Connecting Howe Avenue Safety & Mobility Plan

Existing Conditions Analysis Report

APRIL 2025

PREPARED FOR:

City of SACRAMENTO

DKS

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PREPARED FOR CITY OF SACRAMENTO

Charisse Padilla, Project Manager

Jennifer Donlon Wyant, Mobility and Sustainability Division Manager

Ryan Dodge, Associate Planner

PREPARED BY DKS ASSOCIATES

Josh Pilachowski, Project Manager

Jim Damkowitch

Alexandra Haag

Sylinda Villado

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Introduction

Project Background

Howe Avenue is a multimodal corridor in Sacramento, California, serving as a major connection across the American River and classified as an arterial in the city's transportation network. Howe Avenue is identified as a part of the High Injury Network in the City of Sacramento's Vison Zero Action Plan[1] (2018), which means that the corridor experiences a high volume of fatal and serious injury crashes for persons walking, biking, rolling and driving on Howe Avenue.

The Connecting Howe Avenue Safety & Mobility Plan (Plan), funded through a Caltrans Sustainable Transportation Planning Grant, supports Sacramento's commitment to equitable engagement by involving local communities in identifying their transportation needs. The plan aims to improve safety and mobility for all road users by evaluating current conditions and proposing improvements to eliminate barriers, improve access, and address community priorities. The project limits are along Howe Avenue from Fair Oaks Boulevard to the Sacramento Regional Transit (SacRT) Power Inn Light Rail Station just south of Folsom Boulevard.

Policy Framework and Setting

In 2019, the City of Sacramento adopted a Complete Streets Policy[2] which confirms the City's commitment to Complete Streets to ensure that future transportation projects support a safer, accessible, and connected multi-modal transportation network.

On February 27, 2024, the City adopted the Sacramento 2040 General Plan and Climate Action & Adaptation Plan. The General Plan lists several goals, policies, and implementation measures for the City. The Mobility element of the 2040 General Plan outlines several policies that are related to the Howe Avenue Safety & Mobility Plan.

The following policies relate to Howe Avenue:

- M-1.1. *The City shall maintain a street classification system that considers the role of streets as corridors for movement but prioritizes a context-sensitive Complete*

[1] City of Sacramento. (2018). *Vision Zero action plan*. https://www.cityofsacramento.gov/content/dam/portal/pw/Transportation/VisionZero/Vision-Zero-Action-Plan-Adopted-August-2018.pdf

[2] City of Sacramento, Department of Transportation. (2019). *Approving environmental review of and adopting a complete streets policy* (Report No. R2019-0460). City of Sacramento. https://www.cityofsacramento.gov/content/dam/portal/pw/Transportation/Transportation-Planning/R2019-0460-Approving-Environmental-Review-of-and-Adopting-a-Complete-Streets-Policy.pdf

Streets concept that enables connected, comfortable, and convenient travel for those walking, rolling, and taking transit.

- M-1.2. *The City shall prioritize mobility, comfort, health, safety, and convenience for those walking, followed by those bicycling and riding transit, ahead of design and operations for those driving.*
- M-1.4. *In planning, designing, and managing the transportation system, the City shall prioritize person throughput to shift trips to more efficient travel modes and upgrade the performance of limited street space.*
- M-1.5. *The City shall maintain street design and operations standards that prioritize comfort and travel time for walking, bicycling, and transit, while managing vehicle speeds and traffic volumes, updating them as best practices evolve.*
- M-1.6. *Wherever feasible, the City shall design buildings, the public realm, streets, and pedestrian access to integrate transit into existing neighborhoods and proposed developments and destinations such as schools, employment centers, commercial centers, major attractions, and public walking spaces to improve access for users by transit.*
- M-1.8. *When designing projects, the City shall prioritize designs that strengthen the protection of people bicycling such as improvements that increase visibility of bicyclists, increase bikeway widths, raise bikeways, design safer intersection crossings and turns, and separate bikeways from driving traffic wherever feasible.*
- M-1.9. *The City shall ensure that the transportation system is planned and implemented with an equitable process to achieve equitable outcomes and investments so that all neighborhoods one day will have similar levels of transportation infrastructure such as sidewalks, marked low stress crossings, and bikeways.*
- M.1.11. *The City shall strive to increase bicycling and walking citywide so that it can meet its equity, reduced vehicle miles traveled, and sustainability goals.*
- M-1.12. *Through the development approval process and public and private investments, the City shall foster additional walking and bicycling connections to light rail stations and strengthen existing connections to enhance first/last mile connectivity and make it easier to travel between the station and surrounding neighborhoods and destinations. As feasible, connections should include pedestrian-level streetlighting and tree-shading.*
- M-1.13. *The City shall design streets to prioritize walking by including design elements such as the following:*
    - *Grid networks that provide high levels of connectivity;*
    - *Closely spaced intersections;*
    - *Frequent and low-stress crossings;*
    - *Wide, unobstructed walkable sidewalks;*
    - *Separation from vehicle traffic;*

- *Street trees that provide shading; and*
- *Minimal curb cuts.*

- M-1.14. *The City shall work to complete the network of tree-shaded sidewalks throughout the city, to the greatest extent feasible by building new sidewalks and crossings, especially within the high-injury network, in disadvantaged communities, near high-ridership transit stops, and near important destinations, such as schools, parks, and commercial areas. Walking facilities should incorporate shade trees.*
- M-1.15. *The City shall require new subdivisions, new multi-unit dwelling developments, and new developments along commercial corridors to include well-lit, tree-shaded walkways where feasible, that provide direct links to the public realm or adjacent public destinations such as transit stops and stations, schools, parks and shopping centers.*
- M-1.16. *The City shall remove barriers to walking, where feasible, and work with utility companies to remove barriers to allow people of all abilities to move with comfort and convenience throughout the city, including through the following:*
  - *Provisions of curb ramps, crosswalks, and overpasses;*
  - *Relocation of infrastructure of street furniture that impedes travel pathways;*
  - *Reducing or consolidating driveways and curb cuts;*
  - *Providing long and short-term bicycle and scooter parking to minimize sidewalk obstructions; and*
  - *Creation of additional walking entrances to important destinations like schools, parks, and commercial areas.*
- M-1.17. *The City shall plan and seek funding for a continuous, low-stress bikeway network consisting of bicycling-friendly facilities that connect neighborhoods with destinations and activity centers throughout the city.*
- M-1.18*. When designing projects, the City shall prioritize designs that strengthen the protection of people bicycling such as improvements that increase visibility of bicyclists, increase bikeway widths, raise bikeways, design safer intersection crossings and turns, and separate bikeways from driving traffic wherever feasible.*
- M-1.19. *When designing projects, the City shall prioritize designs that encourage walking and improve walking safety best practice designs and considerations for efficiencies in walking.*
- M-1.20. *The City shall collaborate with the Sacramento Regional Transit District (SacRT) to facilitate the implementation of high-frequency transit service on a network of interconnected corridors with characteristics that best support high-frequency transit service and those characteristics that meet City goals, managing corridor operations to provide for adequate transit vehicle speed and reliability.*
- M-1.25. *The City shall support "first-mile, last-mile solutions" such as e-bikes/e-scooters as well as multimodal transportation services, public realm improvements (e.g., bicycle parking infrastructure), and other innovations in the areas around*

transit stations and major bus stops (transit stops) to maximize multimodal connectivity and access for transit riders.

- M-1.26. *The City shall encourage the Sacramento Regional Transit District (SacRT) to implement bus shelter design that encourages transit use, informed by ADA-compliance, bus stop placement, and passenger safety best practices. Where feasible, the City should collaborate with SacRT on bus stop designs for major corridor improvement projects.*

Within the 2040 General Plan is the Arden Arcade Community Plan, which identifies policies specific to the Arden Arcade neighborhood, including Howe Avenue. There are no policies provided in the Arden Arcade Community Plan section that are specific to Howe Avenue or the Howe Avenue Safety & Mobility Plan that supplement the citywide General Plan policies.

Literature Review

The City has developed several planning studies that overlap or are relevant to planning efforts on the Howe Avenue study corridor. This section provides a brief literature review of several key plans and policies by the City of Sacramento, focusing on their relevance to Howe Avenue.

Sacramento County Fair Oaks Boulevard Complete Streets Master Plan (2017)

The Fair Oaks Boulevard Complete Streets Master Plan was developed by the Sacramento County Department of Transportation (SacDOT) to envision a complete streets corridor on Fair Oaks Boulevard from Howe Avenue to Munroe Street. The Plan notes that there are no bicycle facilities on Fair Oaks Boulevard from Howe Avenue to Munroe Street. The Plan also describes the Fair Oaks Boulevard and Howe Avenue intersections as a conflict point for people walking and biking and that the intersection is uncomfortable to cross.

Vision Zero Action Plan (2018)

In January 2017, the City adopted a goal to eliminate traffic fatalities and serious injuries[3]. Howe Avenue is identified in the City of Sacramento Vision Zero Action Plan as a

[3] City of Sacramento. (2017). *Adopted Resolution No. 2017-0032: Vision Zero*. Retrieved from https://www.cityofsacramento.gov/content/dam/portal/pw/Transportation/VisionZero/Adopted-Reso-2017-0032-Vision-Zero.pdf.

High Injury Corridor. The Sacramento Vision Zero Action Plan aims to support the City’s General Plan in maintaining safety and health of its residents and visitors.

The Vision Zero Action Plan analyzes crash trends and patterns across the city, providing both short- and long-term strategies to improve transportation safety. By implementing these measures, the plan aims to eliminate fatal and severe injury crashes. In the Vision Zero Plan, Howe Avenue was associated with the following crash profiles: Unsafe speed on non-local streets, alcohol involved, 35+ mph streets, 30+ mph - bicycle involved, and driver making left or right turn - bicycle involved.

Regular updates incorporate new traffic data and measure progress toward achieving this critical safety goal.

Transportation Priorities Plan (2022)

In November 2022, the City adopted the Transportation Priorities Plan (TPP), a comprehensive framework for identifying and funding critical transportation projects. The TPP outlines priority areas, funding sources, and the city's most pressing transportation needs, providing a clear roadmap for future improvements.

Among its identified projects, the TPP designates several initiatives on Howe Avenue as medium priority, including bridge replacement, streetscape enhancements, and improved bike lane connectivity to adjacent corridors.

Climate Action & Adaptation Plan (2024)

On February 27, 2024, the City adopted the Climate Action and Adaptation Plan (CAAP), which details strategies to reduce greenhouse gas (GHG) emissions by 2030. Building on the framework established by the City’s 2012 Climate Action Plan, the CAAP underscores active transportation—such as walking, cycling, and other sustainable travel modes—as a cornerstone of its efforts to achieve these ambitious goals. By prioritizing investments in active transportation and enhancing connectivity to public transit hubs like the Power Inn Light Rail Transit (LRT) Station, the plan aims to decrease reliance on single-occupancy vehicles, thereby reducing GHG emissions and improving residents’ quality of life.

2040 General Plan – Environmental Justice Element (2024)

The Sacramento 2040 General Plan includes an Environmental Justice Element, which identifies disadvantaged communities (DACs) and outlines specific actions the City will take to improve residents' quality of life. The Environmental Justice Element establishes six key goals: ensuring clean air and water, increasing food access, providing safe housing, fostering civic engagement, addressing inequities by empowering disadvantaged communities, and building neighborhood resilience.

DAC designation is based on various factors, including pollution levels, income, and access to food resources. Areas near Howe Avenue, west of College Town Road, and south of Folsom Boulevard are identified as disadvantaged communities under this framework.

Streets for People: Sacramento’s Active Transportation Plan (Draft 2024 to 2025)

Streets for People: Sacramento’s Active Transportation Plan (S4P), currently in draft form, seeks to transform how residents navigate the city by enhancing infrastructure for walking, biking, and other active modes of travel. Serving as a comprehensive guide for city staff, local agencies, public officials, residents, and developers, the S4P plan aims to create a balanced and interconnected transportation system that supports diverse travel modes while fostering active lifestyles. A central focus of the plan is to prioritize infrastructure improvements in historically underserved communities, ensuring equitable access to safe and sustainable transportation options.

The Draft S4P focuses on improving walking and bicycling infrastructure through two primary networks: a citywide active transportation network and the Neighborhood Connections network. While portions of Howe Avenue are identified for improvements in the Draft Streets for People Plan, it is not identified on the Neighborhood Connections network. However, several adjacent corridors to Howe Avenue are identified on the Neighborhood Connections network including University Avenue, Swarthmore Drive/University Park Drive, and Scripps Drive which include potential traffic calming and other improvement projects.

Description of Howe Avenue

This section provides a physical description of Howe Avenue and the surrounding community’s socio-economic characteristics.

Socioeconomic Characteristics

The Sacramento Area Council of Governments (SACOG) defines Environmental Justice (EJ) areas at the census block group level, focusing on concentrations of low-income residents, high minority populations, persons with disabilities, low educational attainment, housing cost burdened households, or areas highlighted by CalEnviroScreen 3.0.

Based on SACOG's definition, areas adjacent to the study corridor are classified as EJ communities[4]. Notably, neighborhoods near the U.S. Route 50 overpass and Sacramento State University fall within these designations. These areas are also recognized as Senate Bill (SB) 535 Disadvantaged Communities in the City of Sacramento's 2040 General Plan. Howe Avenue, in particular, experiences high pollution burden scores, especially near U.S. Route 50 and Folsom Boulevard. The United States Environmental Protection Agency (EPA) Climate and Economic Justice Screening Tool (CEJST) identifies sections of Howe Avenue between U.S. Route 50 and Folsom Boulevard as exceeding thresholds for poverty and low high school educational attainment[5][6].

