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.2	12.2	0.0	0.0	0.0	13.6	13.6	12.0	0.0	0.0	0.0
HCM2k95th:	0	9	9	0	0	0	14	14	7	0	0	0

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 5th St/J St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.689
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	14.3
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	25	25	0	0	0	25	25	25	0	0	0
Lanes:	0 0 1 1 1			0 0 0 0 0			1 1 3 0 1			0 0 0 0 0		
Volume Module:												
Base Vol:	0	635	434	0	0	0	662	1349	243	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	635	434	0	0	0	662	1349	243	0	0	0
Added Vol:	0	75	83	0	0	0	0	278	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	710	517	0	0	0	662	1627	243	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	710	517	0	0	0	662	1627	243	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	710	517	0	0	0	662	1627	243	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	710	517	0	0	0	662	1627	243	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.80	0.80	1.00	1.00	1.00	0.70	0.70	0.77	1.00	1.00	1.00
Lanes:	0.00	1.74	1.26	0.00	0.00	0.00	1.45	3.55	1.00	0.00	0.00	0.00
Final Sat.:	0	2642	1924	0	0	0	1913	4701	1454	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.00	0.00	0.00	0.35	0.35	0.17	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.45	0.45	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.60	0.60	0.00	0.00	0.00	0.78	0.78	0.37	0.00	0.00	0.00
Delay/Veh:	0.0	13.1	13.1	0.0	0.0	0.0	15.2	15.2	12.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.1	13.1	0.0	0.0	0.0	15.2	15.2	12.0	0.0	0.0	0.0
HCM2k95th:	0	11	11	0	0	0	17	17	7	0	0	0

Downtown Sacramento Traffic Study
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2000 HCM Operations Method (Base Volume Alternative)

Intersection #9 5th St/L St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.739
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 22.7
Optimal Cycle: 79 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	45	45	0	0	0	45	0	0	0	0	25	25
Lanes:	1 0 3 0 0			0 0 0 0 2			0 0 0 0 0			0 0 3 1 0		
Volume Module:												
Base Vol:	482	1065	0	0	0	172	0	0	0	0	1631	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	482	1065	0	0	0	172	0	0	0	0	1631	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	482	1065	0	0	0	172	0	0	0	0	1631	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	482	1065	0	0	0	172	0	0	0	0	1631	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	482	1065	0	0	0	172	0	0	0	0	1631	140
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.69	0.82	1.00	1.00	1.00	0.67	1.00	1.00	1.00	1.00	0.81	0.81
Lanes:	1.00	3.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	3.68	0.32
Final Sat.:	1315	4668	0	0	0	2558	0	0	0	0	5664	486
Capacity Analysis Module:												
Vol/Sat:	0.37	0.23	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.29	0.29
Crit Moves:	****										****	
Green/Cycle:	0.57	0.57	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.32	0.32
Volume/Cap:	0.64	0.40	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.91	0.91
Delay/Veh:	15.8	9.9	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	33.8	33.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.8	9.9	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	33.8	33.8
HCM2k95th:	19	10	0	0	0	2	0	0	0	0	24	24

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 5th St/L St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.833
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 54.7
Optimal Cycle: 79 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	45	45	0	0	0	45	0	0	0	0	25	25
Lanes:	1 0 3 0 0			0 0 0 0 2			0 0 0 0 0			0 0 3 1 0		
Volume Module:												
Base Vol:	482	1065	0	0	0	172	0	0	0	0	1631	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	482	1065	0	0	0	172	0	0	0	0	1631	140
Added Vol:	21	94	0	0	0	0	0	0	0	0	350	64
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	503	1159	0	0	0	172	0	0	0	0	1981	204
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	503	1159	0	0	0	172	0	0	0	0	1981	204
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	503	1159	0	0	0	172	0	0	0	0	1981	204
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	503	1159	0	0	0	172	0	0	0	0	1981	204
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.69	0.82	1.00	1.00	1.00	0.67	1.00	1.00	1.00	1.00	0.81	0.81
Lanes:	1.00	3.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	3.63	0.37
Final Sat.:	1315	4668	0	0	0	2558	0	0	0	0	5564	573
Capacity Analysis Module:												
Vol/Sat:	0.38	0.25	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.36	0.36
Crit Moves:	****										****	
Green/Cycle:	0.57	0.57	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.32	0.32
Volume/Cap:	0.67	0.44	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	1.13	1.13
Delay/Veh:	16.6	10.3	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	90.6	90.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.6	10.3	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	90.6	90.6
HCM2k95th:	20	11	0	0	0	2	0	0	0	0	40	40

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-------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
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                              PM Peak Hour
-------------------------------------------------------------------------------
                   Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #10 5th St/Capitol Mall
*******************************************************************************
Cycle (sec):          70               Critical Vol./Cap. (X):        0.276
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        21.5
Optimal Cycle:        76               Level Of Service:                 C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Protected        Protected        Protected        Protected
Rights:            Include          Include          Include          Include
Min. Green:    35   35    0    0    0    0   17   35    0    0   18   18
Lanes:        2  0  2  1  0   0  0  0  0  0   2  0  2  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     410  867    64    0    0     0  558  420     0    0  625    60
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:  410  867    64    0    0     0  558  420     0    0  625    60
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:   410  867    64    0    0     0  558  420     0    0  625    60
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:  410  867    64    0    0     0  558  420     0    0  625    60
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:   410  867    64    0    0     0  558  420     0    0  625    60
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  0.86 0.81  0.81 1.00 1.00  1.00 0.83 0.86  1.00 1.00 0.81  0.81
Lanes:       2.00 2.79  0.21 0.00 0.00  0.00 2.00 2.00  0.00 0.00 2.74  0.26
Final Sat.:  3284 4304   318    0    0     0 3152 3249     0    0 4204   404
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.12 0.20  0.20 0.00 0.00  0.00 0.18 0.13  0.00 0.00 0.15  0.15
Crit Moves:  ****                                 ****       ****
Green/Cycle: 0.46 0.46  0.46 0.00 0.00  0.00 0.22 0.46  0.00 0.00 0.24  0.24
Volume/Cap:  0.27 0.44  0.44 0.00 0.00  0.00 0.79 0.28  0.00 0.00 0.63  0.63
Delay/Veh:   13.1 14.5  14.5  0.0  0.0   0.0 36.7 13.2   0.0  0.0 28.7  28.7
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:  13.1 14.5  14.5  0.0  0.0   0.0 36.7 13.2   0.0  0.0 28.7  28.7
HCM2k95th:      7   10    10    0    0     0   16    7     0    0   11    11
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-------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                       2030 Cumulative Conditions
                              PM Peak Hour
-------------------------------------------------------------------------------
                   Level Of Service Computation Report
         2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #10 5th St/Capitol Mall
*******************************************************************************
Cycle (sec):          70               Critical Vol./Cap. (X):        0.317
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        23.4
Optimal Cycle:        76               Level Of Service:                 C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Protected        Protected        Protected        Protected
Rights:            Include          Include          Include          Include
Min. Green:    35   35    0    0    0    0   17   35    0    0   18   18
Lanes:        2  0  2  1  0   0  0  0  0  0   2  0  2  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     410  867    64    0    0     0  558  420     0    0  625    60
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:  410  867    64    0    0     0  558  420     0    0  625    60
Added Vol:     61   70    31    0    0     0   45   60     0    0  159     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:  471  937    95    0    0     0  603  480     0    0  784    60
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:   471  937    95    0    0     0  603  480     0    0  784    60
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:  471  937    95    0    0     0  603  480     0    0  784    60
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:   471  937    95    0    0     0  603  480     0    0  784    60
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  0.86 0.81  0.81 1.00 1.00  1.00 0.83 0.86  1.00 1.00 0.81  0.81
Lanes:       2.00 2.72  0.28 0.00 0.00  0.00 2.00 2.00  0.00 0.00 2.79  0.21
Final Sat.:  3271 4179   424    0    0     0 3152 3249     0    0 4289   328
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.14 0.22  0.22 0.00 0.00  0.00 0.19 0.15  0.00 0.00 0.18  0.18
Crit Moves:  ****                                 ****       ****
Green/Cycle: 0.46 0.46  0.46 0.00 0.00  0.00 0.22 0.46  0.00 0.00 0.24  0.24
Volume/Cap:  0.31 0.49  0.49 0.00 0.00  0.00 0.86 0.32  0.00 0.00 0.77  0.77
Delay/Veh:   13.5 15.1  15.1  0.0  0.0   0.0 41.0 13.5   0.0  0.0 32.4  32.4
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:  13.5 15.1  15.1  0.0  0.0   0.0 41.0 13.5   0.0  0.0 32.4  32.4
HCM2k95th:      8   11    11    0    0     0   18    8     0    0   15    15
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------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                       2030 Cumulative Conditions
                              PM Peak Hour
------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #11 5th St/N St
******************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.473
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       14.8
Optimal Cycle:        76              Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   35    35    0    0     0   35   35     0    0    0     0
Lanes:       0  0  2  1  0    0  0  0  0  0    0  1  2  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  988   124    0    0     0   72 1057     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0  988   124    0    0     0   72 1057     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0  988   124    0    0     0   72 1057     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0  988   124    0    0     0   72 1057     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0  988   124    0    0     0   72 1057     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.89  0.89 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.67  0.33 0.00 0.00  0.00 0.19 2.81  0.00 0.00 0.00  0.00
Final Sat.:     0 4530   569    0    0     0  331 4856     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.22  0.22 0.00 0.00  0.00 0.22 0.22  0.00 0.00 0.00  0.00
Crit Moves:       ****                     ****
Green/Cycle: 0.00 0.46  0.46 0.00 0.00  0.00 0.46 0.46  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.47  0.47 0.00 0.00  0.00 0.47 0.47  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 14.8  14.8  0.0  0.0   0.0 14.8 14.8   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 14.8  14.8  0.0  0.0   0.0 14.8 14.8   0.0  0.0  0.0   0.0
HCM2k95th:      0   11    11    0    0     0   12   12     0    0    0     0
******************************************************************************
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------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                       2030 Cumulative Conditions
                              PM Peak Hour
------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #11 5th St/N St
******************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.529
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       15.5
Optimal Cycle:        76              Level Of Service:                  B
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   35    35    0    0     0   35   35     0    0    0     0
Lanes:       0  0  2  1  0    0  0  0  0  0    0  1  2  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  988   124    0    0     0   72 1057     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0  988   124    0    0     0   72 1057     0    0    0     0
Added Vol:      0  111    34    0    0     0   70   45     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0 1099   158    0    0     0  142 1102     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0 1099   158    0    0     0  142 1102     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0 1099   158    0    0     0  142 1102     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0 1099   158    0    0     0  142 1102     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.89  0.89 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.62  0.38 0.00 0.00  0.00 0.34 2.66  0.00 0.00 0.00  0.00
Final Sat.:     0 4449   640    0    0     0  592 4595     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.25  0.25 0.00 0.00  0.00 0.24 0.24  0.00 0.00 0.00  0.00
Crit Moves:       ****                     ****
Green/Cycle: 0.00 0.46  0.46 0.00 0.00  0.00 0.46 0.46  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.54  0.54 0.00 0.00  0.00 0.52 0.52  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 15.6  15.6  0.0  0.0   0.0 15.4 15.4   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 15.6  15.6  0.0  0.0   0.0 15.4 15.4   0.0  0.0  0.0   0.0
HCM2k95th:      0   13    13    0    0     0   13   13     0    0    0     0
******************************************************************************
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-----------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                     2030 Cumulative Conditions
                            PM Peak Hour
-----------------------------------------------------------------------------
                  Level Of Service Computation Report
        2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #12 5th St/P St
*****************************************************************************
Cycle (sec):          50             Critical Vol./Cap. (X):        0.876
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):     18.4
Optimal Cycle:        66             Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    21   21    0    0    0    0    0    0    0    0   29   29
Lanes:        0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      531  714    0    0    0    0    0    0    0    0 2001  402
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   531  714    0    0    0    0    0    0    0    0 2001  402
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    531  714    0    0    0    0    0    0    0    0 2001  402
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   531  714    0    0    0    0    0    0    0    0 2001  402
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    531  714    0    0    0    0    0    0    0    0 2001  402
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:   0.91 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.89 0.89
Lanes:        1.00 2.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.50 0.50
Final Sat.:   1729 3458    0    0    0    0    0    0    0    0 4211  846
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.31 0.21 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.48 0.48
Crit Moves:   ****                                                ****
Green/Cycle:  0.38 0.38 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.52 0.52
Volume/Cap:   0.82 0.55 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.92 0.92
Delay/Veh:    20.8 14.8  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 18.9 18.9
User DelAdj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   20.8 14.8  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 18.9 18.9
HCM2k95th:      16   10    0    0    0    0    0    0    0    0   29   29
*****************************************************************************
```



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-----------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                     2030 Cumulative Conditions
                            PM Peak Hour
-----------------------------------------------------------------------------
                  Level Of Service Computation Report
       2000 HCM Operations Method (Future Volume Alternative)
*****************************************************************************
Intersection #12 5th St/P St
*****************************************************************************
Cycle (sec):          50             Critical Vol./Cap. (X):        0.917
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):     24.7
Optimal Cycle:        79             Level Of Service:                  C
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    21   21    0    0    0    0    0    0    0    0   29   29
Lanes:        0  1  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      531  714    0    0    0    0    0    0    0    0 2001  402
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   531  714    0    0    0    0    0    0    0    0 2001  402
Added Vol:       0   93    0    0    0    0    0    0    0    0  130   52
PasserByVol:     0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:   531  807    0    0    0    0    0    0    0    0 2131  454
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    531  807    0    0    0    0    0    0    0    0 2131  454
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   531  807    0    0    0    0    0    0    0    0 2131  454
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    531  807    0    0    0    0    0    0    0    0 2131  454
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:   0.91 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.89 0.89
Lanes:        1.00 2.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.47 0.53
Final Sat.:   1729 3458    0    0    0    0    0    0    0    0 4165  887
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.31 0.23 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.51 0.51
Crit Moves:   ****                                                ****
Green/Cycle:  0.38 0.38 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.52 0.52
Volume/Cap:   0.82 0.62 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.99 0.99
Delay/Veh:    20.5 15.6  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 28.3 28.3
User DelAdj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   20.5 15.6  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 28.3 28.3
HCM2k95th:      16   11    0    0    0    0    0    0    0    0   37   37
*****************************************************************************
```

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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #13 5th St/Q St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.509
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       12.0
Optimal Cycle:        56               Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   21    21    0    0     0   29   29     0    0    0     0
Lanes:        0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1112   122    0    0     0  437 1036     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0 1112   122    0    0     0  437 1036     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0 1112   122    0    0     0  437 1036     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0 1112   122    0    0     0  437 1036     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0 1112   122    0    0     0  437 1036     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.90  0.90 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.70  0.30 0.00 0.00  0.00 1.19 2.81  0.00 0.00 0.00  0.00
Final Sat.:     0 4604   505    0    0     0 2052 4864     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.24  0.24 0.00 0.00  0.00 0.21 0.21  0.00 0.00 0.00  0.00
Crit Moves:       ****                       ****
Green/Cycle: 0.00 0.38  0.38 0.00 0.00  0.00 0.52 0.52  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.64  0.64 0.00 0.00  0.00 0.41 0.41  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 16.1  16.1  0.0  0.0   0.0  8.6  8.6   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 16.1  16.1  0.0  0.0   0.0  8.6  8.6   0.0  0.0  0.0   0.0
HCM2k95th:      0   13    13    0    0     0    8    8     0    0    0     0
*******************************************************************************
```



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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #13 5th St/Q St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.526
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       12.0
Optimal Cycle:        56               Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   21    21    0    0     0   29   29     0    0    0     0
Lanes:        0  0  2  1  0   0  0  0  0  0   1  1  2  0  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1112   122    0    0     0  437 1036     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0 1112   122    0    0     0  437 1036     0    0    0     0
Added Vol:      0    0     0    0    0     0   93   14     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0 1112   122    0    0     0  530 1050     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0 1112   122    0    0     0  530 1050     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0 1112   122    0    0     0  530 1050     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0 1112   122    0    0     0  530 1050     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.90  0.90 1.00 1.00  1.00 0.91 0.91  1.00 1.00 1.00  1.00
Lanes:       0.00 2.70  0.30 0.00 0.00  0.00 1.34 2.66  0.00 0.00 0.00  0.00
Final Sat.:     0 4604   505    0    0     0 2320 4596     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.24  0.24 0.00 0.00  0.00 0.23 0.23  0.00 0.00 0.00  0.00
Crit Moves:       ****                       ****
Green/Cycle: 0.00 0.38  0.38 0.00 0.00  0.00 0.52 0.52  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.64  0.64 0.00 0.00  0.00 0.44 0.44  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 16.1  16.1  0.0  0.0   0.0  8.8  8.8   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 16.1  16.1  0.0  0.0   0.0  8.8  8.8   0.0  0.0  0.0   0.0
HCM2k95th:      0   13    13    0    0     0    9    9     0    0    0     0
*******************************************************************************
```

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #14 7th St/I St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.404
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 22.9
Optimal Cycle: 106 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	34	34	0	0	0	66	66	0
Lanes:	0 0 0 0 0			0 0 2 0 2			0 0 0 0 0			1 1 2 0 0		
Volume Module:												
Base Vol:	0	0	0	0	840	505	0	0	0	191	2018	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	840	505	0	0	0	191	2018	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	840	505	0	0	0	191	2018	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	840	505	0	0	0	191	2018	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	840	505	0	0	0	191	2018	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.86	0.67	1.00	1.00	1.00	0.82	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	3249	2558	0	0	0	1556	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.26	0.20	0.00	0.00	0.00	0.12	0.43	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.32	0.32	0.00	0.00	0.00	0.62	0.62	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.81	0.62	0.00	0.00	0.00	0.20	0.69	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	39.6	33.9	0.0	0.0	0.0	8.6	14.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	39.6	33.9	0.0	0.0	0.0	8.6	14.6	0.0
HCM2k95th:	0	0	0	0	24	14	0	0	0	6	25	0

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 7th St/I St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.503
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 25.3
Optimal Cycle: 106 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	34	34	0	0	0	66	66	0
Lanes:	0 0 0 0 0			0 0 2 0 2			0 0 0 0 0			1 1 2 0 0		
Volume Module:												
Base Vol:	0	0	0	0	840	505	0	0	0	191	2018	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	840	505	0	0	0	191	2018	0
Added Vol:	0	0	0	0	107	0	0	0	0	94	151	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	947	505	0	0	0	285	2169	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	947	505	0	0	0	285	2169	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	947	505	0	0	0	285	2169	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	947	505	0	0	0	285	2169	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.86	0.67	1.00	1.00	1.00	0.82	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	3249	2558	0	0	0	1556	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.29	0.20	0.00	0.00	0.00	0.18	0.46	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.32	0.32	0.00	0.00	0.00	0.62	0.62	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.91	0.62	0.00	0.00	0.00	0.29	0.75	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	47.6	33.9	0.0	0.0	0.0	9.3	15.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	47.6	33.9	0.0	0.0	0.0	9.3	15.7	0.0
HCM2k95th:	0	0	0	0	30	14	0	0	0	9	28	0

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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #15 7th St/J St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.688
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       14.7
Optimal Cycle:        56              Level Of Service:                 B
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   22   22     0    0   28    28    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0   90  886     0    0 1439   392    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0   90  886     0    0 1439   392    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0   90  886     0    0 1439   392    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0   90  886     0    0 1439   392    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0   90  886     0    0 1439   392    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.82 0.82  1.00 1.00 0.79  0.79 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.28 2.72  0.00 0.00 2.36  0.64 0.00 0.00  0.00
Final Sat.:     0    0     0  430 4238     0    0 3551   967    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.21 0.21  0.00 0.00 0.41  0.41 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.39 0.39  0.00 0.00 0.50  0.50 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.53 0.53  0.00 0.00 0.81  0.81 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 14.2 14.2   0.0  0.0 15.0  15.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 14.2 14.2   0.0  0.0 15.0  15.0  0.0  0.0   0.0
HCM2k95th:      0    0     0    9    9     0    0   20    20    0    0     0
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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #15 7th St/J St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.832
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       24.2
Optimal Cycle:        56              Level Of Service:                 C
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   22   22     0    0   28    28    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0   90  886     0    0 1439   392    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0   90  886     0    0 1439   392    0    0     0
Added Vol:      0    0     0   91  109     0    0  397     2    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0  181  995     0    0 1836   394    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  181  995     0    0 1836   394    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  181  995     0    0 1836   394    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  181  995     0    0 1836   394    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.82 0.82  1.00 1.00 0.80  0.80 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.46 2.54  0.00 0.00 2.47  0.53 0.00 0.00  0.00
Final Sat.:     0    0     0  719 3950     0    0 3740   803    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.25 0.25  0.00 0.00 0.49  0.49 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.39 0.39  0.00 0.00 0.50  0.50 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.64 0.64  0.00 0.00 0.98  0.98 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 15.5 15.5   0.0  0.0 28.8  28.8  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 15.5 15.5   0.0  0.0 28.8  28.8  0.0  0.0   0.0
HCM2k95th:      0    0     0   10   10     0    0   33    33    0    0     0
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--------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #16 7th St/L St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.468
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       15.0
Optimal Cycle:        56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   29    29    0    0     0   21   21     0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0  810   478    0    0     0  158 1398     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  810   478    0    0     0  158 1398     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  810   478    0    0     0  158 1398     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  810   478    0    0     0  158 1398     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  810   478    0    0     0  158 1398     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.77  0.77 1.00 1.00  1.00 0.90 0.82  1.00
Lanes:       0.00 0.00  0.00 0.00 2.00  1.00 0.00 0.00  0.00 1.00 3.00  0.00
Final Sat.:     0    0     0    0 2938  1469    0    0     0 1710 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.28  0.33 0.00 0.00  0.00 0.09 0.30  0.00
Crit Moves:                             ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.52  0.52 0.00 0.00  0.00 0.38 0.38  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.53  0.63 0.00 0.00  0.00 0.25 0.80  0.00
Delay/Veh:    0.0  0.0   0.0  0.0  9.8  11.1  0.0  0.0   0.0 13.0 19.5   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0  9.8  11.1  0.0  0.0   0.0 13.0 19.5   0.0
HCM2k95th:      0    0     0    0   10    13    0    0     0    5   17     0
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--------------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #16 7th St/L St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.870
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       35.6
Optimal Cycle:        64              Level Of Service:                  D
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0   29    29    0    0     0   21   21     0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   1  0  3  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0  810   478    0    0     0  158 1398     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0  810   478    0    0     0  158 1398     0
Added Vol:      0    0     0    0   35    76    0    0     0  270  461     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0    0  845   554    0    0     0  428 1859     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0  845   554    0    0     0  428 1859     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0  845   554    0    0     0  428 1859     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0  845   554    0    0     0  428 1859     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.77  0.77 1.00 1.00  1.00 0.90 0.82  1.00
Lanes:       0.00 0.00  0.00 0.00 2.00  1.00 0.00 0.00  0.00 1.00 3.00  0.00
Final Sat.:     0    0     0    0 2929  1464    0    0     0 1710 4668     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.29  0.38 0.00 0.00  0.00 0.25 0.40  0.00
Crit Moves:                             ****                       ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.52  0.52 0.00 0.00  0.00 0.38 0.38  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.56  0.73 0.00 0.00  0.00 0.67 1.06  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 10.0  13.0  0.0  0.0   0.0 20.0 57.6   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 10.0  13.0  0.0  0.0   0.0 20.0 57.6   0.0
HCM2k95th:      0    0     0    0   11    16    0    0     0   14   34     0
********************************************************************************
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #17 8th St/I St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.613
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	19.3
Optimal Cycle:	106	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	34	34	0	0	0	0	0	0	0	0	66	66
Lanes:	1 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	452	750	0	0	0	0	0	0	0	0	1920	154
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	452	750	0	0	0	0	0	0	0	0	1920	154
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	452	750	0	0	0	0	0	0	0	0	1920	154
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	452	750	0	0	0	0	0	0	0	0	1920	154
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	452	750	0	0	0	0	0	0	0	0	1920	154
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	0.90
Lanes:	1.50	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.78	0.22
Final Sat.:	2601	4315	0	0	0	0	0	0	0	0	4749	381
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.40
Crit Moves:	****										****	
Green/Cycle:	0.32	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.62
Volume/Cap:	0.54	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.65
Delay/Veh:	29.9	29.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.1	13.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.9	29.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.1	13.1
HCM2k95th:	16	16	0	0	0	0	0	0	0	0	25	25

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 8th St/I St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.671
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	21.0
Optimal Cycle:	106	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	34	34	0	0	0	0	0	0	0	0	66	66
Lanes:	1 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	452	750	0	0	0	0	0	0	0	0	1920	154
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	452	750	0	0	0	0	0	0	0	0	1920	154
Added Vol:	164	99	0	0	0	0	0	0	0	0	80	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	616	849	0	0	0	0	0	0	0	0	2000	163
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	616	849	0	0	0	0	0	0	0	0	2000	163
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	616	849	0	0	0	0	0	0	0	0	2000	163
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	616	849	0	0	0	0	0	0	0	0	2000	163
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	0.90
Lanes:	1.68	2.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.77	0.23
Final Sat.:	2908	4008	0	0	0	0	0	0	0	0	4743	387
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.42
Crit Moves:	****										****	
Green/Cycle:	0.32	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.62
Volume/Cap:	0.66	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.68
Delay/Veh:	31.8	31.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.6	13.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.8	31.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.6	13.6
HCM2k95th:	20	20	0	0	0	0	0	0	0	0	26	26

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #18 8th S/tJ St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.510
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 14.6
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	25	25	0	0	0	25	25	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	660	546	0	0	0	123	1440	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	660	546	0	0	0	123	1440	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	660	546	0	0	0	123	1440	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	660	546	0	0	0	123	1440	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	660	546	0	0	0	123	1440	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.76	0.76	1.00	1.00	1.00	0.82	0.82	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	0.00	0.00	0.00	1.00	3.00	0.00	0.00	0.00	0.00
Final Sat.:	0	2901	1450	0	0	0	1556	4668	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.38	0.00	0.00	0.00	0.08	0.31	0.00	0.00	0.00	0.00
Crit Moves:			****				****					
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.51	0.84	0.00	0.00	0.00	0.18	0.69	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	11.9	20.0	0.0	0.0	0.0	9.4	14.2	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	11.9	20.0	0.0	0.0	0.0	9.4	14.2	0.0	0.0	0.0	0.0
HCM2k95th:	0	9	20	0	0	0	3	12	0	0	0	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 8th S/tJ St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.712
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 31.0
Optimal Cycle: 56 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	25	25	0	0	0	25	25	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	660	546	0	0	0	123	1440	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	660	546	0	0	0	123	1440	0	0	0	0
Added Vol:	0	137	184	0	0	0	80	409	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	797	730	0	0	0	203	1849	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	797	730	0	0	0	203	1849	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	797	730	0	0	0	203	1849	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	797	730	0	0	0	203	1849	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.76	0.76	1.00	1.00	1.00	0.82	0.82	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	0.00	0.00	0.00	1.00	3.00	0.00	0.00	0.00	0.00
Final Sat.:	0	2888	1444	0	0	0	1556	4668	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.51	0.00	0.00	0.00	0.13	0.40	0.00	0.00	0.00	0.00
Crit Moves:			****				****					
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.62	1.13	0.00	0.00	0.00	0.29	0.89	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	13.0	84.9	0.0	0.0	0.0	10.0	19.7	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.0	84.9	0.0	0.0	0.0	10.0	19.7	0.0	0.0	0.0	0.0
HCM2k95th:	0	12	44	0	0	0	5	16	0	0	0	0