The socioeconomic characteristics of the Howe Avenue corridor reflect a diverse community. According to the American Community Survey (ACS) 5-Year Estimates, approximately 15,000 residents live in the four census tracts surrounding the project area[7]. The average median household income across these tracts is $85,195, exceeding the citywide median of $78,954. However, there is significant variation:

- Three tracts reported median incomes ranging from $86,012 to $122,871.
- One tract, encompassing communities near Sacramento State and the American River, reported a much lower median household income of $35,333[8].
- Poverty rates in these tracts vary widely, ranging from 3.9% to 42.7%, compared to the citywide average of 14.8%[9].

While the median household income in the area exceeds the citywide median, there is notable variation. One census tract near Sacramento State reports a much lower median income ($35,333), likely due to the high student population. Environmental justice communities and lower-income residents often depend on public transit and non-motorized travel. The corridor serves older adults, persons with disabilities, linguistically isolated households, and single-parent families, all of whom rely on a mix of transportation modes, including walking, biking, and transit.

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[4] SACOG. (n.d.). *Environmental justice areas*. SACOG Open Data Portal. Retrieved January 9, 2025, from https://www.sacog.org/data/environmental-justice-areas

[5] City of Sacramento. (2024). *2040 General Plan: Map EJ-3: Census tracts with highest pollution burden score*. Retrieved from https://www.cityofsacramento.org/community-development/planning/long-range/general-plan/2040-general-plan

[6] Council on Environmental Quality. (2024). *Climate & Economic Justice Screening Tool* (Version 2.0). GeoPlatform. Retrieved January 9, 2025, from https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5

[7] U.S. Census Bureau. (2024). American Community Survey 5-Year Estimates Subject Tables (Table S0101). Retrieved from https://data.census.gov/table?tid=ACSST5Y2023.S0101

[8] U.S. Census Bureau. (2024). American Community Survey 5-Year Estimates Subject Tables (Table S0901). Retrieved from https://data.census.gov/table?tid=ACSST5Y2023.S0901

[9] U.S. Census Bureau. (2024). American Community Survey 5-Year Estimates Subject Tables (Table S1701). Retrieved from https://data.census.gov/table?tid=ACSST5Y2023.S1701 ACS 5-Year Estimates, Table S1701

Physical Characteristics

Howe Avenue is a north-south arterial corridor connecting the Arden-Arcade community and California State University Sacramento to the regional transportation network. It links major roadways, including Interstate 80 (I-80), U.S. Route 50, and California State Route 16. South of I-80 and Folsom Boulevard, Howe Avenue is a designated Surface Transportation Assistance Act (STAA) truck route. The corridor consists of four to six travel lanes and features a raised, landscaped center median for most of its length, except at the Howe Avenue Bridge, which is made up of separated roadway structures for each direction of travel.

The study corridor includes seven major signalized intersections at:

- Fair Oaks Boulevard
- University Avenue
- American River Drive
- Swarthmore Drive/University Park Drive
- College Town Drive/U.S. 50 westbound off-ramp
- The U.S. 50 eastbound off-ramp
- Folsom Boulevard

The right-of-way (ROW) varies from 90 to 115 feet, narrowing to approximately 30 to 35 feet on the Howe Avenue Bridge. Lane widths are approximately 11 feet through the length of the study corridor; and narrow to approximately 10 to 10.5 feet at the Howe Avenue Bridge. Per the City's standards, the minimum lane width for travel lanes is 11 feet unless the City Traffic Engineer deems appropriate otherwise[10].

Traffic Speeds and Lane Configurations:

Traffic speeds and lane configurations vary along the corridor:

- From Fair Oaks Boulevard to American River Drive and College Town Drive to Folsom Boulevard, the speed limit is 40 mph, with three lanes in each direction.
- Between American River Drive and College Town Drive, the speed limit increases to 50 mph, maintaining three lanes per direction except on the Howe Avenue Bridge, which narrows to two lanes per direction.
- All signalized intersections and approaches have dedicated left turn pockets where there is a valid left turn, except for northbound Howe Avenue at College Town Drive.
- No on-street parking is allowed along Howe Avenue.

[10] City of Sacramento, Section 15 - Street Design Standards

According to a speed survey provided by the City of Sacramento, 85th percentile speeds on Howe Avenue are as follows:

- 43.6 mph between Cadillac Drive and American River Drive (posted 40 mph speed limit).
- 52.4 mph from American River Drive to U.S. 50 (posted 40-50 mph speed limit).
- 41.5 mph from U.S. 50 to Folsom Boulevard (posted 40 mph speed limit).

Bicycle Infrastructure:

Howe Avenue has bike lanes south of University Avenue, each approximately five feet wide. These lanes connect to the broader bicycle network via the American River Parkway shared-use path and painted bike lanes on American River Drive, University Avenue, and La Riviera Drive.

While Howe Avenue is shown with Class II bicycle facilities (bike lanes) on the City of Sacramento Bike Map, field observations indicate that the approximately five-foot wide shoulder lacks the standard painted markings and signage that would distinguish it as a dedicated bicycle lane. There is a southbound facing sign on the northbound side of the road instructing people biking to dismount and walk their bicycle on the northern approach to the Howe Avenue Bridge (**Figure 1**).

Based on the Federal Highway Administration (FHWA) Bikeway Selection Guide, the existing bike lanes do not provide adequate protection for cyclists on this corridor. The guide recommends greater separation between vehicles and cyclists when roadways have speeds of 35 mph or higher and traffic volumes exceeding 6,000 vehicles per day. Given that Howe Avenue has a posted speed limit of 50 mph and carries up to 30,000 vehicles per day, the current bikeway does not align with FHWA's guidance for recommended bicycle infrastructure.

The City of Sacramento's bicycle facility selection guidance similarly recommends a separated bikeway for roadways with posted speeds exceeding 45 mph and average daily traffic over 20,000 vehicles per day. With Howe Avenue's posted speeds and observed traffic volumes ranging from 46,000 to 59,000, the existing bike lanes do not provide the level of separation from vehicle traffic recommended by either FHWA or City design standards.

Figure 1: Bike Facilities and Dismount Signage at Howe Avenue Bridge

Sidewalks:

Most of the study corridor has sidewalks, but gaps exist in the network. On the west side of Howe Avenue, missing sidewalk segments and their approximate lengths are:

- American River Drive to the Swarthmore Drive: 1,400 feet;
- Swarthmore Drive to the University Avenue overcrossing: 940 feet;
- University Avenue overcrossing to the Howe Avenue Bridge: 240 feet.

On the east side of Howe Avenue, a sidewalk gap extends from the La Riviera overcrossing to Folsom Boulevard, a distance of approximately 2,640 feet. No signage alerts people walking southbound on the east side of Howe Avenue that they must walk on the shoulder after crossing the bridge.

Where sidewalks are present, they are approximately five to six feet in width but narrow to approximately 4.5 feet near the University Avenue overcrossing and the Howe Avenue Bridge. In some locations, informal asphalt paths connect sidewalk gaps (**Figure 2**).

Figure 2: Informal Pathway between Sidewalk Gap on East Side of Howe Avenue at Howe Avenue Bridge

Marked Crosswalks:

All study intersections are equipped with pedestrian signals, push buttons, and marked crosswalks. Curb ramps are present at all crossing locations; however, detectable warning surfaces and landing areas are missing at the following intersections:

- American River Drive
- Swarthmore Drive
- College Town Drive
- Folsom Boulevard

Crossings are not provided on the south legs at the American River Drive and Swarthmore Drive/University Park Drive intersections due to a lack of sidewalks on the west side of Howe Avenue.

At the College Town Drive/WB US 50 Off-ramp and EB US 50 Off-ramp intersections, crosswalks are only available on the west legs due to the lack of sidewalks on the east side of Howe Avenue.

At the US 50 interchange, the westbound US 50 on-ramp (**Figure 3**) includes painted crosswalks and curb ramps with detectable warning surfaces. However, no pedestrian signals or traffic control devices are in place to stop vehicles for those wishing to cross. As a result, those walking must rely on drivers yielding to them. Additionally, no warning signs or other measures alert drivers to potential people crossing. Any modifications to crosswalks at the US 50 on- or off-ramps would require coordination with Caltrans.

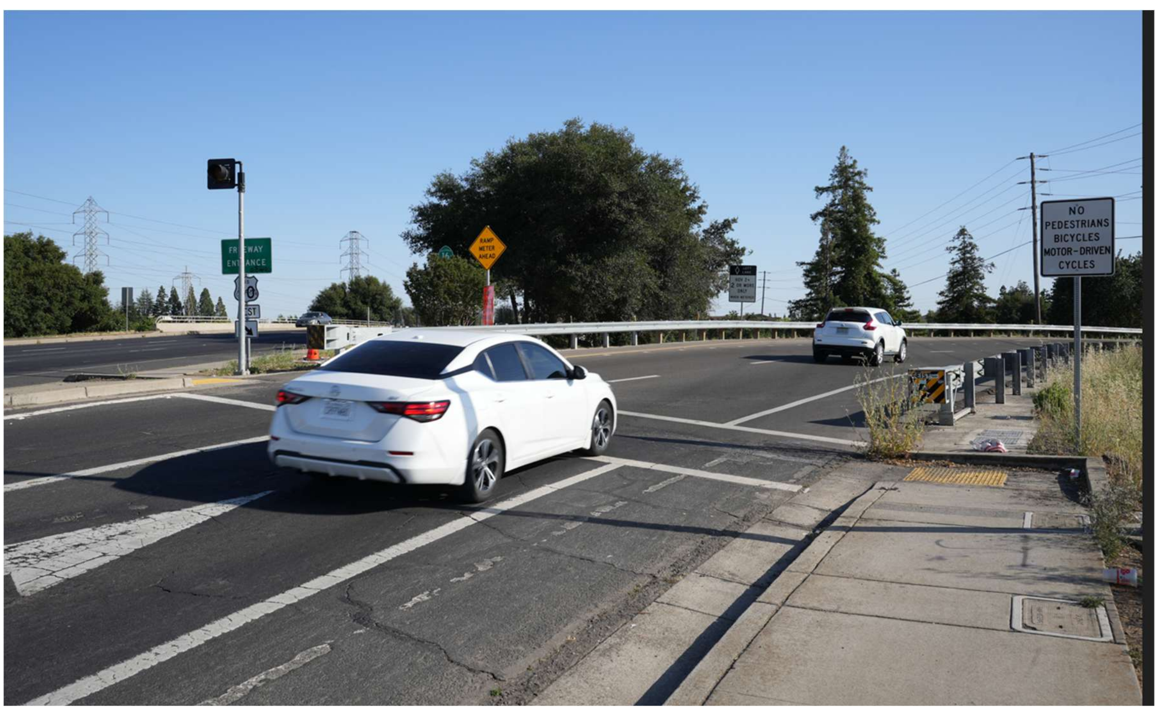

Figure 3: Striped Crosswalk Across Westbound US 50 On-Ramp

Transit Access:

The SacRT Power Inn Light Rail Station, connecting to the Gold Line, is located south of the study corridor on the east side of the street, just south of Folsom Boulevard, where Howe Avenue transitions to Power Inn Road (**Figure 5**). The Gold Line runs primarily east-west, connecting downtown Sacramento to the city of Folsom. Its route passes through multiple neighborhoods in Sacramento (downtown Sacramento, Richmond Grove, Newton Booth, Midtown, Alhambra Triangle, East Sacramento, Elmhurst, Tahoe Park, Tahoe Park East, Ramona Village, College Town, and College Glen), portions of unincorporated Sacramento County, Rancho Cordova, and Gold River.

Within the study area, SacRT Bus Route 26 operates along Howe Avenue with bus stops at Swarthmore Drive and American River Drive (see **Figure 4**). It connects Watt Avenue & Elverta Road in the north to the University/65th Street Light Rail Station in the south.

Service Schedule for Route 26:

- Weekdays: Service runs from approximately 6:00 a.m. to 11:00 p.m.
- Saturdays: Service runs from approximately 8:00 a.m. to 10:45 p.m.
- Sundays: Service runs from approximately 8:00 a.m. to 9:15 p.m.

The frequency of service varies throughout the day, with buses typically running every 30 minutes during peak hours and every 60 minutes after 7:00 p.m.

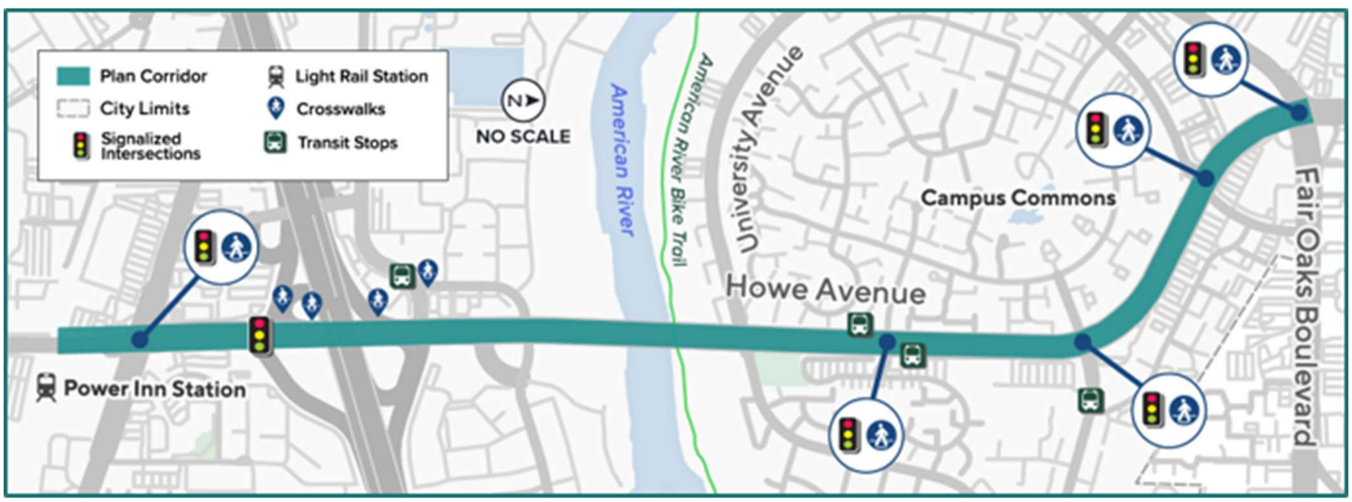

Figure 4: Howe Avenue Bus Stops, Form of Traffic Control and Crosswalks

Corridor Summary and Study Area Segments

Table 1 summarizes the existing conditions and key characteristics of each road segment within the corridor. For this study, the corridor is divided into northern, middle, and southern segments based on similar physical and operational characteristics, as shown in **Figure 5**.