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-------------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                      2030 Cumulative Conditions
                             PM Peak Hour
-------------------------------------------------------------------------------
                  Level Of Service Computation Report
         2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #19 8th St/L St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.524
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        16.1
Optimal Cycle:        56               Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    29   29    0    0    0    0    0    0    0    0   21   21
Lanes:        1  0  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     261  510    0    0    0    0    0    0    0    0 1448   158
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  261  510    0    0    0    0    0    0    0    0 1448   158
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   261  510    0    0    0    0    0    0    0    0 1448   158
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0     0
Reduced Vol:  261  510    0    0    0    0    0    0    0    0 1448   158
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   261  510    0    0    0    0    0    0    0    0 1448   158
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.90 0.86  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 0.81  0.81
Lanes:       1.00 2.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 3.00  1.00
Final Sat.:  1710 3249    0    0    0    0    0    0    0    0 4598  1533
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.15 0.16  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.31  0.10
Crit Moves:  ****                                                   ****
Green/Cycle: 0.52 0.52  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.38  0.38
Volume/Cap:  0.29 0.30  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.84  0.27
Delay/Veh:    8.5  8.2   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 20.6  12.3
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   8.5  8.2   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 20.6  12.3
HCM2k95th:      6    6    0    0    0    0    0    0    0    0   18     5
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-------------------------------------------------------------------------------
                   Downtown Sacramento Traffic Study
                      2030 Cumulative Conditions
                             PM Peak Hour
-------------------------------------------------------------------------------
                  Level Of Service Computation Report
         2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #19 8th St/L St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.693
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        47.1
Optimal Cycle:        56               Level Of Service:                  D
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    29   29    0    0    0    0    0    0    0    0   21   21
Lanes:        1  0  2  0  0   0  0  0  0  0   0  0  0  0  0   0  0  2  1  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     261  510    0    0    0    0    0    0    0    0 1448   158
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  261  510    0    0    0    0    0    0    0    0 1448   158
Added Vol:     89  113    0    0    0    0    0    0    0    0  442   169
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0     0
Initial Fut:  350  623    0    0    0    0    0    0    0    0 1890   327
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   350  623    0    0    0    0    0    0    0    0 1890   327
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0     0
Reduced Vol:  350  623    0    0    0    0    0    0    0    0 1890   327
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   350  623    0    0    0    0    0    0    0    0 1890   327
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.90 0.86  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 0.80  0.80
Lanes:       1.00 2.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 3.00  1.00
Final Sat.:  1710 3249    0    0    0    0    0    0    0    0 4566  1522
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.20 0.19  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.41  0.21
Crit Moves:  ****                                                   ****
Green/Cycle: 0.52 0.52  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.38  0.38
Volume/Cap:  0.40 0.37  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 1.10  0.57
Delay/Veh:    9.5  8.7   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 72.4  14.6
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   9.5  8.7   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 72.4  14.6
HCM2k95th:      8    7    0    0    0    0    0    0    0    0   37    10
*******************************************************************************
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #20 9th St/I St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.481
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.4
Optimal Cycle: 112 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	35	35	0	0	0	65	65	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			1 0 3 0 0		
Volume Module:												
Base Vol:	0	0	0	0	896	341	0	0	0	262	1872	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	896	341	0	0	0	262	1872	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	896	341	0	0	0	262	1872	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	896	341	0	0	0	262	1872	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	896	341	0	0	0	262	1872	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.79	0.79	1.00	1.00	1.00	0.90	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.17	0.83	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	3243	1234	0	0	0	1710	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.28	0.28	0.00	0.00	0.00	0.15	0.40	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.31	0.31	0.00	0.00	0.00	0.58	0.58	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.88	0.88	0.00	0.00	0.00	0.26	0.69	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	45.0	45.0	0.0	0.0	0.0	12.3	17.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	45.0	45.0	0.0	0.0	0.0	12.3	17.9	0.0
HCM2k95th:	0	0	0	0	27	27	0	0	0	9	25	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #20 9th St/I St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.514
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.7
Optimal Cycle: 112 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	35	35	0	0	0	65	65	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			1 0 3 0 0		
Volume Module:												
Base Vol:	0	0	0	0	896	341	0	0	0	262	1872	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	896	341	0	0	0	262	1872	0
Added Vol:	0	0	0	0	7	0	0	0	0	47	89	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	903	341	0	0	0	309	1961	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	903	341	0	0	0	309	1961	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	903	341	0	0	0	309	1961	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	903	341	0	0	0	309	1961	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.79	0.79	1.00	1.00	1.00	0.90	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.18	0.82	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	3250	1227	0	0	0	1710	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.28	0.28	0.00	0.00	0.00	0.18	0.42	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.31	0.31	0.00	0.00	0.00	0.58	0.58	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.89	0.89	0.00	0.00	0.00	0.31	0.72	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	45.4	45.4	0.0	0.0	0.0	12.9	18.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	45.4	45.4	0.0	0.0	0.0	12.9	18.7	0.0
HCM2k95th:	0	0	0	0	28	28	0	0	0	10	26	0

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #21 9th St/J St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.686
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	16.7
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	25	25	0	0	25	25	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	0	0	139	904	0	0	1475	294	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	139	904	0	0	1475	294	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	139	904	0	0	1475	294	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	139	904	0	0	1475	294	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	139	904	0	0	1475	294	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	0.82	1.00	1.00	0.80	0.80	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.40	2.60	0.00	0.00	2.50	0.50	0.00	0.00	0.00
Final Sat.:	0	0	0	622	4046	0	0	3795	756	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.22	0.22	0.00	0.00	0.39	0.39	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.45	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.50	0.50	0.00	0.00	0.87	0.87	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	11.9	11.9	0.0	0.0	19.5	19.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	11.9	11.9	0.0	0.0	19.5	19.5	0.0	0.0	0.0
HCM2k95th:	0	0	0	8	8	0	0	18	18	0	0	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #21 9th St/J St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.844
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	68.2
Optimal Cycle:	58	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	25	25	0	0	25	25	0	0	0
Lanes:	0 0 0 0 0			0 1 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	0	0	139	904	0	0	1475	294	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	139	904	0	0	1475	294	0	0	0
Added Vol:	0	0	0	0	54	0	0	511	83	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	139	958	0	0	1986	377	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	139	958	0	0	1986	377	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	139	958	0	0	1986	377	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	139	958	0	0	1986	377	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	0.82	1.00	1.00	0.80	0.80	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.38	2.62	0.00	0.00	2.52	0.48	0.00	0.00	0.00
Final Sat.:	0	0	0	592	4077	0	0	3829	727	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.52	0.52	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.45	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.53	0.53	0.00	0.00	1.16	1.16	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	12.2	12.2	0.0	0.0	94.2	94.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	12.2	12.2	0.0	0.0	94.2	94.2	0.0	0.0	0.0
HCM2k95th:	0	0	0	9	9	0	0	44	44	0	0	0

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #22 9th St/L St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.767
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	14.8
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	0 0 2 1 0	0 0 0 0 0	1 0 3 0 0

Movement:	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Min. Green:	0	0	0	0	21	21	0	0	0	29	29	0
Volume Module:												
Base Vol:	0	0	0	0	997	159	0	0	0	738	1296	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	997	159	0	0	0	738	1296	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	997	159	0	0	0	738	1296	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	997	159	0	0	0	738	1296	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	997	159	0	0	0	738	1296	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.80	0.80	1.00	1.00	1.00	0.90	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.59	0.41	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	3942	629	0	0	0	1710	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.25	0.25	0.00	0.00	0.00	0.43	0.28	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.00	0.52	0.52	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.67	0.67	0.00	0.00	0.00	0.83	0.54	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	16.8	16.8	0.0	0.0	0.0	20.5	9.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	16.8	16.8	0.0	0.0	0.0	20.5	9.9	0.0
HCM2k95th:	0	0	0	0	13	13	0	0	0	19	9	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #22 9th St/L St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.865
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	18.4
Optimal Cycle:	63	Level Of Service:	B

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	0 0 2 1 0	0 0 0 0 0	1 0 3 0 0

Movement:	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Min. Green:	0	0	0	0	21	21	0	0	0	29	29	0
Volume Module:												
Base Vol:	0	0	0	0	997	159	0	0	0	738	1296	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	997	159	0	0	0	738	1296	0
Added Vol:	0	0	0	0	108	249	0	0	0	5	279	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	1105	408	0	0	0	743	1575	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	1105	408	0	0	0	743	1575	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1105	408	0	0	0	743	1575	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	1105	408	0	0	0	743	1575	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.79	0.79	1.00	1.00	1.00	0.90	0.82	1.00
Lanes:	0.00	0.00	0.00	0.00	2.19	0.81	0.00	0.00	0.00	1.00	3.00	0.00
Final Sat.:	0	0	0	0	3273	1209	0	0	0	1710	4668	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.34	0.34	0.00	0.00	0.00	0.43	0.34	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.00	0.52	0.52	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.90	0.90	0.00	0.00	0.00	0.84	0.65	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	24.7	24.7	0.0	0.0	0.0	20.9	11.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	24.7	24.7	0.0	0.0	0.0	20.9	11.2	0.0
HCM2k95th:	0	0	0	0	21	21	0	0	0	18	12	0

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #23 9th St/P St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.703
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	12.3
Optimal Cycle:	38	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	10	0	0	0	0	0	10	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			0 1 2 0 0		
Volume Module:												
Base Vol:	0	0	0	0	1215	287	0	0	0	329	1331	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	1215	287	0	0	0	329	1331	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	1215	287	0	0	0	329	1331	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1215	287	0	0	0	329	1331	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	1215	287	0	0	0	329	1331	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.88	0.88	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	2.43	0.57	0.00	0.00	0.00	0.59	2.41	0.00
Final Sat.:	0	0	0	0	4074	962	0	0	0	1028	4159	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.30	0.30	0.00	0.00	0.00	0.32	0.32	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.42	0.42	0.00	0.00	0.00	0.46	0.46	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.70	0.70	0.00	0.00	0.00	0.70	0.70	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	12.9	12.9	0.0	0.0	0.0	11.9	11.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	12.9	12.9	0.0	0.0	0.0	11.9	11.9	0.0
HCM2k95th:	0	0	0	0	15	15	0	0	0	13	13	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 9th St/P St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.766
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	13.4
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	10	0	0	0	0	0	10	0
Lanes:	0 0 0 0 0			0 0 2 1 0			0 0 0 0 0			0 1 2 0 0		
Volume Module:												
Base Vol:	0	0	0	0	1215	287	0	0	0	329	1331	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	1215	287	0	0	0	329	1331	0
Added Vol:	0	0	0	0	262	3	0	0	0	0	25	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	1477	290	0	0	0	329	1356	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	1477	290	0	0	0	329	1356	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1477	290	0	0	0	329	1356	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	1477	290	0	0	0	329	1356	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.89	0.89	1.00	1.00	1.00	0.91	0.91	1.00
Lanes:	0.00	0.00	0.00	0.00	2.51	0.49	0.00	0.00	0.00	0.59	2.41	0.00
Final Sat.:	0	0	0	0	4227	830	0	0	0	1013	4174	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.35	0.35	0.00	0.00	0.00	0.32	0.32	0.00
Crit Moves:					****					****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.42	0.42	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.77	0.77	0.00	0.00	0.00	0.77	0.77	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	13.0	13.0	0.0	0.0	0.0	14.0	14.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	13.0	13.0	0.0	0.0	0.0	14.0	14.0	0.0
HCM2k95th:	0	0	0	0	18	18	0	0	0	14	14	0

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2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 9th St/Q St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.560
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.2
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	25	25	0	0	25	25	0	0	0
Lanes:	0 0	0	0 0	0 1	2	0 0	0 0	3	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	0	0	188	1423	0	0	1089	193	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	188	1423	0	0	1089	193	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	188	1423	0	0	1089	193	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	188	1423	0	0	1089	193	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	188	1423	0	0	1089	193	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.89	0.89	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.35	2.65	0.00	0.00	3.40	0.60	0.00	0.00	0.00
Final Sat.:	0	0	0	605	4582	0	0	5740	1017	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.31	0.31	0.00	0.00	0.19	0.19	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.45	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.70	0.70	0.00	0.00	0.42	0.42	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	13.4	13.4	0.0	0.0	10.7	10.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	13.4	13.4	0.0	0.0	10.7	10.7	0.0	0.0	0.0
HCM2k95th:	0	0	0	14	14	0	0	8	8	0	0	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 9th St/Q St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.620
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 13.6
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	25	25	0	0	25	25	0	0	0
Lanes:	0 0	0	0 0	0 1	2	0 0	0 0	3	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	0	0	188	1423	0	0	1089	193	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	188	1423	0	0	1089	193	0	0	0
Added Vol:	0	0	0	30	232	0	0	21	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	218	1655	0	0	1110	193	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	218	1655	0	0	1110	193	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	218	1655	0	0	1110	193	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	218	1655	0	0	1110	193	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.89	0.89	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.35	2.65	0.00	0.00	3.41	0.59	0.00	0.00	0.00
Final Sat.:	0	0	0	604	4583	0	0	5762	1002	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.36	0.36	0.00	0.00	0.19	0.19	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.45	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.81	0.81	0.00	0.00	0.43	0.43	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	15.7	15.7	0.0	0.0	10.7	10.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	15.7	15.7	0.0	0.0	10.7	10.7	0.0	0.0	0.0
HCM2k95th:	0	0	0	17	17	0	0	8	8	0	0	0

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 10th St/I St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.795
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.7
Optimal Cycle: 112 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	35	35	0	0	0	0	0	0	0	0	65	65
Lanes:	0 1	2	0 0	0 0	0	0 0	0 0	0	0 0	0 0	2	1 0
Volume Module:												
Base Vol:	369	798	0	0	0	0	0	0	0	0	1773	325
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	369	798	0	0	0	0	0	0	0	0	1773	325
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	369	798	0	0	0	0	0	0	0	0	1773	325
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	369	798	0	0	0	0	0	0	0	0	1773	325
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	369	798	0	0	0	0	0	0	0	0	1773	325
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.80
Lanes:	0.95	2.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.54	0.46
Final Sat.:	1476	3192	0	0	0	0	0	0	0	0	3854	707
Capacity Analysis Module:												
Vol/Sat:	0.25	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.46
Crit Moves:	****										****	
Green/Cycle:	0.31	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.58
Volume/Cap:	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.79
Delay/Veh:	40.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.8	20.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.8	20.8
HCM2k95th:	24	24	0	0	0	0	0	0	0	0	33	33

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #25 10th St/I St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.842
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 29.6
Optimal Cycle: 112 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	35	35	0	0	0	0	0	0	0	0	65	65
Lanes:	0 1	2	0 0	0 0	0	0 0	0 0	0	0 0	0 0	2	1 0
Volume Module:												
Base Vol:	369	798	0	0	0	0	0	0	0	0	1773	325
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	369	798	0	0	0	0	0	0	0	0	1773	325
Added Vol:	10	59	0	0	0	0	0	0	0	0	127	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	379	857	0	0	0	0	0	0	0	0	1900	325
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	379	857	0	0	0	0	0	0	0	0	1900	325
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	379	857	0	0	0	0	0	0	0	0	1900	325
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	379	857	0	0	0	0	0	0	0	0	1900	325
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.80
Lanes:	0.92	2.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.56	0.44
Final Sat.:	1431	3237	0	0	0	0	0	0	0	0	3899	667
Capacity Analysis Module:												
Vol/Sat:	0.26	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.49
Crit Moves:	****										****	
Green/Cycle:	0.31	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.58
Volume/Cap:	0.85	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.84
Delay/Veh:	42.3	42.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.6	22.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.3	42.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.6	22.6
HCM2k95th:	26	26	0	0	0	0	0	0	0	0	37	37