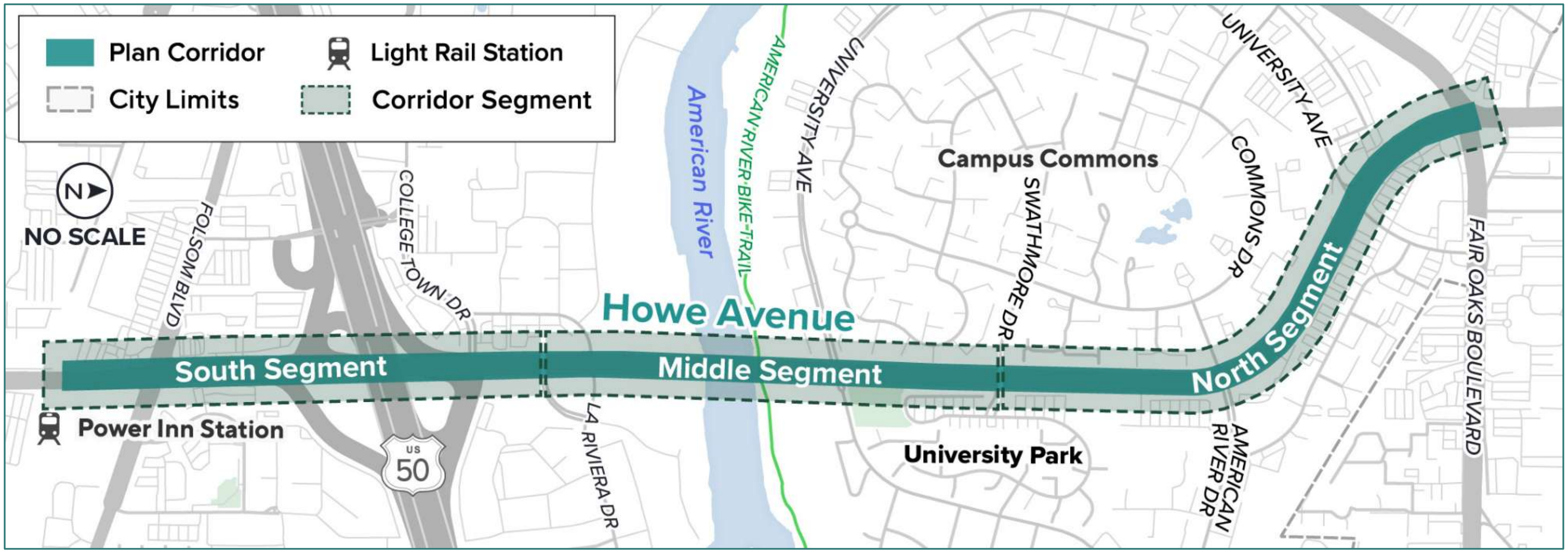

Figure 5. Howe Avenue Roadway Segments

Table 1. Summary of Existing Characteristics of Howe Avenue Segments

Characteristic	North Segment (Figure 3)	Middle Segment (Figure 4)	South Segment (Figure 5)
Boundaries	Fair Oaks Boulevard to Swarthmore Drive/University Park Drive	From Swarthmore Drive/University Park Drive to La Riviera Access Road	La Riviera Access Road to Power Inn Light Rail Station
Length (Approx)	4,200 ft	3,175 ft	3,175 ft
Number of Lanes (Per Direction)	Three	Two to Three	Three
Lane Width	11 ft	10-12 ft	12 ft
AADT[11]	46,000 (At Fair Oaks Ave)	no data	59,000 (At WB US 50 ramps)
Posted Speed Limit	40 MPH - Fair Oaks to American River Drive 50 MPH – American River Dr to Swarthmore Drive/University Park Drive	50 MPH	40 MPH
Observed Speed[12]	43.6 – Cadillac Drive to American River Drive 52.4 – American River Drive to US 50	52.4 – American River Drive to US 50	41.5 – US 50 to Folsom Boulevard
Lighting	Street Lighting	Street and Pedestrian-Scale Lighting	Street and Pedestrian-Scale Lighting

[11] 2017 traffic counts provided for North Segment and South Segment, https://data.cityofsacramento.org/datasets/SacCity::traffic-counts/about

[12] Based on recent speed survey's conducted by the City of Sacramento.

Characteristic	North Segment (Figure 3)	Middle Segment (Figure 4)	South Segment (Figure 5)
Adjacent Land Uses	Standard Single-Family, Single-Family Alternative, General Commercial, Limited Commercial, Office Building, and Multi-Family	Single-Family Alternative, Standard Single Family, Multi-Family, and Office Building	Multi-Family, General Commercial, and Heavy Industrial
Notable Locations	AIMS Urgent Care, Safeway, Starbucks, University Park, American River Commons, Rio Del Oro Sports Club	Rivercrest Apartments, College Garden Apartments, University River Village, Food Mart, Laguna Creek Sports Club	Comfort Inn & Suites Sacramento, Sacramento County Small Claims, Carol Miller Justice Center, Chevron
Major Cross-Streets Within Road Segment	Fair Oaks Boulevard, University Avenue, American River Drive, Swarthmore Drive/University Park Drive	None	College Town Drive, Folsom Boulevard
Median Types	Raised median	Raised median	Raised median
Existing Bicycle Facilities	Bike lane at the northbound (NB) approaches of Howe Avenue/ American River Drive intersection and Howe Avenue/Swarthmore Drive/University Park Drive intersection	Bike lanes on northbound (NB) and southbound (SB) lanes along Howe Avenue Bridge from University Avenue to American River	Bike lanes northbound (NB) and southbound (SB) lanes from U.S. Route 50 overpass to U.S. Route 50 on-ramp
Sidewalks	Sidewalks present	No sidewalk along SB lane from American River Drive to Howe Avenue bridge/University Avenue overpass No sidewalk for NB and SB segments adjacent to University Park Dog Park Existing sidewalks lack buffers from travel lanes	No sidewalk along NB segment from U.S. Route 50 overpass to Folsom Boulevard Existing sidewalks adjacent to SB lanes lack buffers from travel lanes

Characteristic	North Segment (Figure 3)	Middle Segment (Figure 4)	South Segment (Figure 5)
Bus Service Routes and Shelter Locations	No bus route serves the North Segment. No bus shelters are present.	The Middle Segment is served by Route 26. Bus shelters exist at the following locations: • Howe Avenue & Swarthmore Drive (NB) • Howe Avenue & Swarthmore Drive (SB)	No bus route serves the South Segment. No bus shelters are present.

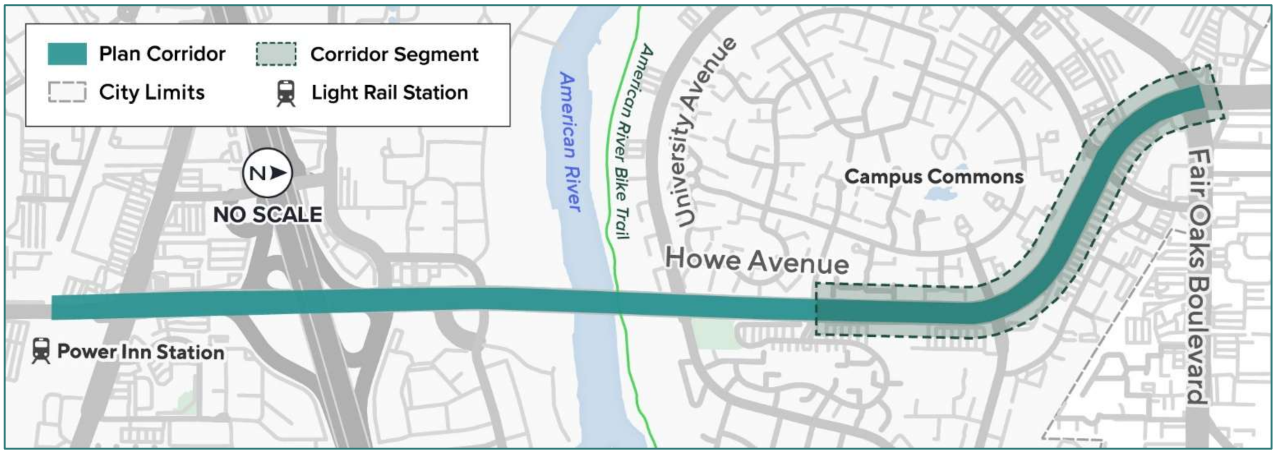

Figure 6. Howe Avenue North Segment Location Map

Figure 7. Site Photo of North Segment Roadway

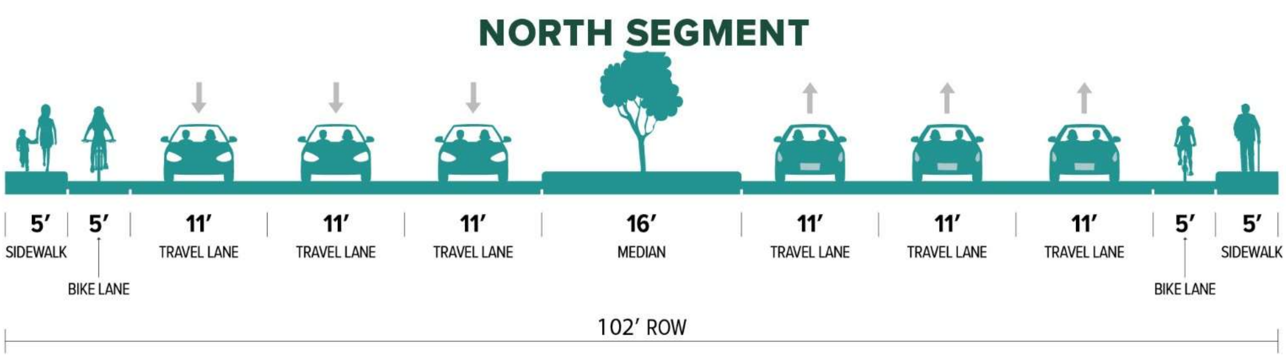

Figure 8. North Segment: Howe Avenue (Fair Oaks Boulevard to Swarthmore Drive/University Park Drive)

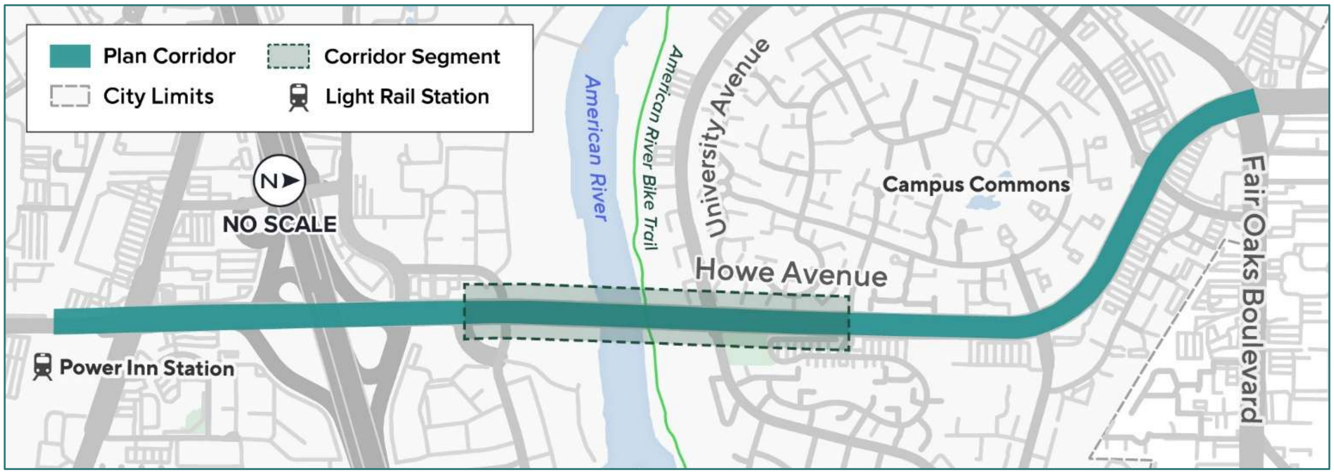

Figure 9. Howe Avenue Middle Segment Location

Figure 10. Site Photo of Middle Segment Operations

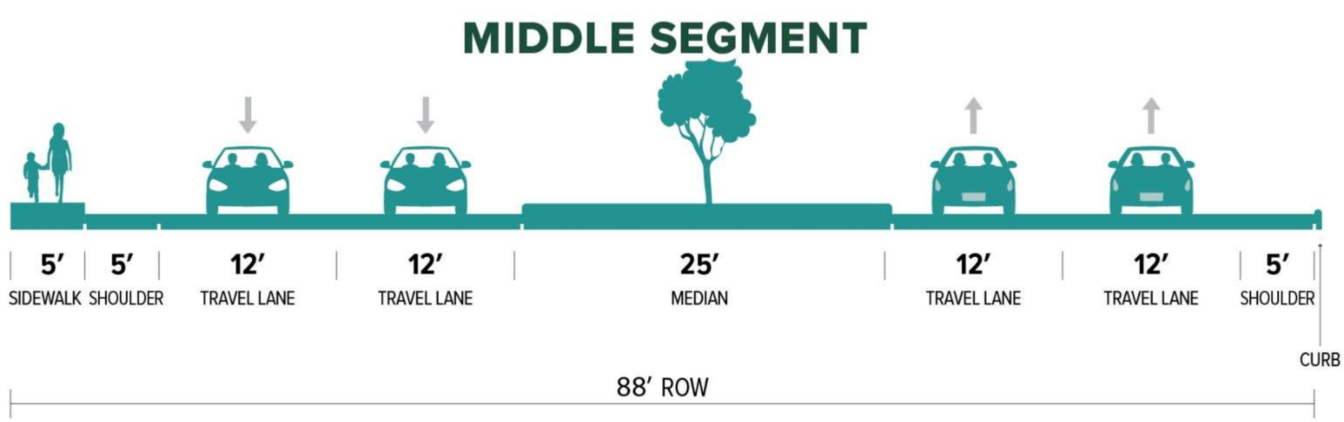

Figure 11. Middle Segment: Howe Avenue (Swarthmore Drive to La Riviera Access Road)

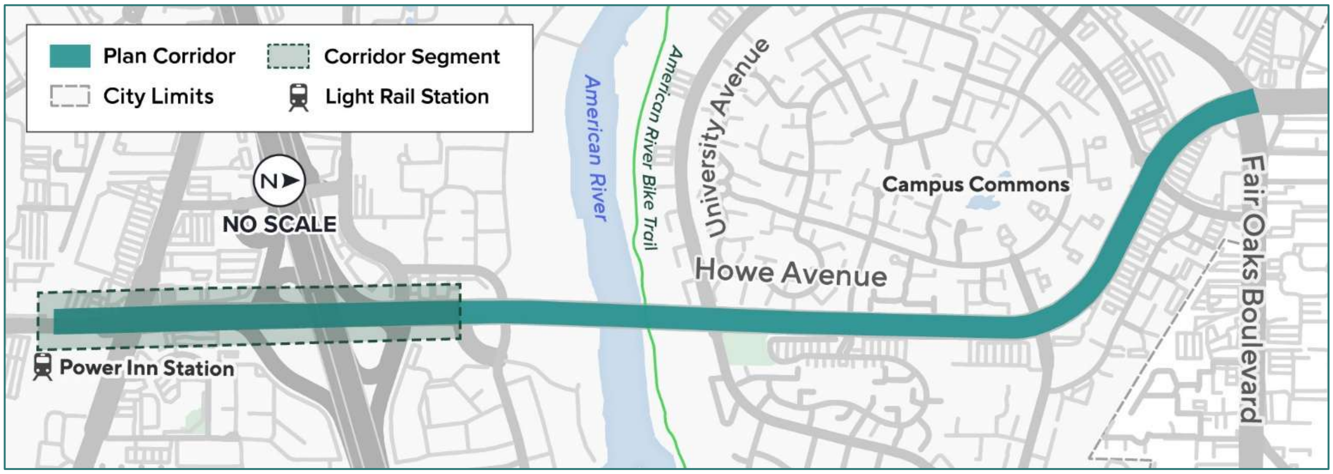

Figure 12. Howe Avenue South Segment Location

Figure 13. Site Photo of South Segment Operations

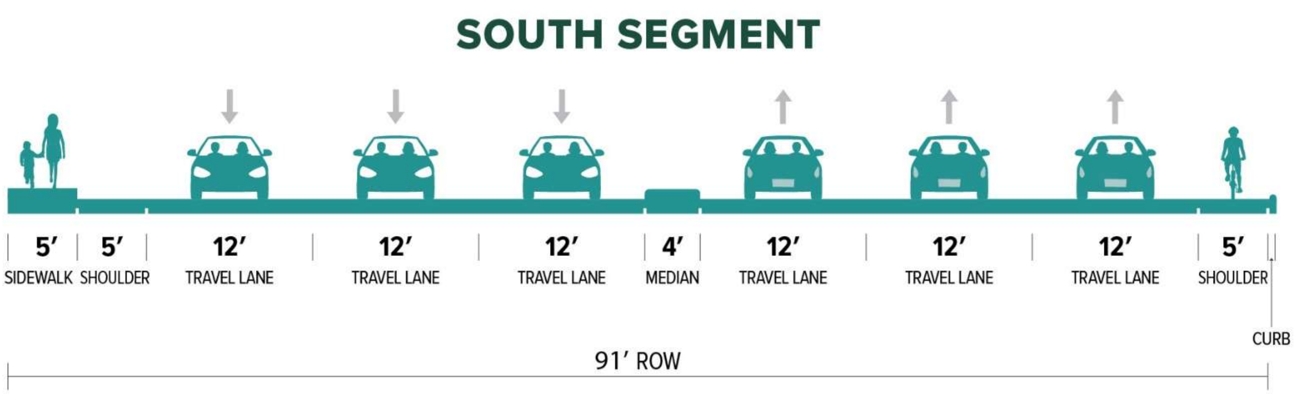

Figure 14. South Segment: Howe Avenue - La Riviera Access Road to Power Inn Station

Existing Conditions Multimodal Analysis

This section provides an analysis of existing conditions along Howe Avenue, focusing on multimodal transportation, traffic operations, safety, and congestion metrics. It presents data on traffic volumes, crash factors, level of traffic stress, transit ridership, and travel time reliability for the study corridor.

Traffic Volumes at Study Intersections

As part of the traffic operations analysis, three out of seven intersections on the corridor were evaluated based on where the City has data collection hardware installed:

- Howe Avenue at Fair Oaks Boulevard
- Howe Avenue at University Avenue
- Howe Avenue at Folsom Boulevard

Volumes were collected during weekday morning (7:00 to 9:00 a.m.) and evening (4:00 to 6:00 p.m.) peak hours from October 14 to October 18, 2024. Peak hours were observed at 7:45 a.m. and 4:30 p.m. for the Fair Oaks Boulevard intersection, and at 8:00 a.m. and 4:15 p.m. for the University Avenue and Folsom Boulevard intersections. Existing peak hour traffic volumes and form of traffic control are illustrated in **Figure 15**. Traffic volumes are in **Appendix A**.

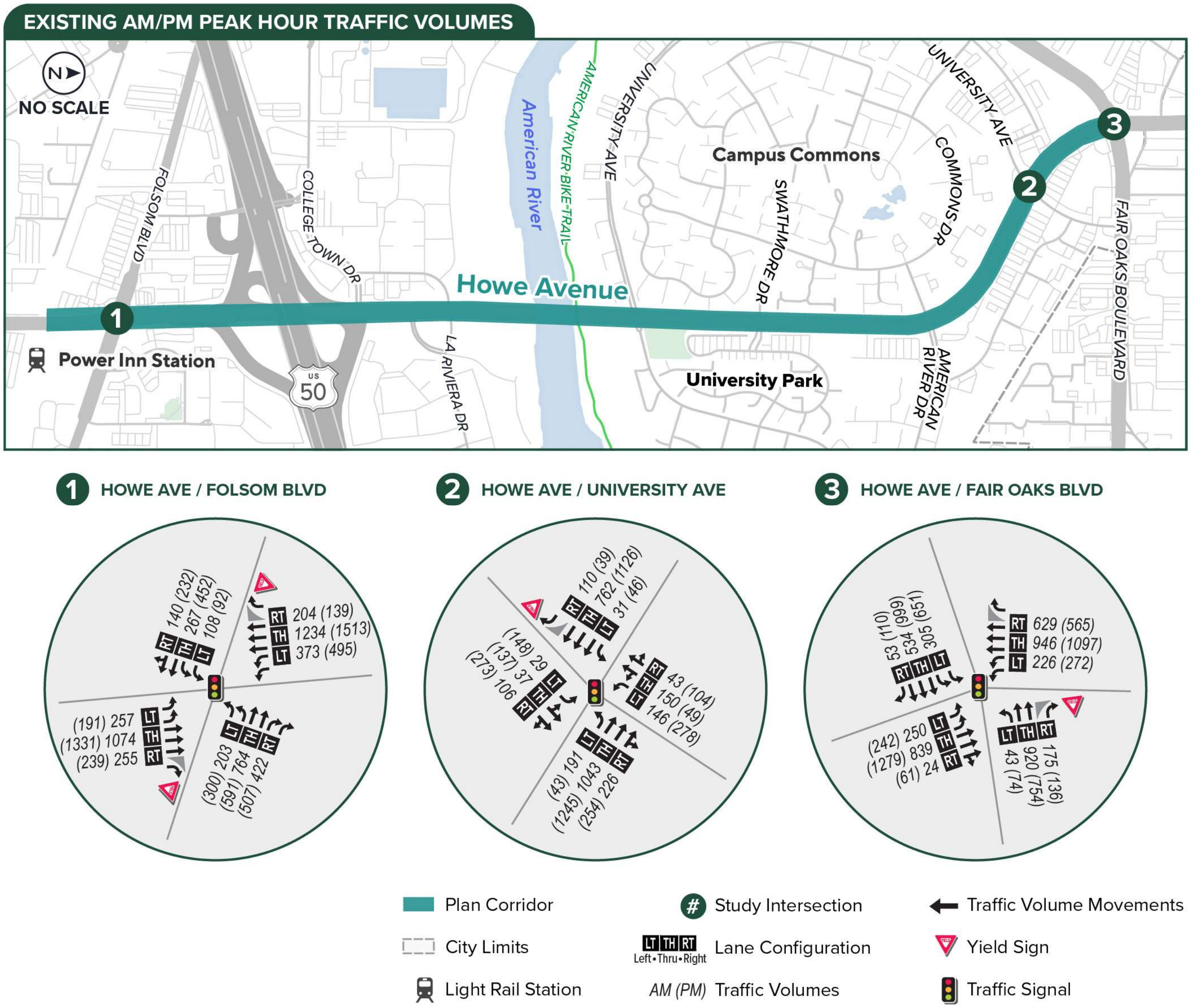

Figure 15: Existing Peak Hour Traffic Volumes and Form of Traffic Control

Transit Data Summary

Weekday passenger boarding data were provided by SacRT for the four bus stops along or near Howe Avenue and at the Power Inn LRT Station. The data covers the period from January to August 2024. SacRT Bus Route 26 operates along Howe Avenue with 30-minute headways, shifting to 60-minute headways after 7 p.m.

Overall Ridership Trends

Figure 16 shows the average daily transit ridership trends across all stops by month from January through August. Ridership declined from 438 in January to 251 in February, then stabilized between March and June, fluctuating between 275 and 291 riders. In the later months, ridership increased, reaching 312 in July and 340 in August.

Ridership by Stop

Figure 17 shows average weekday ridership by individual stops along Howe Avenue:

- Power Inn Station (WB): 160 passengers (highest ridership).
- Power Inn Station (EB): 119 passengers.
- College Towne Dr & La Riviera: 20 passengers.
- American River Dr & La Riviera: 6 passengers.
- Howe Ave & Swarthmore Dr/Northrop Dr: 2 passengers.
- Howe Ave & Swarthmore Dr: 1 passenger.

The data indicates that ridership is heavily concentrated at the Power Inn Station stops, a key transfer point in the transit network, which together account for the majority of weekday passenger activity. Transit data are provided in **Appendix B**.

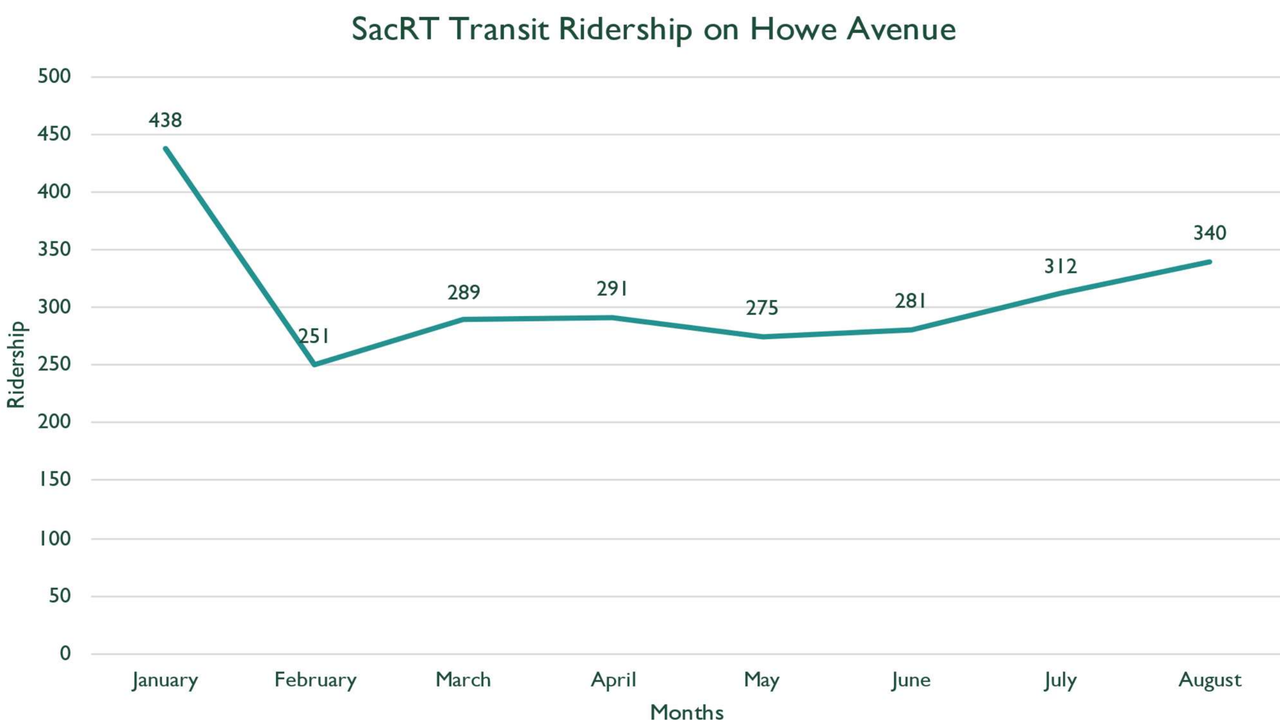

Figure 16. Average Daily Transit Ridership for All Stops on Howe Avenue By Month (Source: SacRT Stop Ridership Data)