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--------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                           2030 Cumulative Conditions
                                  PM Peak Hour
--------------------------------------------------------------------------------
                        Level Of Service Computation Report
              2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #26 10th St/J St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.733
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):        20.9
Optimal Cycle:        62               Level Of Service:                  C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0   26    26    0    0     0   24   24     0    0    0     0
Lanes:        0  0  2  1  0    0  0  0  0  0    0  1  2  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  940   181    0    0     0  132 1479     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0  940   181    0    0     0  132 1479     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0  940   181    0    0     0  132 1479     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0  940   181    0    0     0  132 1479     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0  940   181    0    0     0  132 1479     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.80  0.80 1.00 1.00  1.00 0.82 0.82  1.00 1.00 1.00  1.00
Lanes:       0.00 2.52  0.48 0.00 0.00  0.00 0.25 2.75  0.00 0.00 0.00  0.00
Final Sat.:     0 3821   736    0    0     0  383 4286     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.25  0.25 0.00 0.00  0.00 0.35 0.35  0.00 0.00 0.00  0.00
Crit Moves:       ****                        ****
Green/Cycle: 0.00 0.42  0.42 0.00 0.00  0.00 0.39 0.39  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.59  0.59 0.00 0.00  0.00 0.89 0.89  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 15.2  15.2  0.0  0.0   0.0 24.9 24.9   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 15.2  15.2  0.0  0.0   0.0 24.9 24.9   0.0  0.0  0.0   0.0
HCM2k95th:      0   12    12    0    0     0   18   18     0    0    0     0
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--------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                           2030 Cumulative Conditions
                                  PM Peak Hour
--------------------------------------------------------------------------------
                        Level Of Service Computation Report
             2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #26 10th St/J St
********************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.883
Loss Time (sec):      12 (Y+R =  4 sec) Average Delay (sec/veh):        72.3
Optimal Cycle:        79               Level Of Service:                  E
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0   26    26    0    0     0   24   24     0    0    0     0
Lanes:        0  0  2  1  0    0  0  0  0  0    0  1  2  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  940   181    0    0     0  132 1479     0    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0  940   181    0    0     0  132 1479     0    0    0     0
Added Vol:      0   52     0    0    0     0   95  416     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0  992   181    0    0     0  227 1895     0    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0  992   181    0    0     0  227 1895     0    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0  992   181    0    0     0  227 1895     0    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0  992   181    0    0     0  227 1895     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.80  0.80 1.00 1.00  1.00 0.82 0.82  1.00 1.00 1.00  1.00
Lanes:       0.00 2.54  0.46 0.00 0.00  0.00 0.32 2.68  0.00 0.00 0.00  0.00
Final Sat.:     0 3857   704    0    0     0  499 4169     0    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.26  0.26 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.00  0.00
Crit Moves:       ****                        ****
Green/Cycle: 0.00 0.42  0.42 0.00 0.00  0.00 0.39 0.39  0.00 0.00 0.00  0.00
Volume/Cap:  0.00 0.61  0.61 0.00 0.00  0.00 1.17 1.17  0.00 0.00 0.00  0.00
Delay/Veh:    0.0 15.6  15.6  0.0  0.0   0.0 103.6  104   0.0  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 15.6  15.6  0.0  0.0   0.0 103.6  104   0.0  0.0  0.0   0.0
HCM2k95th:      0   13    13    0    0     0   41   41     0    0    0     0
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-----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                       2030 Cumulative Conditions
                              PM Peak Hour
-----------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #27 10th St/L St
*****************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.804
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       17.8
Optimal Cycle:        56              Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    21   21    0    0    0    0    0    0    0    0   29   29
Lanes:       0  1  2  0  0    0  0  0  0  0    0  0  0  0  0    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      202  967    0    0    0    0    0    0    0    0 1760  366
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   202  967    0    0    0    0    0    0    0    0 1760  366
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    202  967    0    0    0    0    0    0    0    0 1760  366
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   202  967    0    0    0    0    0    0    0    0 1760  366
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    202  967    0    0    0    0    0    0    0    0 1760  366
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:   0.82 0.82 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.80 0.80
Lanes:        0.52 2.48 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.48 0.52
Final Sat.:    807 3862    0    0    0    0    0    0    0    0 3764  783
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.25 0.25 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.47 0.47
Crit Moves:   ****                                                ****
Green/Cycle:  0.38 0.38 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.52 0.52
Volume/Cap:   0.67 0.67 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.90 0.90
Delay/Veh:    16.6 16.6  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 18.4 18.4
User DelAdj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   16.6 16.6  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 18.4 18.4
HCM2k95th:      13   13    0    0    0    0    0    0    0    0   26   26
*****************************************************************************
```



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-----------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                       2030 Cumulative Conditions
                              PM Peak Hour
-----------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*****************************************************************************
Intersection #27 10th St/L St
*****************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.892
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       25.4
Optimal Cycle:        71              Level Of Service:                  C
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    21   21    0    0    0    0    0    0    0    0   29   29
Lanes:       0  1  2  0  0    0  0  0  0  0    0  0  0  0  0    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      202  967    0    0    0    0    0    0    0    0 1760  366
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   202  967    0    0    0    0    0    0    0    0 1760  366
Added Vol:      92   68    0    0    0    0    0    0    0    0  192   14
PasserByVol:     0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:   294 1035    0    0    0    0    0    0    0    0 1952  380
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    294 1035    0    0    0    0    0    0    0    0 1952  380
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   294 1035    0    0    0    0    0    0    0    0 1952  380
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    294 1035    0    0    0    0    0    0    0    0 1952  380
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:   0.82 0.82 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.80 0.80
Lanes:        0.66 2.34 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.51 0.49
Final Sat.:   1033 3636    0    0    0    0    0    0    0    0 3814  742
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.28 0.28 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.51 0.51
Crit Moves:   ****                                                ****
Green/Cycle:  0.38 0.38 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.52 0.52
Volume/Cap:   0.76 0.76 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.99 0.99
Delay/Veh:    18.4 18.4  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 29.3 29.3
User DelAdj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   18.4 18.4  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 29.3 29.3
HCM2k95th:      16   16    0    0    0    0    0    0    0    0   34   34
*****************************************************************************
```

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 10th St/P St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.554
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	9.5
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	10	0	0	0	0	0	0	0	0	10	0
Lanes:	0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	188	658	0	0	0	0	0	0	0	0	1430	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	188	658	0	0	0	0	0	0	0	0	1430	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	188	658	0	0	0	0	0	0	0	0	1430	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	188	658	0	0	0	0	0	0	0	0	1430	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	188	658	0	0	0	0	0	0	0	0	1430	220
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89
Lanes:	0.67	2.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.60	0.40
Final Sat.:	1153	4034	0	0	0	0	0	0	0	0	4405	678
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.32
Crit Moves:		****									****	
Green/Cycle:	0.29	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.59
Volume/Cap:	0.55	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.55
Delay/Veh:	15.3	15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	6.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.3	15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	6.6
HCM2k95th:	7	7	0	0	0	0	0	0	0	0	10	10

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #28 10th St/P St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.590
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	10.1
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	10	0	0	0	0	0	0	0	0	10	0
Lanes:	0 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	188	658	0	0	0	0	0	0	0	0	1430	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	188	658	0	0	0	0	0	0	0	0	1430	220
Added Vol:	21	91	0	0	0	0	0	0	0	0	5	39
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	209	749	0	0	0	0	0	0	0	0	1435	259
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	209	749	0	0	0	0	0	0	0	0	1435	259
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	209	749	0	0	0	0	0	0	0	0	1435	259
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	209	749	0	0	0	0	0	0	0	0	1435	259
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89
Lanes:	0.65	2.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.54	0.46
Final Sat.:	1132	4055	0	0	0	0	0	0	0	0	4293	775
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.33
Crit Moves:		****									****	
Green/Cycle:	0.31	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.57
Volume/Cap:	0.59	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.59
Delay/Veh:	15.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4	7.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4	7.4
HCM2k95th:	8	8	0	0	0	0	0	0	0	0	11	11

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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               PM Peak Hour
-------------------------------------------------------------------------------

                     Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #29 10th St/Q St
*******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.430
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        9.8
Optimal Cycle:        26              Level Of Service:                  A
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0   10    0     0    0    0     0   10    0     0    0    0
Lanes:        0  0  2  1  0    0  0  0  0  0    0  1  2  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  780   144     0    0     0    93  925     0     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  780   144     0    0     0    93  925     0     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  780   144     0    0     0    93  925     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  780   144     0    0     0    93  925     0     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0  780   144     0    0     0    93  925     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.89  0.89  1.00 1.00  1.00  0.91 0.91  1.00  1.00 1.00  1.00
Lanes:       0.00 2.53  0.47  0.00 0.00  0.00  0.27 2.73  0.00  0.00 0.00  0.00
Final Sat.:     0 4278   790     0    0     0   474 4713     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.18  0.18  0.00 0.00  0.00  0.20 0.20  0.00  0.00 0.00  0.00
Crit Moves:       ****                         ****
Green/Cycle: 0.00 0.42  0.42  0.00 0.00  0.00  0.46 0.46  0.00  0.00 0.00  0.00
Volume/Cap:  0.00 0.43  0.43  0.00 0.00  0.00  0.43 0.43  0.00  0.00 0.00  0.00
Delay/Veh:    0.0 10.3  10.3   0.0  0.0   0.0   9.3  9.3   0.0   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 10.3  10.3   0.0  0.0   0.0   9.3  9.3   0.0   0.0  0.0   0.0
HCM2k95th:      0    7     7     0    0     0     7    7     0     0    0     0
*******************************************************************************
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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               PM Peak Hour
-------------------------------------------------------------------------------

                     Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #29 10th St/Q St
*******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.466
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       10.0
Optimal Cycle:        26              Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0   10    0     0    0    0     0   10    0     0    0    0
Lanes:        0  0  2  1  0    0  0  0  0  0    0  1  2  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  780   144     0    0     0    93  925     0     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  780   144     0    0     0    93  925     0     0    0     0
Added Vol:      0  109     0     0    0     0     3   49     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0  889   144     0    0     0    96  974     0     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  889   144     0    0     0    96  974     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  889   144     0    0     0    96  974     0     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0  889   144     0    0     0    96  974     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.89  0.89  1.00 1.00  1.00  0.91 0.91  1.00  1.00 1.00  1.00
Lanes:       0.00 2.58  0.42  0.00 0.00  0.00  0.27 2.73  0.00  0.00 0.00  0.00
Final Sat.:     0 4370   708     0    0     0   465 4722     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.20  0.20  0.00 0.00  0.00  0.21 0.21  0.00  0.00 0.00  0.00
Crit Moves:       ****                         ****
Green/Cycle: 0.00 0.44  0.44  0.00 0.00  0.00  0.44 0.44  0.00  0.00 0.00  0.00
Volume/Cap:  0.00 0.47  0.47  0.00 0.00  0.00  0.47 0.47  0.00  0.00 0.00  0.00
Delay/Veh:    0.0 10.1  10.1   0.0  0.0   0.0   9.9  9.9   0.0   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 10.1  10.1   0.0  0.0   0.0   9.9  9.9   0.0   0.0  0.0   0.0
HCM2k95th:      0    8     8     0    0     0     8    8     0     0    0     0
*******************************************************************************
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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               PM Peak Hour
-------------------------------------------------------------------------------
                       Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #30 12th St/H St
*******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.586
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      14.3
Optimal Cycle:        66              Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:         Include          Include          Include          Include
Min. Green:    0    0     0   27   27     0     0   33    33    0    0     0
Lanes:       0  0  0  0  0    0  1  2  0  0    0  0  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0     0  231  984     0     0 1398   128    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0     0  231  984     0     0 1398   128    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0    0     0  231  984     0     0 1398   128    0    0     0
Reduct Vol:    0    0     0    0    0     0     0    0     0    0    0     0
Reduced Vol:   0    0     0  231  984     0     0 1398   128    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0    0     0  231  984     0     0 1398   128    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900  1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00  1.00 0.90  0.90 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.57 2.43  0.00  0.00 2.75  0.25 0.00 0.00  0.00
Final Sat.:    0    0     0  986 4201     0     0 4690   429    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.23 0.23  0.00  0.00 0.30  0.30 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.41 0.41  0.00  0.00 0.50  0.50 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.57 0.57  0.00  0.00 0.60  0.60 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 16.2 16.2   0.0   0.0 12.8  12.8  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 16.2 16.2   0.0   0.0 12.8  12.8  0.0  0.0   0.0
HCM2k95th:     0    0     0   13   13     0     0   15    15    0    0     0
*******************************************************************************
```



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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               PM Peak Hour
-------------------------------------------------------------------------------
                       Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #30 12th St/H St
*******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.607
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):      14.6
Optimal Cycle:        66              Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:         Include          Include          Include          Include
Min. Green:    0    0     0   27   27     0     0   33    33    0    0     0
Lanes:       0  0  0  0  0    0  1  2  0  0    0  0  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0    0     0  231  984     0     0 1398   128    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0    0     0  231  984     0     0 1398   128    0    0     0
Added Vol:     0    0     0    0   73     0     0   18    12    0    0     0
PasserByVol:   0    0     0    0    0     0     0    0     0    0    0     0
Initial Fut:   0    0     0  231 1057     0     0 1416   140    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0    0     0  231 1057     0     0 1416   140    0    0     0
Reduct Vol:    0    0     0    0    0     0     0    0     0    0    0     0
Reduced Vol:   0    0     0  231 1057     0     0 1416   140    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0    0     0  231 1057     0     0 1416   140    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900  1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00  1.00 0.90  0.90 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.54 2.46  0.00  0.00 2.73  0.27 0.00 0.00  0.00
Final Sat.:    0    0     0  930 4257     0     0 4659   461    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.25 0.25  0.00  0.00 0.30  0.30 0.00 0.00  0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00  0.00 0.41 0.41  0.00  0.00 0.50  0.50 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.61 0.61  0.00  0.00 0.61  0.61 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 16.6 16.6   0.0   0.0 12.9  12.9  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 16.6 16.6   0.0   0.0 12.9  12.9  0.0  0.0   0.0
HCM2k95th:     0    0     0   14   14     0     0   15    15    0    0     0
*******************************************************************************
```