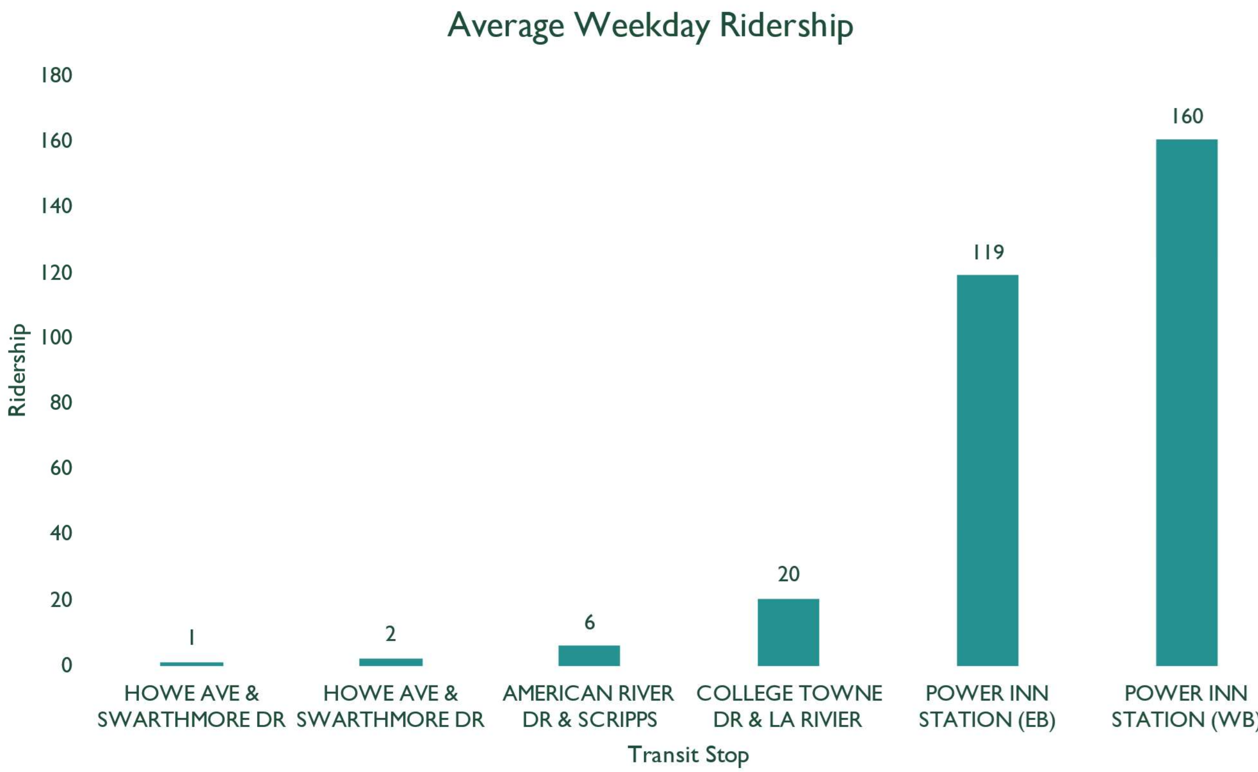

Figure 17. Average Weekday Ridership by Stop on Howe Avenue (Source: SacRT Stop Ridership Data)

Level of Traffic Stress/All Ages and Abilities Walking and Biking Analysis

The following sections describe the methodology used to evaluate conditions along the corridor for non-motorized road users and the results of this analysis.

Bicycle LTS

Bicycle LTS analysis was calculated using the methodologies described in the *Mineta Transportation Institutes Report 11-19 Low Stress Bicycling and Network Connectivity* (2012). Bicycle LTS scores measure the stress level of a roadway segment based on criteria such as:

- Street width (number of lanes);
- Speed limit or prevailing speed;
- The presence and width of bike lanes;
- Signals; and
- The presence and width of parking lanes (if applicable).

Bicycle LTS scores range from one to four, with one representing the most comfortable conditions for riders and four representing the least comfortable. An LTS score of one indicates that the roadway stress level is tolerable for most riders, including children and less experienced people bicycling. Conversely, an LTS score of four signifies conditions better suited to highly skilled people bicycling, as shown in **Figure 18**. The criteria used to determine the Bicycle LTS along the corridor are summarized in **Table 2**.

Applying this methodology, Howe Avenue receives an **LTS score of four** throughout the study limits, primarily due to street width and the existing speed limits (**Figure 19**). This assessment is consistent with the existing roadway configuration, which provides a Class II bike facility rather than protected bicycle facilities.

Existing conditions on the corridor, including posted speed limits up to 50 mph and traffic volumes up to 59,000 vehicles per day, create a high-stress environment for people biking on Howe Avenue. The lack of dedicated, protected infrastructure is consistent with the high LTS score.

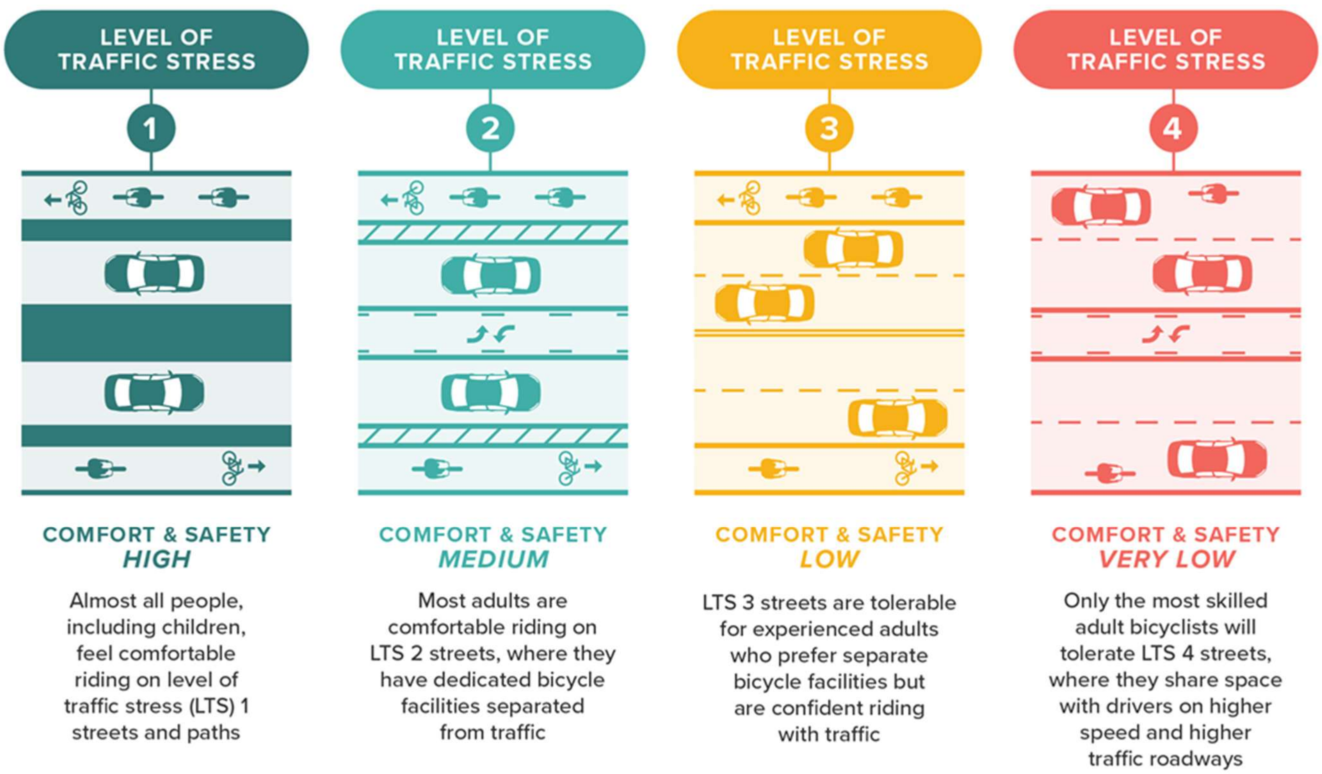

Figure 18. Bike Level of Traffic Stress Scores

Table 2. Bicycle Level of Traffic Stress Criteria

SEGMENT	POSTED (OBSERVED) SPEED (MPH)	BIKE LANE	PARKING LANE	# OF TRAVEL LANES	LTS SCORE
NORTH SEGMENT **FAIR OAKS BOULEVARD TO SWARTHMORE DRIVE/UNIVERSITY PARK DRIVE**	40 (43.6): Fair Oaks Blvd to American River Dr 50 (52.4): American River Dr to Swarthmore Dr/University Park Dr	Yes: University Ave to American River Dr (NB) No: American River Dr to Swarthmore Dr	No	3	4
MIDDLE SEGMENT **SWARTHMORE DRIVE/UNIVERSITY PARK DRIVE TO LA RIVIERA ACCESS ROAD**	50 (52.4)	No	No	3	4
SOUTH SEGMENT **LA RIVIERA ACCESS ROAD TO POWER INN STATION**	40 (41.5)	No	No	3	4

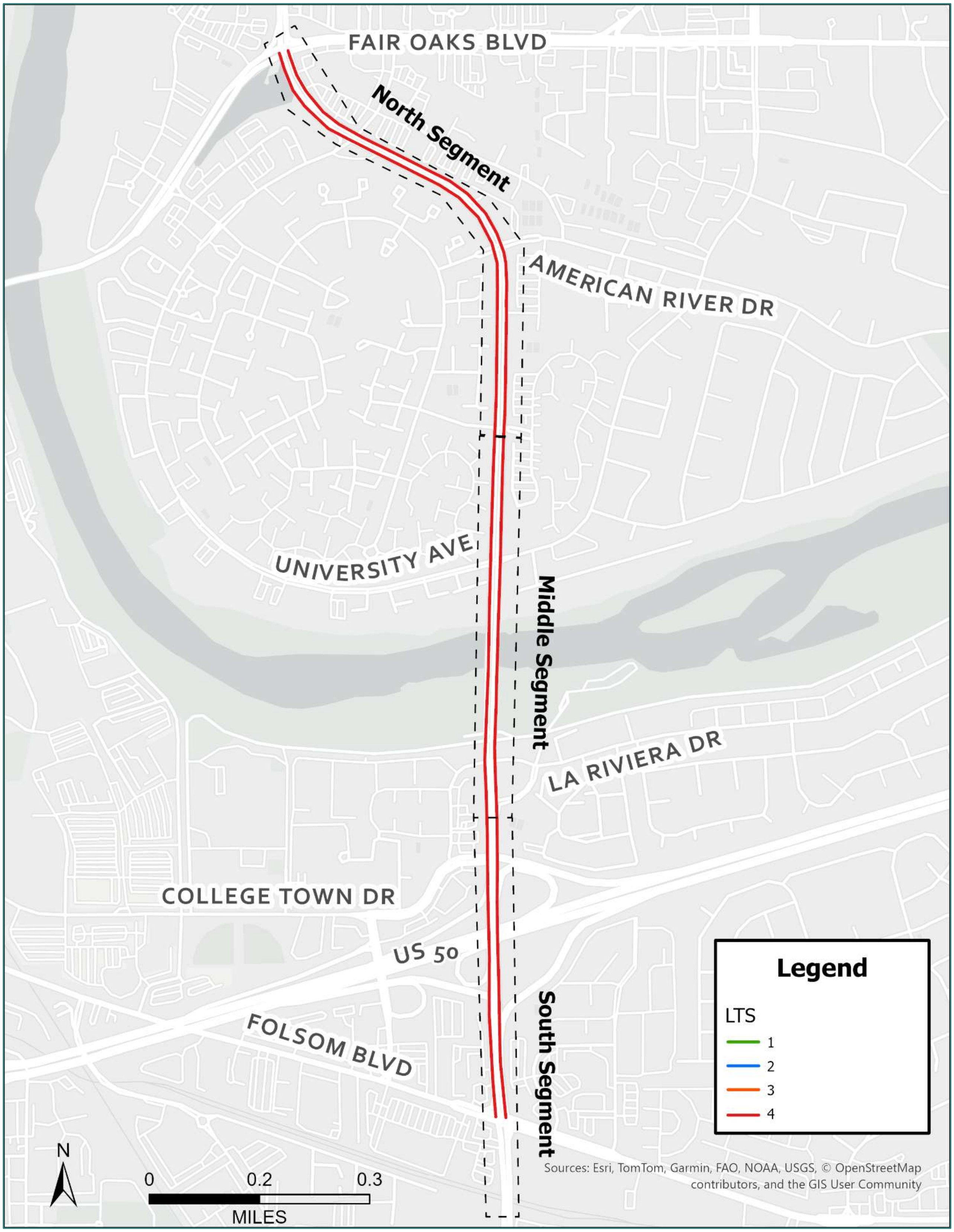

Figure 19. Bicycle Segment LTS

Walking LTS

The walking level of traffic stress (LTS) analysis was conducted using the *Oregon Department of Transportation (ODOT) Level of Traffic Stress Analysis Procedures* (2020). Similar to the bicycle LTS methodology, walking LTS also uses several criteria to develop a LTS score of one to four based on factors such as the presence of sidewalks, crosswalks, median refuges, traffic volume, and posted speed limits as shown in **Figure 20**.

Similar to bicycling LTS results, Howe Avenue receives an LTS score of 4 for all segments. uncomfortable and stressful for most people walking or rolling as illustrated in **Figure 21**.

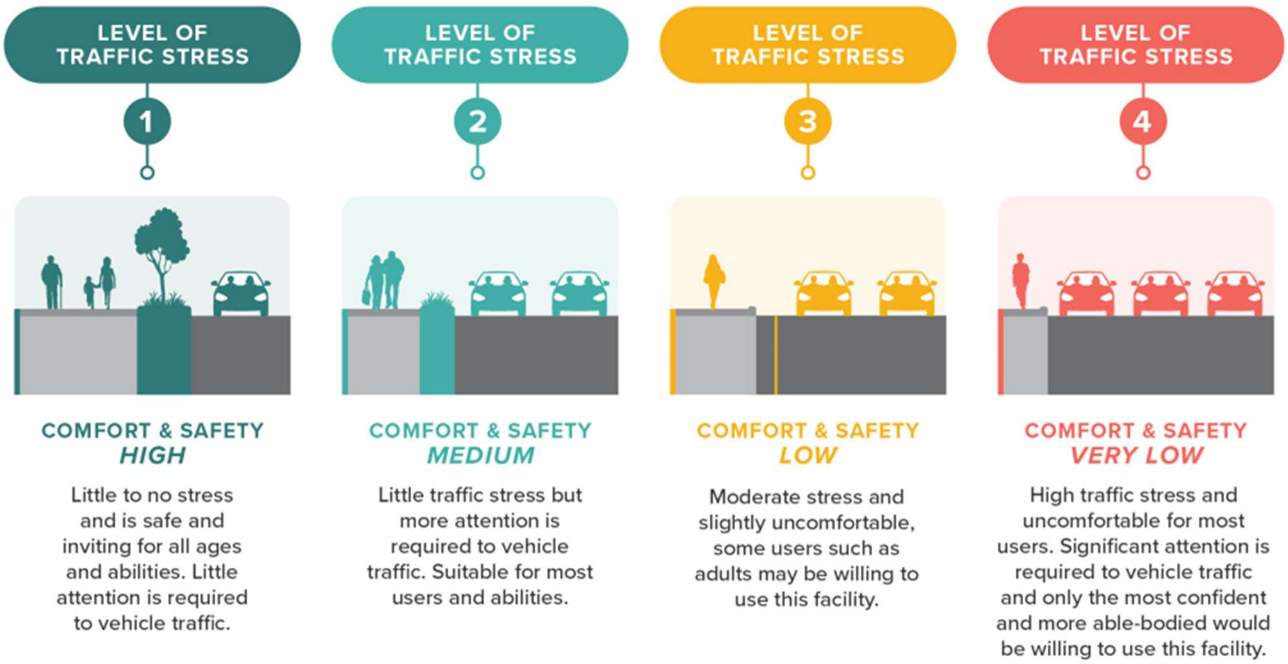

Figure 20. Walking Level of Traffic Stress

Table 3. Walking Level of Traffic Stress Criteria

SEGMENT	STREET WIDTH[13]	BUFFER TYPE	SIDEWALK WIDTH	SIDEWALK CONDITION	SPEED LIMIT[14]	LTS SCORE
NORTH SEGMENT: **FAIR OAKS BOULEVARD TO SWARTHMORE DRIVE/ UNIVERSITY PARK DRIVE**	3	None	5 feet No sidewalk is present along southbound travel lanes from American River Drive to Swarthmore Drive/University Park Drive.	Good, no obvious cracks in concrete or uneven pavement.	40 mph	4
MIDDLE SEGMENT: **SWARTHMORE DRIVE/ UNIVERSITY PARK DRIVE TO LA RIVIERA DRIVE OVERPASS**	2	None	5 feet No sidewalks exist along the southbound travel lanes from Swarthmore Drive to University Avenue overpass, University overpass to Howe Avenue bridge. No sidewalks exist along the northbound travel lanes from Howe Avenue bridge to La Riviera Drive overpass.	Fair	50 mph	4
SOUTH SEGMENT: **LA RIVIERA DRIVE OVERPASS TO POWER INN LRT STATION**	3	None	5 feet	Good, no obvious cracks in concrete or uneven pavement.	40 mph	4

[13] Lanes per direction

[14] Posted speed limit or prevailing speed

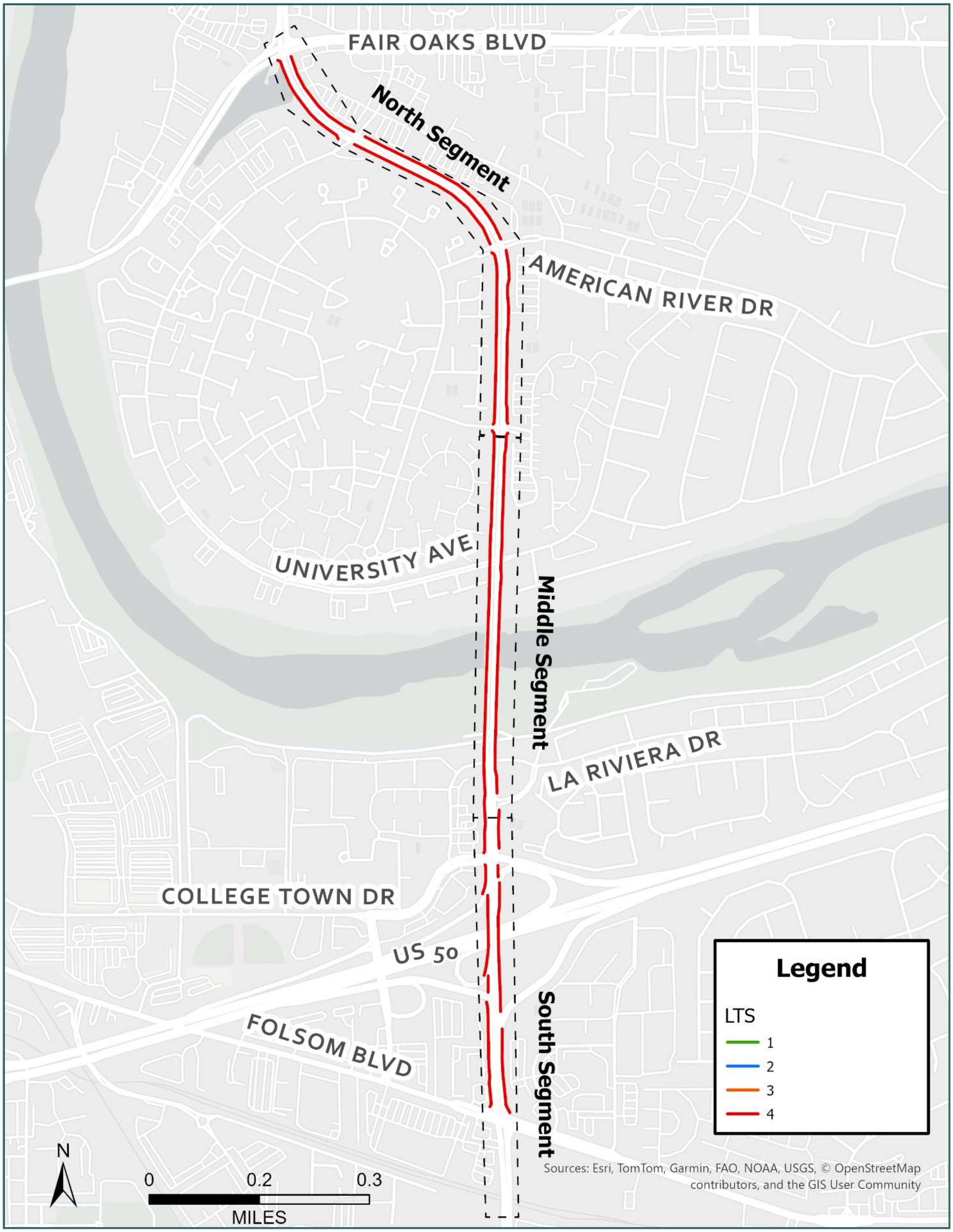

Figure 21. Walking Segment LTS

Crash Analysis Summary

DKS collected injury crash data obtained from Transportation Injury Mapping System (TIMS) and Statewide Integrated Traffic Records System (SWITRS) within a six-year period (2018 to 2023) to conduct a safety analysis within the corridor. The data consisted of injury crashes on Howe Avenue from Fair Oaks Boulevard to Folsom Boulevard. **Table 4** presents the annual crash counts and severity levels. **Figure 22** provides a visual representation of all crashes within the corridor, while **Figure 23** focuses specifically on crashes where a person is killed or severely injured (KSI).

During this period, the corridor experienced 201 crashes, with 18 crashes resulting in fatalities or serious injuries. The primary contributing factors identified were unsafe speed, issues related to traffic signals, and improper turning maneuvers.

Table 5 summarizes crash data by segment, revealing that the North Segment experienced the highest number of total crashes (77, 38%) and KSI crashes (nine, 50%). The South Segment followed with 70 crashes (35%) and six KSI crashes (33%). The Middle Segment had the fewest crashes, with 54 crashes (27%) and three KSI crashes (17%). Notably, no crashes involving people walking or biking occurred in the Middle Segment.

Across all segments, bicycle-involved crashes totaled two, with one crash each in the North and South Segments. There were three crashes involving people walking, including two in the North Segment and one in the South Segment. The two crashes involving someone biking and one crash involving someone walking occurred at major intersections - American River Drive, Folsom Boulevard, and College Town Drive. Two of the crashes were a result of failure to yield right-of-way and one by an unsafe turn. One bicycle crash resulted in serious injuries, while the remaining collisions involving someone walking or biking resulted in minor injuries. One of the crashes involving someone walking involved a hit-and-run driver who struck two people. All crashes happened during busier evening hours between 6:30 to 9:00 p.m.

Table 4: Crashes by Severity

SEVERITY	2018	2019	2020	2021	2022	2023	TOTAL
FATAL INJURY	1	1	0	0	0	0	2
SEVERE INJURY	3	2	3	4	2	2	16
MINOR INJURY	9	1	6	14	6	16	52
POSSIBLE INJURY	20	22	14	25	23	27	131
TOTAL	**33**	**26**	**23**	**43**	**31**	**45**	**201**

Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley.

Table 5: Crashes by Segment

CRASH SEGMENT	CRASHES	KSI CRASHES	CRASHES INVOLVING PEOPLE BIKING	CRASHES INVOLVING PEOPLE WALKING
NORTH SEGMENT	77	9	1	2
MIDDLE SEGMENT	54	3	0	0
SOUTH SEGMENT	70	6	1	1
TOTAL	**201**	**18**	**2**	**3**

Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley.

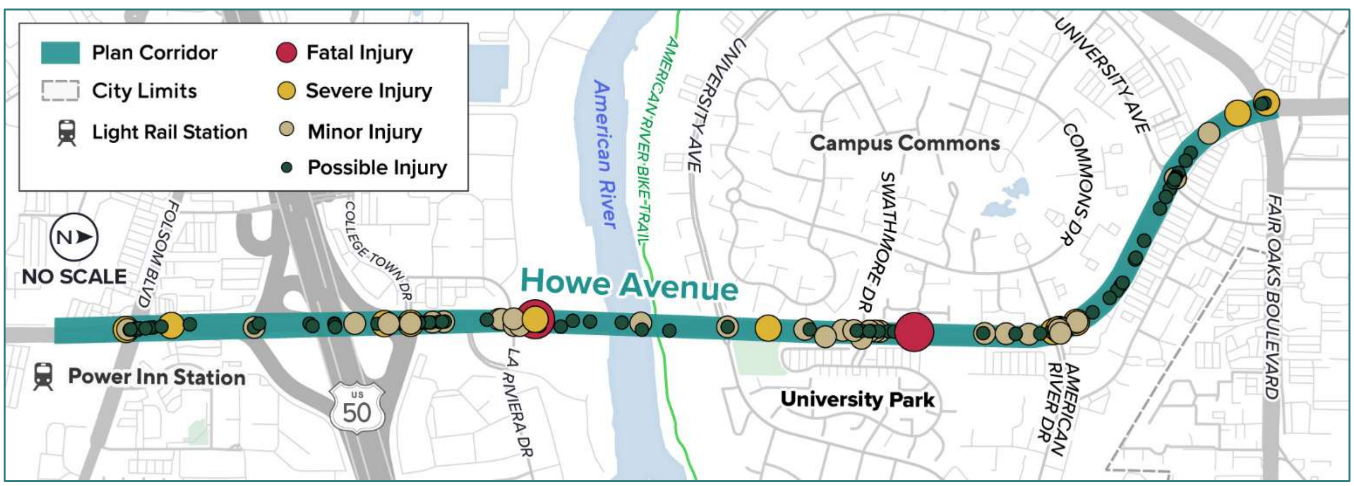

Figure 22: Howe Avenue Crash Map (ALL CRASHES) Source: Transportation Injury Mapping System (TIMS)

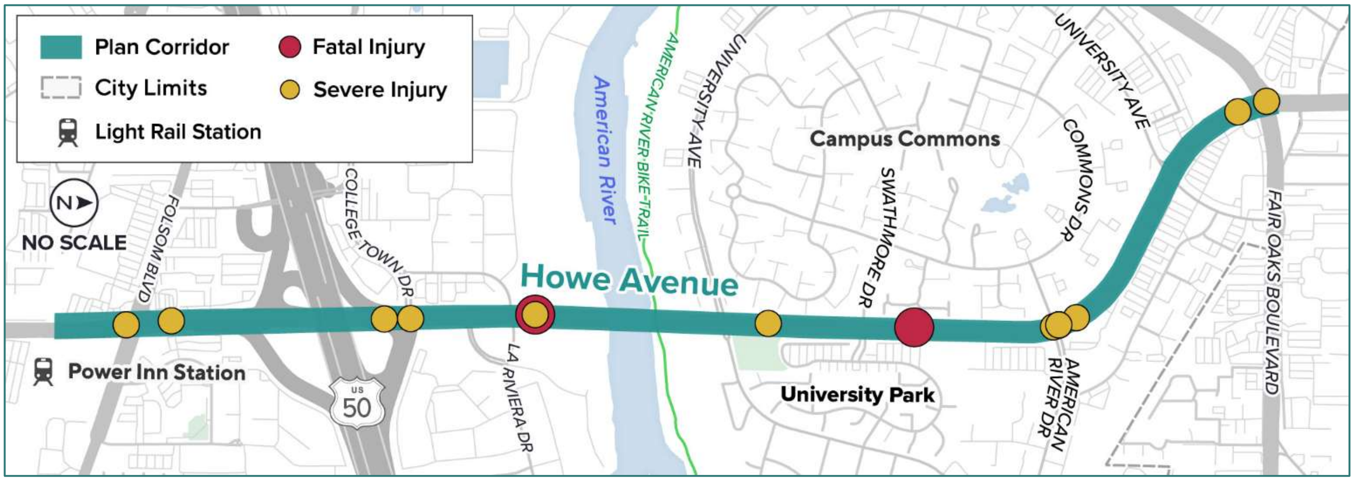

Figure 23: Howe Avenue Crash Map (KSI Crashes) Source: Transportation Injury Mapping System (TIMS)

Crash Type Summary

Figure 24 illustrates the distribution of crashes by type[15] during the analysis period.