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-----------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               PM Peak Hour
-----------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
*****************************************************************************
Intersection #31 12th St/I St
*****************************************************************************
Cycle (sec):          0               Critical Vol./Cap. (X):        0.681
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        9.5
Optimal Cycle:       32               Level Of Service:                  A
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0    0    7    7    0    0    0    3    7    0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0    0  917  307    0    0    0   69 1527    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0    0    0    0  917  307    0    0    0   69 1527    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0    0    0    0  917  307    0    0    0   69 1527    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0    0    0    0  917  307    0    0    0   69 1527    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0    0    0    0  917  307    0    0    0   69 1527    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 1.00 0.88 0.88 1.00 1.00 1.00 0.91 0.91 1.00
Lanes:       0.00 0.00 0.00 0.00 2.25 0.75 0.00 0.00 0.00 0.13 2.87 0.00
Final Sat.:     0    0    0    0 3738 1252    0    0    0  224 4963    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.00 0.25 0.25 0.00 0.00 0.00 0.31 0.31 0.00
Crit Moves:                       ****                            ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.36 0.36 0.00 0.00 0.00 0.45 0.45 0.00
Volume/Cap:  0.00 0.00 0.00 0.00 0.68 0.68 0.00 0.00 0.00 0.68 0.68 0.00
Delay/Veh:    0.0  0.0  0.0  0.0 10.8 10.8  0.0  0.0  0.0  8.6  8.6  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  0.0 10.8 10.8  0.0  0.0  0.0  8.6  8.6  0.0
HCM2k95th:      0    0    0    0   10   10    0    0    0   11   11    0
*****************************************************************************
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-----------------------------------------------------------------------------
                     Downtown Sacramento Traffic Study
                        2030 Cumulative Conditions
                               PM Peak Hour
-----------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Operations Method (Future Volume Alternative)
*****************************************************************************
Intersection #31 12th St/I St
*****************************************************************************
Cycle (sec):          0               Critical Vol./Cap. (X):        0.705
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):       10.4
Optimal Cycle:       35               Level Of Service:                  B
*****************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0    0    7    7    0    0    0    3    7    0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0    0  917  307    0    0    0   69 1527    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0    0    0    0  917  307    0    0    0   69 1527    0
Added Vol:      0    0    0    0   50    7    0    0    0    6   99    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:    0    0    0    0  967  314    0    0    0   75 1626    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0    0    0    0  967  314    0    0    0   75 1626    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    0    0    0    0  967  314    0    0    0   75 1626    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:     0    0    0    0  967  314    0    0    0   75 1626    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  1.00 1.00 1.00 1.00 0.88 0.88 1.00 1.00 1.00 0.91 0.91 1.00
Lanes:       0.00 0.00 0.00 0.00 2.26 0.74 0.00 0.00 0.00 0.13 2.87 0.00
Final Sat.:     0    0    0    0 3771 1224    0    0    0  229 4958    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00 0.00 0.26 0.26 0.00 0.00 0.00 0.33 0.33 0.00
Crit Moves:                       ****                            ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.36 0.36 0.00 0.00 0.00 0.46 0.46 0.00
Volume/Cap:  0.00 0.00 0.00 0.00 0.71 0.71 0.00 0.00 0.00 0.71 0.71 0.00
Delay/Veh:    0.0  0.0  0.0  0.0 11.9 11.9  0.0  0.0  0.0  9.2  9.2  0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  0.0 11.9 11.9  0.0  0.0  0.0  9.2  9.2  0.0
HCM2k95th:      0    0    0    0   11   11    0    0    0   12   12    0
*****************************************************************************
```

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #32 12th St/J St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.735
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 23.5
Optimal Cycle: 56 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	31	31	31	31	0	19	19	0	0	0
Lanes:	0 0 0 0 1			1 0 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	0	249	476	556	0	0	1519	171	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	249	476	556	0	0	1519	171	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	249	476	556	0	0	1519	171	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	249	476	556	0	0	1519	171	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	249	476	556	0	0	1519	171	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.77	0.95	1.00	1.00	0.90	0.90	1.00	1.00	1.00
Lanes:	0.00	0.00	1.00	1.00	2.00	0.00	0.00	2.70	0.30	0.00	0.00	0.00
Final Sat.:	0	0	1644	1461	3610	0	0	4592	517	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.15	0.33	0.15	0.00	0.00	0.33	0.33	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.55	0.55	0.55	0.00	0.00	0.34	0.34	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.27	0.59	0.28	0.00	0.00	0.97	0.97	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	7.3	11.4	6.9	0.0	0.0	34.7	34.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	7.3	11.4	6.9	0.0	0.0	34.7	34.7	0.0	0.0	0.0
HCM2k95th:	0	0	5	13	6	0	0	27	27	0	0	0

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #32 12th St/J St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.826
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 76.6
Optimal Cycle: 56 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	31	31	31	31	0	19	19	0	0	0
Lanes:	0 0 0 0 1			1 0 2 0 0			0 0 2 1 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	0	249	476	556	0	0	1519	171	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	249	476	556	0	0	1519	171	0	0	0
Added Vol:	0	0	0	0	55	0	0	417	1	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	249	476	611	0	0	1936	172	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	249	476	611	0	0	1936	172	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	249	476	611	0	0	1936	172	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	249	476	611	0	0	1936	172	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.77	0.95	1.00	1.00	0.90	0.90	1.00	1.00	1.00
Lanes:	0.00	0.00	1.00	1.00	2.00	0.00	0.00	2.76	0.24	0.00	0.00	0.00
Final Sat.:	0	0	1644	1461	3610	0	0	4707	418	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.15	0.33	0.17	0.00	0.00	0.41	0.41	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.55	0.55	0.55	0.00	0.00	0.34	0.34	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.27	0.59	0.31	0.00	0.00	1.21	1.21	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	7.3	11.4	7.1	0.0	0.0	120	119.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	7.3	11.4	7.1	0.0	0.0	120	119.6	0.0	0.0	0.0
HCM2k95th:	0	0	5	13	6	0	0	49	49	0	0	0

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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #33 12th St/L St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.614
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):        15.1
Optimal Cycle:        59               Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    25   25    0     0   25   25     0    0    0    25   25   25
Lanes:       1  0  0  0  0    0  0  0  1  1    0  0  0  0  0    0  1  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       5    0    0     0    0  752     0    0    0     1 1301  146
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    5    0    0     0    0  752     0    0    0     1 1301  146
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     5    0    0     0    0  752     0    0    0     1 1301  146
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    5    0    0     0    0  752     0    0    0     1 1301  146
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     5    0    0     0    0  752     0    0    0     1 1301  146
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  0.93 1.00 1.00  1.00 1.00 0.85  1.00 1.00 1.00  0.88 0.88 0.88
Lanes:       1.00 0.00 0.00  0.00 0.00 2.00  0.00 0.00 0.00  0.01 2.69 0.30
Final Sat.:  1758    0    0     0    0 3230     0    0    0     3 4522  507
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.00 0.00 0.23  0.00 0.00 0.00  0.29 0.29 0.29
Crit Moves:                             ****                   ****
Green/Cycle: 0.42 0.00 0.00  0.00 0.00 0.42  0.00 0.00 0.00  0.42 0.42 0.42
Volume/Cap:  0.01 0.00 0.00  0.00 0.00 0.55  0.00 0.00 0.00  0.68 0.68 0.68
Delay/Veh:    9.8  0.0  0.0   0.0  0.0 14.4   0.0  0.0  0.0  15.5 15.5 15.5
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   9.8  0.0  0.0   0.0  0.0 14.4   0.0  0.0  0.0  15.5 15.5 15.5
HCM2k95th:      0    0    0     0    0   10     0    0    0    14   14   14
*******************************************************************************
```



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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                PM Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #33 12th St/L St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):        0.669
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):        16.2
Optimal Cycle:        59               Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    25   25    0     0   25   25     0    0    0    25   25   25
Lanes:       1  0  0  0  0    0  0  0  1  1    0  0  0  0  0    0  1  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       5    0    0     0    0  752     0    0    0     1 1301  146
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    5    0    0     0    0  752     0    0    0     1 1301  146
Added Vol:      0    0    0     0    0   56     0    0    0     0  150    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    5    0    0     0    0  808     0    0    0     1 1451  146
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     5    0    0     0    0  808     0    0    0     1 1451  146
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    5    0    0     0    0  808     0    0    0     1 1451  146
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     5    0    0     0    0  808     0    0    0     1 1451  146
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  0.93 1.00 1.00  1.00 1.00 0.85  1.00 1.00 1.00  0.88 0.88 0.88
Lanes:       1.00 0.00 0.00  0.00 0.00 2.00  0.00 0.00 0.00  0.01 2.72 0.27
Final Sat.:  1758    0    0     0    0 3230     0    0    0     3 4579  461
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.00 0.00 0.25  0.00 0.00 0.00  0.32 0.32 0.32
Crit Moves:                             ****                   ****
Green/Cycle: 0.42 0.00 0.00  0.00 0.00 0.42  0.00 0.00 0.00  0.42 0.42 0.42
Volume/Cap:  0.01 0.00 0.00  0.00 0.00 0.59  0.00 0.00 0.00  0.75 0.75 0.75
Delay/Veh:    9.8  0.0  0.0   0.0  0.0 14.9   0.0  0.0  0.0  16.8 16.8 16.8
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   9.8  0.0  0.0   0.0  0.0 14.9   0.0  0.0  0.0  16.8 16.8 16.8
HCM2k95th:      0    0    0     0    0   11     0    0    0    15   15   15
*******************************************************************************
```

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 15th St/H St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.627
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	13.9
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	0 1 2 0 0	0 0 2 1 0	0 0 0 0 0

Movement:	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Min. Green:	0	0	0	25	25	0	0	25	25	0	0	0
Volume Module:												
Base Vol:	0	0	0	165	877	0	0	1395	404	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	165	877	0	0	1395	404	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	165	877	0	0	1395	404	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	165	877	0	0	1395	404	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	165	877	0	0	1395	404	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.88	0.88	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.48	2.52	0.00	0.00	2.33	0.67	0.00	0.00	0.00
Final Sat.:	0	0	0	821	4366	0	0	3885	1125	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.36	0.36	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.45	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.80	0.80	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	10.9	10.9	0.0	0.0	15.6	15.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	10.9	10.9	0.0	0.0	15.6	15.6	0.0	0.0	0.0
HCM2k95th:	0	0	0	9	9	0	0	21	21	0	0	0

Downtown Sacramento Traffic Study
2030 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #34 15th St/H St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.636
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	14.2
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	0 1 2 0 0	0 0 2 1 0	0 0 0 0 0

Movement:	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Min. Green:	0	0	0	25	25	0	0	25	25	0	0	0
Volume Module:												
Base Vol:	0	0	0	165	877	0	0	1395	404	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	165	877	0	0	1395	404	0	0	0
Added Vol:	0	0	0	0	0	0	0	43	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	165	877	0	0	1438	404	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	165	877	0	0	1438	404	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	165	877	0	0	1438	404	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	165	877	0	0	1438	404	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.88	0.88	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.48	2.52	0.00	0.00	2.34	0.66	0.00	0.00	0.00
Final Sat.:	0	0	0	821	4366	0	0	3916	1100	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.37	0.37	0.00	0.00	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.45	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.82	0.82	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	10.9	10.9	0.0	0.0	16.1	16.1	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	10.9	10.9	0.0	0.0	16.1	16.1	0.0	0.0	0.0
HCM2k95th:	0	0	0	9	9	0	0	22	22	0	0	0

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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #35 15th St/J St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.863
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       45.2
Optimal Cycle:        63              Level Of Service:                  D
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   25   25     0    0   25    25    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  407 1062     0    0 1832   603    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  407 1062     0    0 1832   603    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  407 1062     0    0 1832   603    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  407 1062     0    0 1832   603    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  407 1062     0    0 1832   603    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.88  0.88 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.83 2.17  0.00 0.00 2.26  0.74 0.00 0.00  0.00
Final Sat.:     0    0     0 1437 3750     0    0 3758  1237    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.28 0.28  0.00 0.00 0.49  0.49 0.00 0.00  0.00
Crit Moves:                  ****                 ****
Green/Cycle: 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.63 0.63  0.00 0.00 1.09  1.09 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 12.6 12.6   0.0  0.0 64.9  64.9  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 12.6 12.6   0.0  0.0 64.9  64.9  0.0  0.0   0.0
HCM2k95th:      0    0     0   14   14     0    0   45    45    0    0     0
********************************************************************************
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--------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
                         2030 Cumulative Conditions
                                PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #35 15th St/J St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):        0.954
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       98.1
Optimal Cycle:        85              Level Of Service:                  F
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0   25   25     0    0   25    25    0    0     0
Lanes:        0  0  0  0  0   0  1  2  0  0   0  0  2  1  0   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0  407 1062     0    0 1832   603    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0  407 1062     0    0 1832   603    0    0     0
Added Vol:      0    0     0    0    0     0    0  333    75    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0  407 1062     0    0 2165   678    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0  407 1062     0    0 2165   678    0    0     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0  407 1062     0    0 2165   678    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0  407 1062     0    0 2165   678    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 0.91 0.91  1.00 1.00 0.88  0.88 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 0.83 2.17  0.00 0.00 2.28  0.72 0.00 0.00  0.00
Final Sat.:     0    0     0 1437 3750     0    0 3808  1192    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.28 0.28  0.00 0.00 0.57  0.57 0.00 0.00  0.00
Crit Moves:                  ****                 ****
Green/Cycle: 0.00 0.00  0.00 0.45 0.45  0.00 0.00 0.45  0.45 0.00 0.00  0.00
Volume/Cap:  0.00 0.00  0.00 0.63 0.63  0.00 0.00 1.27  1.27 0.00 0.00  0.00
Delay/Veh:    0.0  0.0   0.0 12.6 12.6   0.0  0.0  142 142.3  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0 12.6 12.6   0.0  0.0  142 142.3  0.0  0.0   0.0
HCM2k95th:      0    0     0   14   14     0    0   69    69    0    0     0
********************************************************************************
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-------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                           2030 Cumulative Conditions
                                  PM Peak Hour
-------------------------------------------------------------------------------
                         Level Of Service Computation Report
              2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #36 15th St/L St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):         0.662
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        12.3
Optimal Cycle:        56               Level Of Service:                  B
*******************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0     0     0     0    30    30     0     0     0    20    20     0
Lanes:        0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0    0     0     0 1473   403     0    0     0   174  956     0
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:     0    0     0     0 1473   403     0    0     0   174  956     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0    0     0     0 1473   403     0    0     0   174  956     0
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:     0    0     0     0 1473   403     0    0     0   174  956     0
PCE Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:      0    0     0     0 1473   403     0    0     0   174  956     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:   1.00 1.00  1.00  1.00 0.88  0.88  1.00 1.00  1.00  0.91 0.91  1.00
Lanes:        0.00 0.00  0.00  0.00 2.36  0.64  0.00 0.00  0.00  0.46 2.54  0.00
Final Sat.:      0    0     0     0 3942  1079     0    0     0   799 4388     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.00 0.00  0.00  0.00 0.37  0.37  0.00 0.00  0.00  0.22 0.22  0.00
Crit Moves:                         ****                        ****
Green/Cycle:  0.00 0.00  0.00  0.00 0.54  0.54  0.00 0.00  0.00  0.36 0.36  0.00
Volume/Cap:   0.00 0.00  0.00  0.00 0.70  0.70  0.00 0.00  0.00  0.61 0.61  0.00
Delay/Veh:     0.0  0.0   0.0   0.0 10.5  10.5   0.0  0.0   0.0  15.4 15.4   0.0
User DelAdj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:    0.0  0.0   0.0   0.0 10.5  10.5   0.0  0.0   0.0  15.4 15.4   0.0
HCM2k95th:       0    0     0     0   17    17     0    0     0    10   10     0
*******************************************************************************
```



```
-------------------------------------------------------------------------------
                        Downtown Sacramento Traffic Study
                           2030 Cumulative Conditions
                                  PM Peak Hour
-------------------------------------------------------------------------------
                         Level Of Service Computation Report
              2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #36 15th St/L St
*******************************************************************************
Cycle (sec):          50               Critical Vol./Cap. (X):         0.711
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        13.1
Optimal Cycle:        56               Level Of Service:                  B
*******************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0     0     0     0    30    30     0     0     0    20    20     0
Lanes:        0  0  0  0  0    0  0  2  1  0    0  0  0  0  0    0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0    0     0     0 1473   403     0    0     0   174  956     0
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:     0    0     0     0 1473   403     0    0     0   174  956     0
Added Vol:       0    0     0     0   75     0     0    0     0     0  150     0
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     0    0     0     0 1548   403     0    0     0   174 1106     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0    0     0     0 1548   403     0    0     0   174 1106     0
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:     0    0     0     0 1548   403     0    0     0   174 1106     0
PCE Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:      0    0     0     0 1548   403     0    0     0   174 1106     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:   1.00 1.00  1.00  1.00 0.88  0.88  1.00 1.00  1.00  0.91 0.91  1.00
Lanes:        0.00 0.00  0.00  0.00 2.38  0.62  0.00 0.00  0.00  0.41 2.59  0.00
Final Sat.:      0    0     0     0 3988  1038     0    0     0   705 4482     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.00 0.00  0.00  0.00 0.39  0.39  0.00 0.00  0.00  0.25 0.25  0.00
Crit Moves:                         ****                        ****
Green/Cycle:  0.00 0.00  0.00  0.00 0.54  0.54  0.00 0.00  0.00  0.36 0.36  0.00
Volume/Cap:   0.00 0.00  0.00  0.00 0.72  0.72  0.00 0.00  0.00  0.69 0.69  0.00
Delay/Veh:     0.0  0.0   0.0   0.0 10.9  10.9   0.0  0.0   0.0  16.5 16.5   0.0
User DelAdj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:    0.0  0.0   0.0   0.0 10.9  10.9   0.0  0.0   0.0  16.5 16.5   0.0
HCM2k95th:       0    0     0     0   19    19     0    0     0    12   12     0
*******************************************************************************
```

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--------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                       2030 Cumulative Conditions
                              PM Peak Hour
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
         2000 HCM Operations Method (Base Volume Alternative)
********************************************************************************
Intersection #37 15th St/P St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):         0.607
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        12.0
Optimal Cycle:        56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0    0   28    28    0    0     0   22   22     0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0 1330   289    0    0     0  163  985     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0 1330   289    0    0     0  163  985     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0 1330   289    0    0     0  163  985     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0 1330   289    0    0     0  163  985     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0 1330   289    0    0     0  163  985     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.89  0.89 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 2.46  0.54 0.00 0.00  0.00 0.43 2.57  0.00
Final Sat.:     0    0     0    0 4146   901    0    0     0  736 4451     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.32  0.32 0.00 0.00  0.00 0.22 0.22  0.00
Crit Moves:                       ****                          ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.50  0.50 0.00 0.00  0.00 0.39 0.39  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.64  0.64 0.00 0.00  0.00 0.56 0.56  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 10.9  10.9  0.0  0.0   0.0 13.6 13.6   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 10.9  10.9  0.0  0.0   0.0 13.6 13.6   0.0
HCM2k95th:      0    0     0    0   15    15    0    0     0   10   10     0
********************************************************************************
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--------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                       2030 Cumulative Conditions
                              PM Peak Hour
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
         2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #37 15th St/P St
********************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):         0.656
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        12.6
Optimal Cycle:        56              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0    0   28    28    0    0     0   22   22     0
Lanes:        0  0  0  0  0   0  0  2  1  0   0  0  0  0  0   0  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0 1330   289    0    0     0  163  985     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0 1330   289    0    0     0  163  985     0
Added Vol:      0    0     0    0  186     0    0    0     0    0   43     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0    0 1516   289    0    0     0  163 1028     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0 1516   289    0    0     0  163 1028     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0 1516   289    0    0     0  163 1028     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0 1516   289    0    0     0  163 1028     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.89  0.89 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 2.52  0.48 0.00 0.00  0.00 0.41 2.59  0.00
Final Sat.:     0    0     0    0 4252   811    0    0     0  710 4477     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.36  0.36 0.00 0.00  0.00 0.23 0.23  0.00
Crit Moves:                       ****                          ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.50  0.50 0.00 0.00  0.00 0.39 0.39  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.71  0.71 0.00 0.00  0.00 0.58 0.58  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 11.9  11.9  0.0  0.0   0.0 13.8 13.8   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 11.9  11.9  0.0  0.0   0.0 13.8 13.8   0.0
HCM2k95th:      0    0     0    0   18    18    0    0     0   10   10     0
********************************************************************************
```

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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2030 Cumulative Conditions
                                 PM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #38 15th St/Q St
*******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):         0.644
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       12.9
Optimal Cycle:        56              Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0    27   27    0     0   23   23     0    0    0
Lanes:        0  0  0  0  0    0  1  2  0  0    0  0  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0   165 1309    0     0 1256  221     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0   165 1309    0     0 1256  221     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0   165 1309    0     0 1256  221     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0   165 1309    0     0 1256  221     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0   165 1309    0     0 1256  221     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.91 0.91 1.00  1.00 0.89 0.89  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  0.34 2.66 0.00  0.00 2.55 0.45  0.00 0.00 0.00
Final Sat.:     0    0    0   581 4606    0     0 4314  759     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.28 0.28 0.00  0.00 0.29 0.29  0.00 0.00 0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00 0.00  0.48 0.48 0.00  0.00 0.41 0.41  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.59 0.59 0.00  0.00 0.71 0.71  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0  10.9 10.9  0.0   0.0 14.9 14.9   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  10.9 10.9  0.0   0.0 14.9 14.9   0.0  0.0  0.0
HCM2k95th:      0    0    0    12   12    0     0   14   14     0    0    0
*******************************************************************************
```



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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2030 Cumulative Conditions
                                 PM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #38 15th St/Q St
*******************************************************************************
Cycle (sec):          50              Critical Vol./Cap. (X):         0.696
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):       13.4
Optimal Cycle:        56              Level Of Service:                  B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0    27   27    0     0   23   23     0    0    0
Lanes:        0  0  0  0  0    0  1  2  0  0    0  0  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    0   165 1309    0     0 1256  221     0    0    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0   165 1309    0     0 1256  221     0    0    0
Added Vol:      0    0    0     4  182    0     0   36   13     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    0    0    0   169 1491    0     0 1292  234     0    0    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0   169 1491    0     0 1292  234     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0   169 1491    0     0 1292  234     0    0    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     0    0    0   169 1491    0     0 1292  234     0    0    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900
Adjustment:  1.00 1.00 1.00  0.91 0.91 1.00  1.00 0.89 0.89  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  0.31 2.69 0.00  0.00 2.54 0.46  0.00 0.00 0.00
Final Sat.:     0    0    0   528 4659    0     0 4291  777     0    0    0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.32 0.32 0.00  0.00 0.30 0.30  0.00 0.00 0.00
Crit Moves:                  ****                  ****
Green/Cycle: 0.00 0.00 0.00  0.48 0.48 0.00  0.00 0.41 0.41  0.00 0.00 0.00
Volume/Cap:  0.00 0.00 0.00  0.66 0.66 0.00  0.00 0.73 0.73  0.00 0.00 0.00
Delay/Veh:    0.0  0.0  0.0  11.7 11.7  0.0   0.0 15.3 15.3   0.0  0.0  0.0
User DelAdj: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
AdjDel/Veh:   0.0  0.0  0.0  11.7 11.7  0.0   0.0 15.3 15.3   0.0  0.0  0.0
HCM2k95th:      0    0    0    14   14    0     0   14   14     0    0    0
*******************************************************************************
```

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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2030 Cumulative Conditions
                                 PM Peak Hour
-------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #39 15th St/W St
*******************************************************************************
Cycle (sec):          70                 Critical Vol./Cap. (X):        0.529
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        14.6
Optimal Cycle:        76                 Level Of Service:                 B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0    0   38    38    0    0     0   32   32     0
Lanes:        0  0  0  0  0   0  0  3  1  0   0  0  0  0  0   1  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0 1691   155    0    0     0  426 1074     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0 1691   155    0    0     0  426 1074     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0 1691   155    0    0     0  426 1074     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0 1691   155    0    0     0  426 1074     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0 1691   155    0    0     0  426 1074     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.90  0.90 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 3.66  0.34 0.00 0.00  0.00 1.14 2.86  0.00
Final Sat.:     0    0     0    0 6253   573    0    0     0 1964 4952     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.27  0.27 0.00 0.00  0.00 0.22 0.22  0.00
Crit Moves:                       ****                        ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.50  0.50 0.00 0.00  0.00 0.42 0.42  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.54  0.54 0.00 0.00  0.00 0.52 0.52  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 13.2  13.2  0.0  0.0   0.0 16.4 16.4   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 13.2  13.2  0.0  0.0   0.0 16.4 16.4   0.0
HCM2k95th:      0    0     0    0   15    15    0    0     0   13   13     0
*******************************************************************************
```



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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2030 Cumulative Conditions
                                 PM Peak Hour
-------------------------------------------------------------------------------
                       Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #39 15th St/W St
*******************************************************************************
Cycle (sec):          70                 Critical Vol./Cap. (X):        0.558
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        14.9
Optimal Cycle:        76                 Level Of Service:                 B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0    0   38    38    0    0     0   32   32     0
Lanes:        0  0  0  0  0   0  0  3  1  0   0  0  0  0  0   1  1  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0 1691   155    0    0     0  426 1074     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:    0    0     0    0 1691   155    0    0     0  426 1074     0
Added Vol:      0    0     0    0  183     0    0    0     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:    0    0     0    0 1874   155    0    0     0  426 1074     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0    0     0    0 1874   155    0    0     0  426 1074     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0    0     0    0 1874   155    0    0     0  426 1074     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0    0     0    0 1874   155    0    0     0  426 1074     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 1.00  1.00 1.00 0.90  0.90 1.00 1.00  1.00 0.91 0.91  1.00
Lanes:       0.00 0.00  0.00 0.00 3.69  0.31 0.00 0.00  0.00 1.14 2.86  0.00
Final Sat.:     0    0     0    0 6317   523    0    0     0 1964 4952     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.00 0.30  0.30 0.00 0.00  0.00 0.22 0.22  0.00
Crit Moves:                       ****                        ****
Green/Cycle: 0.00 0.00  0.00 0.00 0.50  0.50 0.00 0.00  0.00 0.42 0.42  0.00
Volume/Cap:  0.00 0.00  0.00 0.00 0.59  0.59 0.00 0.00  0.00 0.52 0.52  0.00
Delay/Veh:    0.0  0.0   0.0  0.0 13.8  13.8  0.0  0.0   0.0 16.4 16.4   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0  0.0 13.8  13.8  0.0  0.0   0.0 16.4 16.4   0.0
HCM2k95th:      0    0     0    0   17    17    0    0     0   13   13     0
*******************************************************************************
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------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                       2030 Cumulative Conditions
                              PM Peak Hour
------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
******************************************************************************
Intersection #40 15th St/X St
******************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.891
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):       58.9
Optimal Cycle:        85              Level Of Service:                  E
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase       Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   17    17    24   24     0     0   32    32     0    0     0
Lanes:        0  0  2  1  0    1  1  2  0  0    0  0  1  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1020    70   853 1270     0     0  673   255     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0 1020    70   853 1270     0     0  673   255     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0 1020    70   853 1270     0     0  673   255     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 1020    70   853 1270     0     0  673   255     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0 1020    70   853 1270     0     0  673   255     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.90  0.90  0.89 0.89  1.00  1.00 0.91  0.91  1.00 1.00  1.00
Lanes:       0.00 2.81  0.19  1.61 2.39  0.00  0.00 1.45  0.55  0.00 0.00  0.00
Final Sat.:     0 4805   330  2723 4054     0     0 2511   951     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.21  0.21  0.31 0.31  0.00  0.00 0.27  0.27  0.00 0.00  0.00
Crit Moves:             ****  ****                   ****
Green/Cycle: 0.00 0.21  0.21  0.29 0.29  0.00  0.00 0.39  0.39  0.00 0.00  0.00
Volume/Cap:  0.00 1.02  1.02  1.07 1.07  0.00  0.00 0.69  0.69  0.00 0.00  0.00
Delay/Veh:    0.0 66.3  66.3  71.0 71.0   0.0   0.0 22.3  22.3   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 66.3  66.3  71.0 71.0   0.0   0.0 22.3  22.3   0.0  0.0   0.0
HCM2k95th:      0   27    27    34   34     0     0   20    20     0    0     0
******************************************************************************
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------------------------------------------------------------------------------
                    Downtown Sacramento Traffic Study
                       2030 Cumulative Conditions
                              PM Peak Hour
------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #40 15th St/X St
******************************************************************************
Cycle (sec):          70              Critical Vol./Cap. (X):        0.922
Loss Time (sec):       9 (Y+R =  4 sec) Average Delay (sec/veh):       79.7
Optimal Cycle:        85              Level Of Service:                  E
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase       Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:     0   17    17    24   24     0     0   32    32     0    0     0
Lanes:        0  0  2  1  0    1  1  2  0  0    0  0  1  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1020    70   853 1270     0     0  673   255     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0 1020    70   853 1270     0     0  673   255     0    0     0
Added Vol:      0    0     0   183    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0 1020    70  1036 1270     0     0  673   255     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0 1020    70  1036 1270     0     0  673   255     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 1020    70  1036 1270     0     0  673   255     0    0     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0 1020    70  1036 1270     0     0  673   255     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.90  0.90  0.89 0.89  1.00  1.00 0.91  0.91  1.00 1.00  1.00
Lanes:       0.00 2.81  0.19  1.80 2.20  0.00  0.00 1.45  0.55  0.00 0.00  0.00
Final Sat.:     0 4805   330  3039 3725     0     0 2511   951     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.21  0.21  0.34 0.34  0.00  0.00 0.27  0.27  0.00 0.00  0.00
Crit Moves:             ****  ****                   ****
Green/Cycle: 0.00 0.21  0.21  0.29 0.29  0.00  0.00 0.39  0.39  0.00 0.00  0.00
Volume/Cap:  0.00 1.02  1.02  1.16 1.16  0.00  0.00 0.69  0.69  0.00 0.00  0.00
Delay/Veh:    0.0 66.3  66.3 109.1  109   0.0   0.0 22.3  22.3   0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0 66.3  66.3 109.1  109   0.0   0.0 22.3  22.3   0.0  0.0   0.0
HCM2k95th:      0   27    27    42   42     0     0   20    20     0    0     0
******************************************************************************
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Downtown Sacramento Traffic Study
2030 Cumulative Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #41 16th St/H St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.759
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 22.7
Optimal Cycle: 56 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	25	25	0	0	0	19	25	0	0	0	6
Lanes:	0 0 2 1 0			0 0 0 0 0			2 1 0 0 0			0 0 0 0 1		
Volume Module:												
Base Vol:	0	2191	20	0	0	0	798	751	0	0	0	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2191	20	0	0	0	798	751	0	0	0	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2191	20	0	0	0	798	751	0	0	0	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2191	20	0	0	0	798	751	0	0	0	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	2191	20	0	0	0	798	751	0	0	0	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.91	1.00	1.00	1.00	0.95	0.98	1.00	1.00	1.00	0.87
Lanes:	0.00	2.97	0.03	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00
Final Sat.:	0	5135	47	0	0	0	3594	1853	0	0	0	1644
Capacity Analysis Module:												
Vol/Sat:	0.00	0.43	0.43	0.00	0.00	0.00	0.22	0.41	0.00	0.00	0.00	0.03
Crit Moves:		****					****					****
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.34	0.45	0.00	0.00	0.00	0.11
Volume/Cap:	0.00	0.96	0.96	0.00	0.00	0.00	0.65	0.91	0.00	0.00	0.00	0.27
Delay/Veh:	0.0	25.3	25.3	0.0	0.0	0.0	16.4	22.0	0.0	0.0	0.0	23.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	25.3	25.3	0.0	0.0	0.0	16.4	22.0	0.0	0.0	0.0	23.8
HCM2k95th:	0	26	26	0	0	0	11	23	0	0	0	2