Among the 201 total crashes, rear-end collisions were the most common, accounting for 101 crashes (50%). Broadside crashes followed as the second most frequent type, with 46 crashes (22%). Both crash types are prevalent at intersections, where 151 crashes (75% of the total) occurred.

Rear-end crashes were particularly concentrated near the intersection of Howe Avenue and American River Drive. Additionally, several "hit object" crashes that resulted in fatalities or serious injuries (KSI crashes) occurred in the same area.

Of the 101 rear-end crashes, 51% involved vehicles traveling northbound on Howe Avenue, approaching major intersections[16]. The remaining rear-end crashes were divided between southbound vehicles and those entering from side streets.

[15] Note: One of the crashes identified as the type “Vehicle/Pedestrian” was not marked as involving a pedestrian, resulting in the disagreement between Table 4 and Figure 17. Lacking a way to determine which is correct, the data is presented as provided.

[16] Analysis of 89 rear-end crashes along Howe Avenue shows that 45 (51%) occurred in the northbound direction, 35 (39%) in the southbound direction, and 9 (10%) were eastbound on intersecting streets.

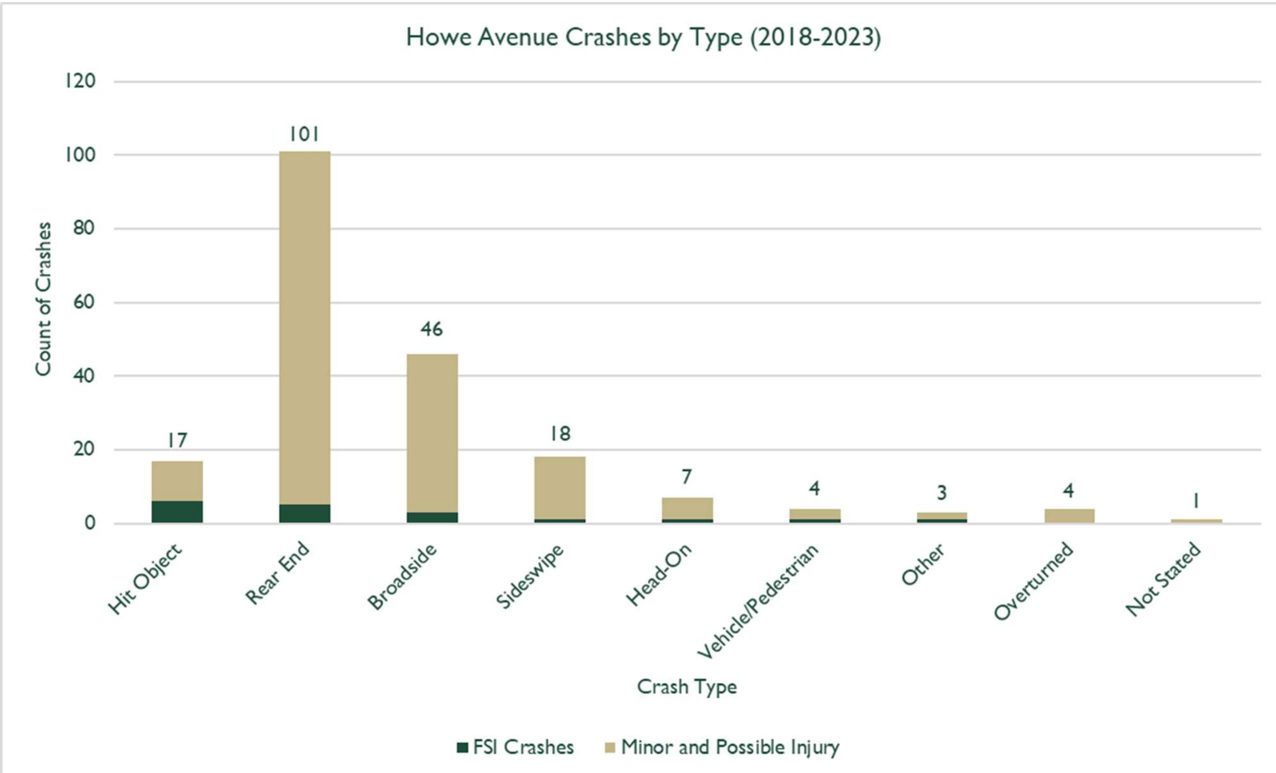

Figure 24: Howe Avenue Crashes by Type (Source: Transportation Injury Mapping System (TIMS))

Primary Crash Factor Summary

Figure 25 categorizes crashes by primary crash factor (PCF) based on reporting officer assessments. Among the 201 crashes analyzed, 104 (52%) were attributed to unsafe speeds[17], making it the leading cause of crashes on the corridor. Violations related to traffic signals and signs[18] were the next most frequent PCF, contributing to 29 crashes (14%), followed by improper turning, which accounted for 28 crashes (14%).

Of the 18 KSI crashes, seven (39%) involved unsafe speeds, while four (22%) were related to driving under the influence. None of the DUI-related crashes involved people walking or biking but one crash resulted in a non-KSI crash involving a person on a motorcycle.

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[17] In California Highway Patrol (CHP) crash reports, "unsafe speed" typically means driving at a speed that was dangerous for the prevailing conditions, even if it was at or below the posted speed limit.

[18] In CHP crash reports, "traffic signals and signs" as a crash cause typically indicates that a violation or disregard of traffic control devices contributed to the collision.

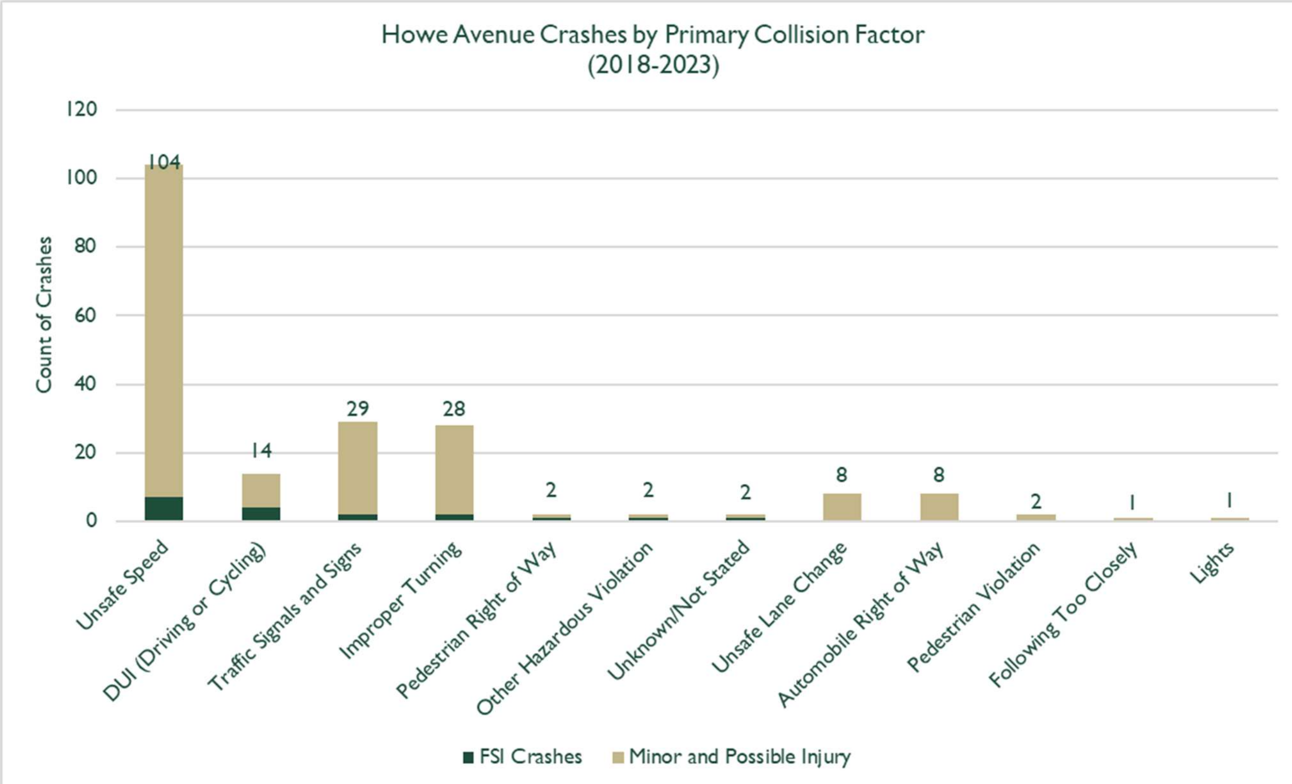


Figure 25: Howe Avenue Crashes by Primary Crash Factor Howe Avenue Crashes by Type (Source: Transportation Injury Mapping System (TIMS)

Crash Trends by Location

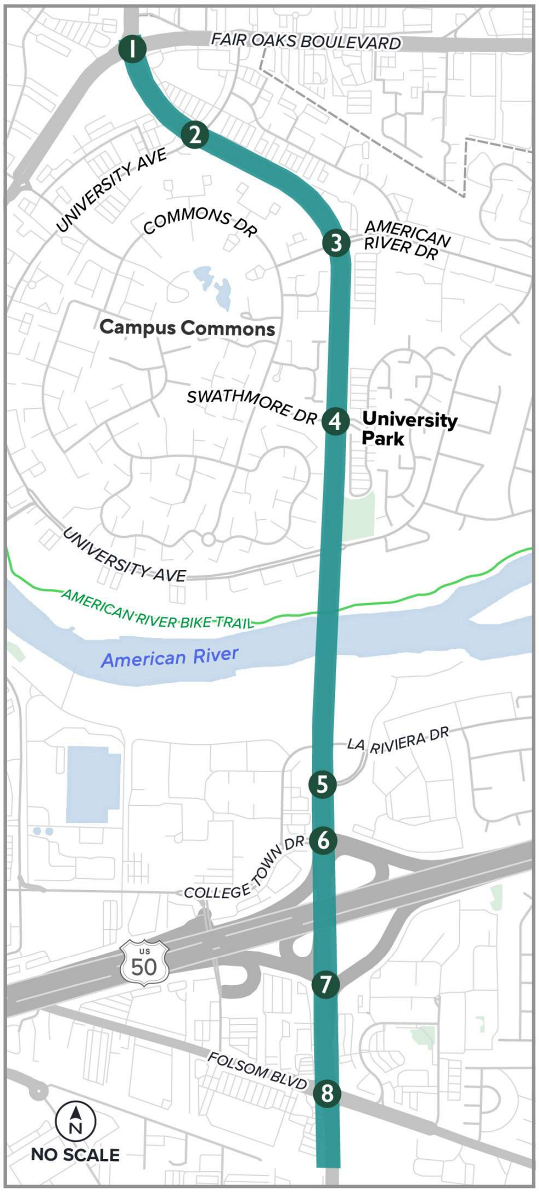
The most frequently occurring primary collision factors and crash types reported for crashes along the study corridor, along with the associated locations, are provided in **Figure 26**.

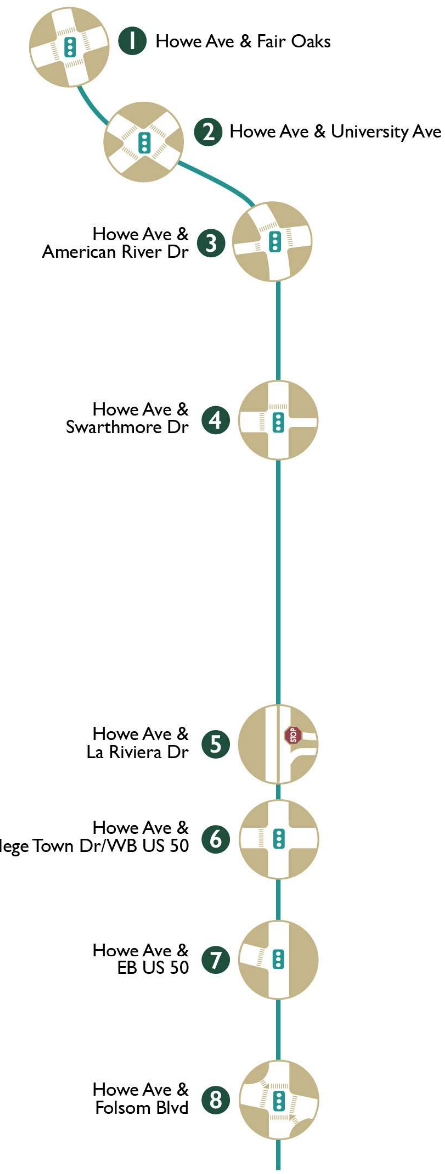
Rear-end collisions were the most common crash type during the study period, accounting for over 50% of all reported incidents along the Howe Avenue corridor. Broadside collisions ranked second in frequency. Signal and sign violations were among the most frequently cited contributing factors, particularly at intersections such as Howe Avenue at University Avenue, American River Drive, and Folsom Boulevard. The locations with the highest collision frequencies and their crash characteristics are summarized below:

- Howe Avenue & American River Drive: This intersection experienced the highest number of crashes from 2018 to 2023 with 37 crashes. Broadside collisions were the most frequent, with traffic signal and sign violations identified as the leading primary collision factor.