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #41 16th St/H St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.820
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 37.5
Optimal Cycle: 56 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	25	25	0	0	0	19	25	0	0	0	6
Lanes:	0 0 2 1 0			0 0 0 0 0			2 1 0 0 0			0 0 0 0 1		
Volume Module:												
Base Vol:	0	2191	20	0	0	0	798	751	0	0	0	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2191	20	0	0	0	798	751	0	0	0	47
Added Vol:	0	223	0	0	0	0	43	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2414	20	0	0	0	841	751	0	0	0	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2414	20	0	0	0	841	751	0	0	0	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2414	20	0	0	0	841	751	0	0	0	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	2414	20	0	0	0	841	751	0	0	0	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.91	1.00	1.00	1.00	0.94	0.97	1.00	1.00	1.00	0.87
Lanes:	0.00	2.98	0.02	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00
Final Sat.:	0	5139	43	0	0	0	3590	1851	0	0	0	1644
Capacity Analysis Module:												
Vol/Sat:	0.00	0.47	0.47	0.00	0.00	0.00	0.23	0.41	0.00	0.00	0.00	0.03
Crit Moves:		****					****					****
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.34	0.45	0.00	0.00	0.00	0.11
Volume/Cap:	0.00	1.05	1.05	0.00	0.00	0.00	0.69	0.91	0.00	0.00	0.00	0.27
Delay/Veh:	0.0	49.7	49.7	0.0	0.0	0.0	16.9	21.9	0.0	0.0	0.0	23.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	49.7	49.7	0.0	0.0	0.0	16.9	21.9	0.0	0.0	0.0	23.8
HCM2k95th:	0	35	35	0	0	0	12	23	0	0	0	2

Downtown Sacramento Traffic Study
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PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #42 16th St/I St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.587
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	15.6
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	30	30	0	0	0	0	0	0	0	0	20	20
Lanes:	1 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	348	1810	0	0	0	0	0	0	0	0	1162	444
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	348	1810	0	0	0	0	0	0	0	0	1162	444
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	348	1810	0	0	0	0	0	0	0	0	1162	444
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	348	1810	0	0	0	0	0	0	0	0	1162	444
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	348	1810	0	0	0	0	0	0	0	0	1162	444
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	0.87
Lanes:	1.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.17	0.83
Final Sat.:	1729	5187	0	0	0	0	0	0	0	0	3599	1375
Capacity Analysis Module:												
Vol/Sat:	0.20	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.32
Crit Moves:	****										****	
Green/Cycle:	0.54	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.36
Volume/Cap:	0.38	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.90
Delay/Veh:	7.6	9.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	24.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.6	9.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	24.0
HCM2k95th:	7	13	0	0	0	0	0	0	0	0	24	24

Downtown Sacramento Traffic Study
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PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #42 16th St/I St

Cycle (sec):	50	Critical Vol./Cap. (X):	0.615
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	15.8
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	30	30	0	0	0	0	0	0	0	0	20	20
Lanes:	1 1 2 0 0			0 0 0 0 0			0 0 0 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	348	1810	0	0	0	0	0	0	0	0	1162	444
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	348	1810	0	0	0	0	0	0	0	0	1162	444
Added Vol:	43	223	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	391	2033	0	0	0	0	0	0	0	0	1162	444
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	391	2033	0	0	0	0	0	0	0	0	1162	444
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	391	2033	0	0	0	0	0	0	0	0	1162	444
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	391	2033	0	0	0	0	0	0	0	0	1162	444
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	0.87
Lanes:	1.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.17	0.83
Final Sat.:	1729	5187	0	0	0	0	0	0	0	0	3599	1375
Capacity Analysis Module:												
Vol/Sat:	0.23	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.32
Crit Moves:	****										****	
Green/Cycle:	0.54	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.36
Volume/Cap:	0.42	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.90
Delay/Veh:	7.8	10.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	24.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.8	10.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	24.0
HCM2k95th:	7	16	0	0	0	0	0	0	0	0	24	24

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #43 16th St/J St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.788
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 16.2
Optimal Cycle: 56 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	25	25	0	0	0	25	25	0	0	0	0
Lanes:		0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0	
Volume Module:												
Base Vol:	0	1870	152	0	0	0	535	1790	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1870	152	0	0	0	535	1790	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1870	152	0	0	0	535	1790	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1870	152	0	0	0	535	1790	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1870	152	0	0	0	535	1790	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.77	0.23	0.00	0.00	0.00	1.00	3.00	0.00	0.00	0.00	0.00
Final Sat.:	0	4744	386	0	0	0	1729	5187	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.39	0.00	0.00	0.00	0.31	0.35	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.88	0.88	0.00	0.00	0.00	0.69	0.77	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	18.6	18.6	0.0	0.0	0.0	13.1	14.4	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.6	18.6	0.0	0.0	0.0	13.1	14.4	0.0	0.0	0.0	0.0
HCM2k95th:	0	26	26	0	0	0	13	15	0	0	0	0

Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #43 16th St/J St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.881
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 18.0
Optimal Cycle: 68 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	25	25	0	0	0	25	25	0	0	0	0
Lanes:		0 0 2 1 0			0 0 0 0 0			1 1 2 0 0			0 0 0 0 0	
Volume Module:												
Base Vol:	0	1870	152	0	0	0	535	1790	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1870	152	0	0	0	535	1790	0	0	0	0
Added Vol:	0	43	0	0	0	0	223	111	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1913	152	0	0	0	758	1901	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1913	152	0	0	0	758	1901	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1913	152	0	0	0	758	1901	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1913	152	0	0	0	758	1901	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Lanes:	0.00	2.78	0.22	0.00	0.00	0.00	1.14	2.86	0.00	0.00	0.00	0.00
Final Sat.:	0	4752	378	0	0	0	1972	4944	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.40	0.40	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.45	0.45	0.00	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.90	0.90	0.00	0.00	0.00	0.86	0.86	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	19.8	19.8	0.0	0.0	0.0	16.6	16.6	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	19.8	19.8	0.0	0.0	0.0	16.6	16.6	0.0	0.0	0.0	0.0
HCM2k95th:	0	27	27	0	0	0	18	18	0	0	0	0

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Downtown Sacramento Traffic Study
2030 Cumulative Conditions
PM Peak Hour
-------------------------------------------------------------------------------
Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #44 16th St/L St
*******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):          0.496
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        13.0
Optimal Cycle:       56              Level Of Service:                   B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    25   25    0    0    0    0    0    0    0    0   25   25
Lanes:        1  0  2  1  0   0  0  0  0  0   0  0  0  0  0   0  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     329 1659    0    0    0    0    0    0    0    0  716   224
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  329 1659    0    0    0    0    0    0    0    0  716   224
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   329 1659    0    0    0    0    0    0    0    0  716   224
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0     0
Reduced Vol:  329 1659    0    0    0    0    0    0    0    0  716   224
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   329 1659    0    0    0    0    0    0    0    0  716   224
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.91  0.91  1.00 1.00  1.00  1.00 1.00  1.00  1.00 0.92  0.92
Lanes:       1.00 3.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 1.52  0.48
Final Sat.:  1900 5187    0    0    0    0    0    0    0    0 2651   829
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.17 0.32  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.27  0.27
Crit Moves:  ****                                                   ****
Green/Cycle: 0.45 0.45  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.45  0.45
Volume/Cap:  0.39 0.72  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.61  0.61
Delay/Veh:   10.7 13.7   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 12.4  12.4
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  10.7 13.7   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 12.4  12.4
HCM2k95th:      8   17    0    0    0    0    0    0    0    0   13    13
*******************************************************************************
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Downtown Sacramento Traffic Study
2030 Cumulative Conditions
PM Peak Hour
-------------------------------------------------------------------------------
Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #44 16th St/L St
*******************************************************************************
Cycle (sec):         50              Critical Vol./Cap. (X):          0.563
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):        13.4
Optimal Cycle:       56              Level Of Service:                   B
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    25   25    0    0    0    0    0    0    0    0   25   25
Lanes:        1  0  2  1  0   0  0  0  0  0   0  0  0  0  0   0  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     329 1659    0    0    0    0    0    0    0    0  716   224
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  329 1659    0    0    0    0    0    0    0    0  716   224
Added Vol:     53   28    0    0    0    0    0    0    0    0   97    15
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0     0
Initial Fut:  382 1687    0    0    0    0    0    0    0    0  813   239
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   382 1687    0    0    0    0    0    0    0    0  813   239
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0     0
Reduced Vol:  382 1687    0    0    0    0    0    0    0    0  813   239
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   382 1687    0    0    0    0    0    0    0    0  813   239
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  1.00 0.91  0.91  1.00 1.00  1.00  1.00 1.00  1.00  1.00 0.92  0.92
Lanes:       1.00 3.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 1.55  0.45
Final Sat.:  1900 5187    0    0    0    0    0    0    0    0 2695   792
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.20 0.33  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.30  0.30
Crit Moves:  ****                                                   ****
Green/Cycle: 0.45 0.45  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.45  0.45
Volume/Cap:  0.45 0.73  0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.68  0.68
Delay/Veh:   11.1 13.9   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 13.5  13.5
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  11.1 13.9   0.0   0.0  0.0   0.0   0.0  0.0   0.0   0.0 13.5  13.5
HCM2k95th:     10   18    0    0    0    0    0    0    0    0   16    16
*******************************************************************************
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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
                          2030 Cumulative Conditions
                                 PM Peak Hour
-------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #45 16th St/P St
*******************************************************************************
Cycle (sec):         50               Critical Vol./Cap. (X):          0.665
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):         13.8
Optimal Cycle:       56               Level Of Service:                    B
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    29   29    0    0    0    0    0    0    0    0   21   21
Lanes:        0  1  1  1  0   0  0  0  0  0   0  0  0  0  0   0  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      209 1284    0    0    0    0    0    0    0    0  911  169
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   209 1284    0    0    0    0    0    0    0    0  911  169
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    209 1284    0    0    0    0    0    0    0    0  911  169
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   209 1284    0    0    0    0    0    0    0    0  911  169
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    209 1284    0    0    0    0    0    0    0    0  911  169
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:   0.91 0.91 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.93 0.93
Lanes:        0.42 2.58 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.69 0.31
Final Sat.:    726 4461    0    0    0    0    0    0    0    0 2975  552
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.29 0.29 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.31 0.31
Crit Moves:   ****                                                  ****
Green/Cycle:  0.52 0.52 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.38 0.38
Volume/Cap:   0.56 0.56 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.82 0.82
Delay/Veh:     9.4  9.4  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 19.8 19.8
User DelAdj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:    9.4  9.4  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 19.8 19.8
HCM2k95th:      11   11    0    0    0    0    0    0    0    0   20   20
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-------------------------------------------------------------------------------
                       Downtown Sacramento Traffic Study
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-------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #45 16th St/P St
*******************************************************************************
Cycle (sec):         50               Critical Vol./Cap. (X):          0.695
Loss Time (sec):      6 (Y+R =  4 sec) Average Delay (sec/veh):         14.2
Optimal Cycle:       56               Level Of Service:                    B
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    29   29    0    0    0    0    0    0    0    0   21   21
Lanes:        0  1  1  1  0   0  0  0  0  0   0  0  0  0  0   0  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      209 1284    0    0    0    0    0    0    0    0  911  169
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   209 1284    0    0    0    0    0    0    0    0  911  169
Added Vol:      26   75    0    0    0    0    0    0    0    0   17    6
PasserByVol:     0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:   235 1359    0    0    0    0    0    0    0    0  928  175
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    235 1359    0    0    0    0    0    0    0    0  928  175
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   235 1359    0    0    0    0    0    0    0    0  928  175
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    235 1359    0    0    0    0    0    0    0    0  928  175
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:   0.91 0.91 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.93 0.93
Lanes:        0.44 2.56 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.68 0.32
Final Sat.:    765 4422    0    0    0    0    0    0    0    0 2964  559
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.31 0.31 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.31 0.31
Crit Moves:   ****                                                  ****
Green/Cycle:  0.52 0.52 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.38 0.38
Volume/Cap:   0.59 0.59 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.83 0.83
Delay/Veh:     9.8  9.8  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 20.7 20.7
User DelAdj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:    9.8  9.8  0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0 20.7 20.7
HCM2k95th:      12   12    0    0    0    0    0    0    0    0   21   21
*******************************************************************************
```

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #46 16th St/Q St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.603
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.9
Optimal Cycle: 31 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	10	0	0	0	0	0	10	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 1 0 0			0 0 0 0 1		
Volume Module:												
Base Vol:	0	1148	63	0	0	0	347	1066	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1148	63	0	0	0	347	1066	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1148	63	0	0	0	347	1066	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1148	63	0	0	0	347	1066	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1148	63	0	0	0	347	1066	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Lanes:	0.00	2.84	0.16	0.00	0.00	0.00	1.00	2.00	0.00	0.00	0.00	1.00
Final Sat.:	0	4878	268	0	0	0	1805	3610	0	0	0	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.24	0.00	0.00	0.00	0.19	0.30	0.00	0.00	0.00	0.00
Crit Moves:		****						****				
Green/Cycle:	0.00	0.39	0.39	0.00	0.00	0.00	0.49	0.49	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.60	0.60	0.00	0.00	0.00	0.39	0.60	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	12.7	12.7	0.0	0.0	0.0	8.1	9.7	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.7	12.7	0.0	0.0	0.0	8.1	9.7	0.0	0.0	0.0	0.0
HCM2k95th:	0	11	11	0	0	0	6	11	0	0	0	0

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Intersection #46 16th St/Q St

Cycle (sec): 50 Critical Vol./Cap. (X): 0.638
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.3
Optimal Cycle: 33 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	10	0	0	0	0	0	10	0	0	0	0
Lanes:	0 0 2 1 0			0 0 0 0 0			1 1 1 0 0			0 0 0 0 1		
Volume Module:												
Base Vol:	0	1148	63	0	0	0	347	1066	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1148	63	0	0	0	347	1066	0	0	0	0
Added Vol:	0	102	0	0	0	0	0	40	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1250	63	0	0	0	347	1106	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1250	63	0	0	0	347	1106	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1250	63	0	0	0	347	1106	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1250	63	0	0	0	347	1106	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Lanes:	0.00	2.86	0.14	0.00	0.00	0.00	1.00	2.00	0.00	0.00	0.00	1.00
Final Sat.:	0	4904	247	0	0	0	1805	3610	0	0	0	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.00	0.00	0.00	0.19	0.31	0.00	0.00	0.00	0.00
Crit Moves:		****						****				
Green/Cycle:	0.00	0.40	0.40	0.00	0.00	0.00	0.48	0.48	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.64	0.64	0.00	0.00	0.00	0.40	0.64	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	12.8	12.8	0.0	0.0	0.0	8.4	10.3	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.8	12.8	0.0	0.0	0.0	8.4	10.3	0.0	0.0	0.0	0.0
HCM2k95th:	0	13	13	0	0	0	7	12	0	0	0	0

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Intersection #47 16th St/W St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.555
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 25.2
Optimal Cycle: 79 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	31	31	0	0	0	0	0	23	23	0	16	16
Lanes:	1 1 2 0 0			0 0 0 0 0			0 0 2 1 0			0 0 1 1 1		
Volume Module:												
Base Vol:	221	740	0	0	0	0	0	786	269	0	336	421
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	221	740	0	0	0	0	0	786	269	0	336	421
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	221	740	0	0	0	0	0	786	269	0	336	421
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	740	0	0	0	0	0	786	269	0	336	421
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	221	740	0	0	0	0	0	786	269	0	336	421
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.88	0.88	1.00	0.87	0.87
Lanes:	1.00	3.00	0.00	0.00	0.00	0.00	0.00	2.24	0.76	0.00	1.33	1.67
Final Sat.:	1729	5187	0	0	0	0	0	3718	1272	0	2204	2762
Capacity Analysis Module:												
Vol/Sat:	0.13	0.14	0.00	0.00	0.00	0.00	0.00	0.21	0.21	0.00	0.15	0.15
Crit Moves:	****							****			****	
Green/Cycle:	0.39	0.39	0.00	0.00	0.00	0.00	0.00	0.29	0.29	0.00	0.20	0.20
Volume/Cap:	0.33	0.36	0.00	0.00	0.00	0.00	0.00	0.73	0.73	0.00	0.75	0.75
Delay/Veh:	16.8	17.1	0.0	0.0	0.0	0.0	0.0	27.0	27.0	0.0	32.9	32.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.8	17.1	0.0	0.0	0.0	0.0	0.0	27.0	27.0	0.0	32.9	32.9
HCM2k95th:	7	8	0	0	0	0	0	17	17	0	15	15

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Intersection #47 16th St/W St

Cycle (sec): 70 Critical Vol./Cap. (X): 0.580
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 27.0
Optimal Cycle: 79 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	31	31	0	0	0	0	0	23	23	0	16	16
Lanes:	1 1 2 0 0			0 0 0 0 0			0 0 2 1 0			0 0 1 1 1		
Volume Module:												
Base Vol:	221	740	0	0	0	0	0	786	269	0	336	421
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	221	740	0	0	0	0	0	786	269	0	336	421
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	102
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	221	740	0	0	0	0	0	786	269	0	336	523
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	221	740	0	0	0	0	0	786	269	0	336	523
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	740	0	0	0	0	0	786	269	0	336	523
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	221	740	0	0	0	0	0	786	269	0	336	523
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.88	0.88	1.00	0.86	0.86
Lanes:	1.00	3.00	0.00	0.00	0.00	0.00	0.00	2.24	0.76	0.00	1.17	1.83
Final Sat.:	1729	5187	0	0	0	0	0	3718	1272	0	1925	2997
Capacity Analysis Module:												
Vol/Sat:	0.13	0.14	0.00	0.00	0.00	0.00	0.00	0.21	0.21	0.00	0.17	0.17
Crit Moves:	****							****			****	
Green/Cycle:	0.39	0.39	0.00	0.00	0.00	0.00	0.00	0.29	0.29	0.00	0.20	0.20
Volume/Cap:	0.33	0.36	0.00	0.00	0.00	0.00	0.00	0.73	0.73	0.00	0.86	0.86
Delay/Veh:	16.8	17.1	0.0	0.0	0.0	0.0	0.0	27.0	27.0	0.0	38.2	38.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.8	17.1	0.0	0.0	0.0	0.0	0.0	27.0	27.0	0.0	38.2	38.2
HCM2k95th:	7	8	0	0	0	0	0	17	17	0	18	18

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                      Level Of Service Computation Report
          2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #48 16th St/X St
*******************************************************************************
Cycle (sec):          70               Critical Vol./Cap. (X):        0.587
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        20.2
Optimal Cycle:        76               Level Of Service:                  C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   35    35    0    0     0   35   35     0    0    0     0
Lanes:       0  0  3  1  0    0  0  0  0  0    1  0  2  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0  758   120    0    0     0  664 1342   265    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0  758   120    0    0     0  664 1342   265    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0  758   120    0    0     0  664 1342   265    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0  758   120    0    0     0  664 1342   265    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0  758   120    0    0     0  664 1342   265    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.89  0.89 1.00 1.00  1.00 0.85 0.95  0.85 1.00 1.00  1.00
Lanes:       0.00 3.45  0.55 0.00 0.00  0.00 1.00 2.00  1.00 0.00 0.00  0.00
Final Sat.:    0 5845   925    0    0     0 1615 3610  1615    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.13  0.13 0.00 0.00  0.00 0.41 0.37  0.16 0.00 0.00  0.00
Crit Moves:       ****                       ****
Green/Cycle: 0.00 0.46  0.46 0.00 0.00  0.00 0.46 0.46  0.46 0.00 0.00  0.00
Volume/Cap:  0.00 0.28  0.28 0.00 0.00  0.00 0.89 0.81  0.36 0.00 0.00  0.00
Delay/Veh:    0.0 12.8  12.8  0.0  0.0   0.0 31.9 20.6  13.5  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 12.8  12.8  0.0  0.0   0.0 31.9 20.6  13.5  0.0  0.0   0.0
HCM2k95th:     0    7     7    0    0     0   31   24     8    0    0     0
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-------------------------------------------------------------------------------
                      Downtown Sacramento Traffic Study
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                               PM Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
*******************************************************************************
Intersection #48 16th St/X St
*******************************************************************************
Cycle (sec):          70               Critical Vol./Cap. (X):        0.587
Loss Time (sec):       6 (Y+R =  4 sec) Average Delay (sec/veh):        23.4
Optimal Cycle:        76               Level Of Service:                  C
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:          Include          Include          Include          Include
Min. Green:    0   35    35    0    0     0   35   35     0    0    0     0
Lanes:       0  0  3  1  0    0  0  0  0  0    1  0  2  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0  758   120    0    0     0  664 1342   265    0    0     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   0  758   120    0    0     0  664 1342   265    0    0     0
Added Vol:     0    0     0    0    0     0    0  183     0    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   0  758   120    0    0     0  664 1525   265    0    0     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    0  758   120    0    0     0  664 1525   265    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0  758   120    0    0     0  664 1525   265    0    0     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    0  758   120    0    0     0  664 1525   265    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  1.00 0.89  0.89 1.00 1.00  1.00 0.85 0.95  0.85 1.00 1.00  1.00
Lanes:       0.00 3.45  0.55 0.00 0.00  0.00 1.00 2.00  1.00 0.00 0.00  0.00
Final Sat.:    0 5845   925    0    0     0 1615 3610  1615    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.13  0.13 0.00 0.00  0.00 0.41 0.42  0.16 0.00 0.00  0.00
Crit Moves:       ****                       ****
Green/Cycle: 0.00 0.46  0.46 0.00 0.00  0.00 0.46 0.46  0.46 0.00 0.00  0.00
Volume/Cap:  0.00 0.28  0.28 0.00 0.00  0.00 0.89 0.92  0.36 0.00 0.00  0.00
Delay/Veh:    0.0 12.8  12.8  0.0  0.0   0.0 31.9 27.6  13.5  0.0  0.0   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:   0.0 12.8  12.8  0.0  0.0   0.0 31.9 27.6  13.5  0.0  0.0   0.0
HCM2k95th:     0    7     7    0    0     0   31   31     8    0    0     0
*******************************************************************************
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Downtown Sacramento Traffic Study
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #49 29th St/J St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.766
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	41.3
Optimal Cycle:	82	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	18	18	0	18	18	0	0	34	34	0	0	0
Lanes:	0 1 2 0 0			0 1 1 0 0			0 0 2 1 0			1 0 0 0 0		
Volume Module:												
Base Vol:	57	329	0	222	333	0	0	1369	693	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	57	329	0	222	333	0	0	1369	693	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	57	329	0	222	333	0	0	1369	693	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	329	0	222	333	0	0	1369	693	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	57	329	0	222	333	0	0	1369	693	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.90	1.00	0.93	0.93	1.00	1.00	0.86	0.86	1.00	1.00	1.00
Lanes:	0.44	2.56	0.00	0.80	1.20	0.00	0.00	2.00	1.00	1.00	0.00	0.00
Final Sat.:	761	4390	0	1415	2123	0	0	3285	1643	1900	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.00	0.16	0.16	0.00	0.00	0.42	0.42	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.22	0.22	0.00	0.22	0.22	0.00	0.00	0.41	0.41	0.00	0.00	0.00
Volume/Cap:	0.34	0.34	0.00	0.71	0.71	0.00	0.00	1.01	1.02	0.00	0.00	0.00
Delay/Veh:	27.2	27.2	0.0	32.8	32.8	0.0	0.0	45.1	48.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.2	27.2	0.0	32.8	32.8	0.0	0.0	45.1	48.5	0.0	0.0	0.0
HCM2k95th:	6	6	0	15	15	0	0	41	42	0	0	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #49 29th St/J St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.770
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	44.7
Optimal Cycle:	82	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	18	18	0	18	18	0	0	34	34	0	0	0
Lanes:	0 1 2 0 0			0 1 1 0 0			0 0 2 1 0			1 0 0 0 0		
Volume Module:												
Base Vol:	57	329	0	222	333	0	0	1369	693	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	57	329	0	222	333	0	0	1369	693	0	0	0
Added Vol:	0	0	0	0	0	0	0	38	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	329	0	222	333	0	0	1407	693	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	57	329	0	222	333	0	0	1407	693	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	329	0	222	333	0	0	1407	693	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	57	329	0	222	333	0	0	1407	693	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.90	1.00	0.93	0.93	1.00	1.00	0.87	0.87	1.00	1.00	1.00
Lanes:	0.44	2.56	0.00	0.80	1.20	0.00	0.00	2.01	0.99	1.00	0.00	0.00
Final Sat.:	761	4390	0	1415	2123	0	0	3305	1628	1900	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.00	0.16	0.16	0.00	0.00	0.43	0.43	0.00	0.00	0.00
Crit Moves:	****				****			****				
Green/Cycle:	0.22	0.22	0.00	0.22	0.22	0.00	0.00	0.41	0.41	0.00	0.00	0.00
Volume/Cap:	0.34	0.34	0.00	0.71	0.71	0.00	0.00	1.03	1.03	0.00	0.00	0.00
Delay/Veh:	27.2	27.2	0.0	32.8	32.8	0.0	0.0	51.1	51.1	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.2	27.2	0.0	32.8	32.8	0.0	0.0	51.1	51.1	0.0	0.0	0.0
HCM2k95th:	6	6	0	15	15	0	0	43	43	0	0	0

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2000 HCM Operations Method (Base Volume Alternative)

Intersection #50 30th St/J St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.648
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	19.1
Optimal Cycle:	79	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	31	31	0	0	0	39	39	0	0	0	0
Lanes:	0 1 1 1 0			0 0 0 0 0			1 0 2 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	1055	470	0	0	0	505	1143	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1055	470	0	0	0	505	1143	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1055	470	0	0	0	505	1143	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1055	470	0	0	0	505	1143	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1055	470	0	0	0	505	1143	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.87	0.87	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Lanes:	0.00	2.08	0.92	0.00	0.00	0.00	1.00	2.00	0.00	0.00	1.00	0.00
Final Sat.:	0	3423	1525	0	0	0	1900	3610	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.31	0.31	0.00	0.00	0.00	0.27	0.32	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.39	0.39	0.00	0.00	0.00	0.49	0.49	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.79	0.79	0.00	0.00	0.00	0.54	0.64	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	23.3	23.3	0.0	0.0	0.0	14.4	15.6	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	23.3	23.3	0.0	0.0	0.0	14.4	15.6	0.0	0.0	0.0	0.0
HCM2k95th:	0	23	23	0	0	0	15	17	0	0	0	0

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Intersection #50 30th St/J St

Cycle (sec):	70	Critical Vol./Cap. (X):	0.648
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	19.2
Optimal Cycle:	79	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	31	31	0	0	0	39	39	0	0	0	0
Lanes:	0 1 1 1 0			0 0 0 0 0			1 0 2 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	1055	470	0	0	0	505	1143	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1055	470	0	0	0	505	1143	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	38	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1055	470	0	0	0	505	1181	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1055	470	0	0	0	505	1181	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1055	470	0	0	0	505	1181	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1055	470	0	0	0	505	1181	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.87	0.87	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Lanes:	0.00	2.08	0.92	0.00	0.00	0.00	1.00	2.00	0.00	0.00	1.00	0.00
Final Sat.:	0	3423	1525	0	0	0	1900	3610	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.31	0.31	0.00	0.00	0.00	0.27	0.33	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.39	0.39	0.00	0.00	0.00	0.49	0.49	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.79	0.79	0.00	0.00	0.00	0.54	0.66	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	23.3	23.3	0.0	0.0	0.0	14.4	16.0	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	23.3	23.3	0.0	0.0	0.0	14.4	16.0	0.0	0.0	0.0	0.0
HCM2k95th:	0	23	23	0	0	0	15	18	0	0	0	0