- Howe Avenue & College Town Drive: This location recorded the second-highest number of crashes (29), primarily broadside and rear-end collisions associated with unsafe speed.
- Howe Avenue & Folsom Boulevard: A total of 22 crashes were reported, primarily rear-end and broadside collisions related to unsafe speed and improper turning, respectively.
- Howe Avenue and Swarthmore Drive: 17 crashes reported at this intersection, also primarily rear-end collisions related to unsafe speed.

Although unsafe speed was the most frequently identified primary collision factor, these crashes occurred throughout the corridor rather than being concentrated on specific segments. Crash data from 2018 to 2023 indicates that collisions of various types and contributing factors were generally dispersed along the corridor[19].





CRASH CAUSES

\# Highlighted intersections had more than 2 crashes of the associated type or primary cause.

Unsafe Speed
Most common factor, involving cars at uncontrolled driveways.
1 **2** **3** **4** 5 **6** **7** **8**

Signal or Sign Violation
Tied for the second most commonly cited factor.
1 2 **3** 4 5 **6** 7 **8**

Improper Turning
Tied for the second most commonly cited factor.
1 2 **3** **4** 5 **6** 7 8

Under the Influence
Occured along the corridor but most occurances at American River.
1 2 **3** 4 5 6 7 8

CRASH TYPES

Rear End
Most common crash type, involved in over 50% of crashes.
1 **2** **3** **4** 5 **6** **7** **8**

Broadside
Second most common crash type.
1 2 **3** **4** 5 **6** 7 **8**

Sideswipe
Tied for third most common crash type with no concentration at any intersection.
1 2 3 4 5 6 7 8

Hit Object
Tied for third most common crash type.
1 2 **3** **4** 5 6 7 8

Figure 26: Crash Trends by Location

Traffic Operations Analysis

The following sections describe the methodology used to analyze and evaluate the traffic conditions at the study intersections and the results of this analysis.

Analysis Methodology

The study intersections were analyzed using Synchro 12, a traffic analysis software. A model of existing conditions was developed using the existing roadway geometry, traffic signal timing plans, and intersection turn movement volumes for the weekday morning and evening peak periods. In accordance with city guidelines, the peak hour factor (PHF) was set to 1.0.

Intersection geometry was determined through aerial imagery and field assessments. The most recent signal timing information was provided by the City of Sacramento. Signal Timing Worksheets are provided in **Appendix C**.

Key performance metrics for this analysis include average vehicle delay, intersection Level of Service (LOS)[20], and 95th percentile queue.

The delay and LOS analysis follows the methodology outlined in the Highway Capacity Manual (HCM) methodology published by the Transportation Research Board (TRB). This methodology assigns LOS grades (A to F) based on average vehicle control delay, where LOS A represents free-flow conditions and LOS F indicates severe congestion. **Table 6** documents the LOS criteria for signalized intersections.

The 95th percentile queueing reported by Synchro refers to the queue length (in vehicles) that has only a 5% chance of being exceeded during the analysis period. Most drivers will typically experience shorter queues than these estimates.

Queue lengths are analyzed to assess potential safety impacts, including blocked side street or driveway access (a moderate concern) and queue spill-back into upstream intersections (a significant concern). Queue overflows are calculated as the number of vehicles exceeding available storage, assuming 25 feet per vehicle and rounding up.

[20] A Level of Service (LOS) analysis refers to the quantifiable assessment of traffic under various scenarios.

Table 6: Level of Service Criteria Definitions

Level of Service	Description	signalized Intersection (Delay in Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	≤10.0
B	Operations with very low delay occurring with good progression and/or short cycle lengths.	>10.0 to 20.0
C	Operations with very average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	>20.0 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	>35.0 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and V/C ratios. Individual cycle failures are frequent occurrences.	>55.0 to 80.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	>80.0

Source: Highway Capacity Manual, 7th Edition

Analysis Results

Existing Vehicular Level of Service

The three study intersections—Fair Oaks Boulevard, University Avenue, and Folsom Boulevard—were analyzed for average control delay and Level of Service (LOS) during the a.m. and p.m. peak hours based on available traffic volume data. The observed delays ranged from 29 to 45 seconds per vehicle, with all intersections operating at LOS D or better. LOS D represents the lowest level of service observed, while the others performed at LOS C or higher.

Table 7 summarizes the existing peak-hour intersection performance, including control delay and LOS. Supporting Synchro reports—covering lane configurations, traffic volumes, signal timings, queue lengths, and delay/LOS analyses—are provided in **Appendix D**.

Table 7: Existing Conditions Operational Analysis Results

INTERSECTION	A.M. PEAK HOUR		P.M. PEAK HOUR	
	DELAY (SECONDS)	LOS	DELAY (SECONDS)	LOS
1. HOWE AVENUE / FAIR OAKS BOULEVARD*	36.2	D	44.4	D
2. HOWE AVENUE / UNIVERSITY AVENUE	36.2	D	35.6	D
3. HOWE AVENUE / FOLSOM BOULEVARD	29.6	C	36.7	D

*Delay and LOS calculated using HCM 2000 methodology for this intersection, because of complex signal phasing not included in the HCM 7th Edition methodology.

Source: DKS Associates, December 2024.

95th Percentile Queueing

Table 8 provides an overview of the 95th percentile queueing results at all study intersections compared to available storage lengths. Deficiencies are summarized as follows:

- **Howe Avenue and Fair Oaks Boulevard:** The southbound right-turn queue exceeds available storage length (270 ft) during both periods.
- **Howe Avenue and University Avenue:** Queues for several movements exceed available storage lengths during both peak hours:
  - **A.M. Peak:** The northbound left turn queue exceeds the available storage (230 ft)
  - **P.M. Peak:** The southbound left turn queue does not exceed available storage length, however, analysis indicates that southbound demand is constrained by the upstream signal (at Fair Oaks Boulevard). If future changes to signal timing allowed more traffic through Fair Oaks, queues at University Avenue would be longer. Eastbound and westbound left-turn movements exceed available storage lengths in the p.m. peak, with the eastbound queue at 175 feet (exceeding 90 ft available storage) and the westbound queue at 190 feet (exceeding the 140 ft available storage).
- **Howe Avenue/Power Inn Road and Folsom Boulevard**: The northbound left queue in the a.m. peak exceeds available storage length (155 ft).

Table 8: 95TH Percentile Queuing Results at Study Intersections

INTERSECTION	TURNING MOVEMENT	STORAGE (FT)	95TH PCTLE QUEUE (FT)	
			A.M. PEAK HOUR	P.M. PEAK HOUR
1. HOWE AVENUE / FAIR OAKS BOULEVARD	NBL	260	150	155
	SBL	205	125	160
	EBL	530	165	325
	WBL	300	70	110
	SBR	270	**525**	**280**
2. HOWE AVENUE / UNIVERSITY AVENUE	NBL	230	**280**(#)	75
	SBL	100	45(m)	65(m)
	EBL	90	45	**175**
	WBL	140	135	**190**
3. HOWE AVENUE / FOLSOM BOULEVARD	NBL	155	**165**	135
	SBL	720	215	300
	EBL	230	80	75
	WBL	225	135	200

[a]**BOLD** represents 95th percentile queueing above the available storage length.

(#) 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

(m) Volume for 95th percentile queue is metered by upstream signal.

Values rounded up to the nearest multiple of five.

Source: DKS Associates, December 2024.

Travel Time Reliability and Congestion

Traffic operations along a corridor are typically evaluated using two key metrics: **congestion** and **travel time reliability**

Congestion refers to significantly slower travel times during peak periods compared to free-flow or ideal travel conditions. **Travel time reliability** measures the consistency of travel times, reflecting how predictable a trip's duration is when taken at the same time each day.

Common factors that contribute to unreliable travel times include:

- Normal fluctuations in travel demand
- Physical bottlenecks
- Special events
- Traffic crashes
- Inclement weather
- Traffic control devices
- Work or construction activities

Measuring Congestion and Travel Time Reliability

Congestion is measured using the **Travel Time Index (TTI)**, which is calculated as the ratio of a corridor's travel time at a specific time of day to its free-flow travel time.

Travel time reliability is quantified using the **Buffer Time Index (BTI)**, which represents the additional time a traveler must budget to ensure on-time arrival. It is determined by the difference between the average travel time and the 95th percentile travel time, normalized to free-flow conditions.

The relationship between the Travel Time Index (TTI), the 95th Percentile Travel Time Index, and the Buffer Time Index (BTI) is illustrated in **Figure 27**.

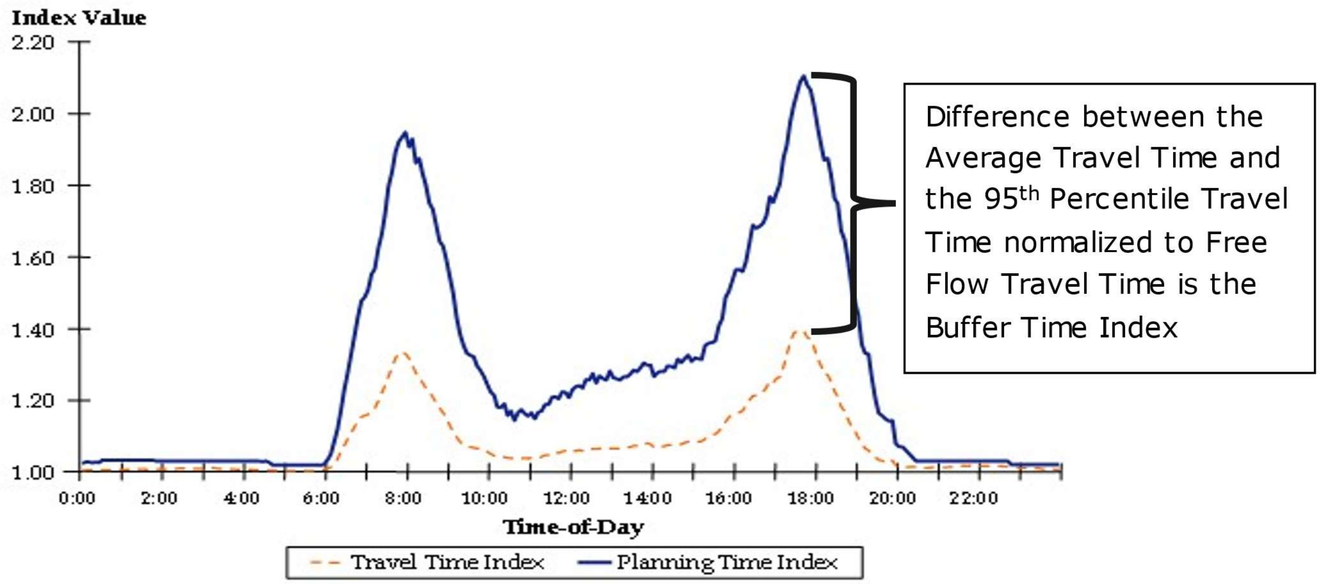


Figure 27. Relationship between Average Travel Time and 95th Percentile Travel Time[21]

City of Sacramento's Policies on Congestion

According to the City of Sacramento General Plan, some levels of corridor congestion are considered acceptable. Instead of prioritizing congestion reduction, transportation improvements aim to enhance mobility for all users and ensure a reliable travel experience. This means that while peak-hour travel delays may persist, travelers can plan their trips with greater confidence in arrival times.

Data Collection and Analysis

To evaluate travel time reliability and congestion along Howe Avenue, average speed data were obtained from the Federal Highway Administration's (FHWA) National Performance Management Research Data Set (NPMRDS). In this data set, congestion is defined as peak-hour speeds that are 60% or less of free-flow speeds.

For consistency, data was filtered to reflect annual average weekday conditions, focusing on typical a.m. and p.m. peak periods (Tuesday through Thursday). Analyses were conducted separately for passenger vehicles and heavy-duty trucks, as well as for both combined.

The most congested continuous 60-minute intervals were identified as the peak periods for each vehicle type. Free-flow speed (FFS) was determined by analyzing the highest recorded vehicle speeds during off-peak hours (12:00 a.m. to 3:00 a.m.). Congestion and

[21] Source: Traffic Congestion and Reliability: Linking Solutions to Problems, FHWA, 2004

reliability thresholds, as defined in the *Highway Capacity Manual, 7th Edition*, are summarized in **Table 9**.

Travel time reliability and congestion metrics were analyzed for passenger vehicles, trucks, and combined traffic during the a.m. peak hour (8:00 to 9:00 a.m.) and p.m. peak hour (4:00 to 5:00 p.m.). **Figure 28** through **Figure 33** illustrate that, despite persistent congestion, the corridor demonstrates minimal variability in travel times. **This suggests that while congestion levels are consistently high, travel time reliability remains stable across all vehicle types and peak periods.**

Table 9. Congestion and Reliability Performance Measures

	RELIABLE	MODERATELY RELIABLE	UNRELIABLE
BUFFER TIME INDEX	BTI < 1.25	BTI 1.25-< 1.5	BTI >= 1.5
UNCONGESTED >= 60% OF FREE FLOW SPEED	Predictable and efficient	Not always predictable, usually efficient	Unpredictable, not often congested
CONGESTED <60% OF FREE FLOW SPEED	Predictable and inefficient	Not always predictable, usually inefficient	Unpredictable, not often congestion

Source: Highway Capacity Manual, 7th Edition.

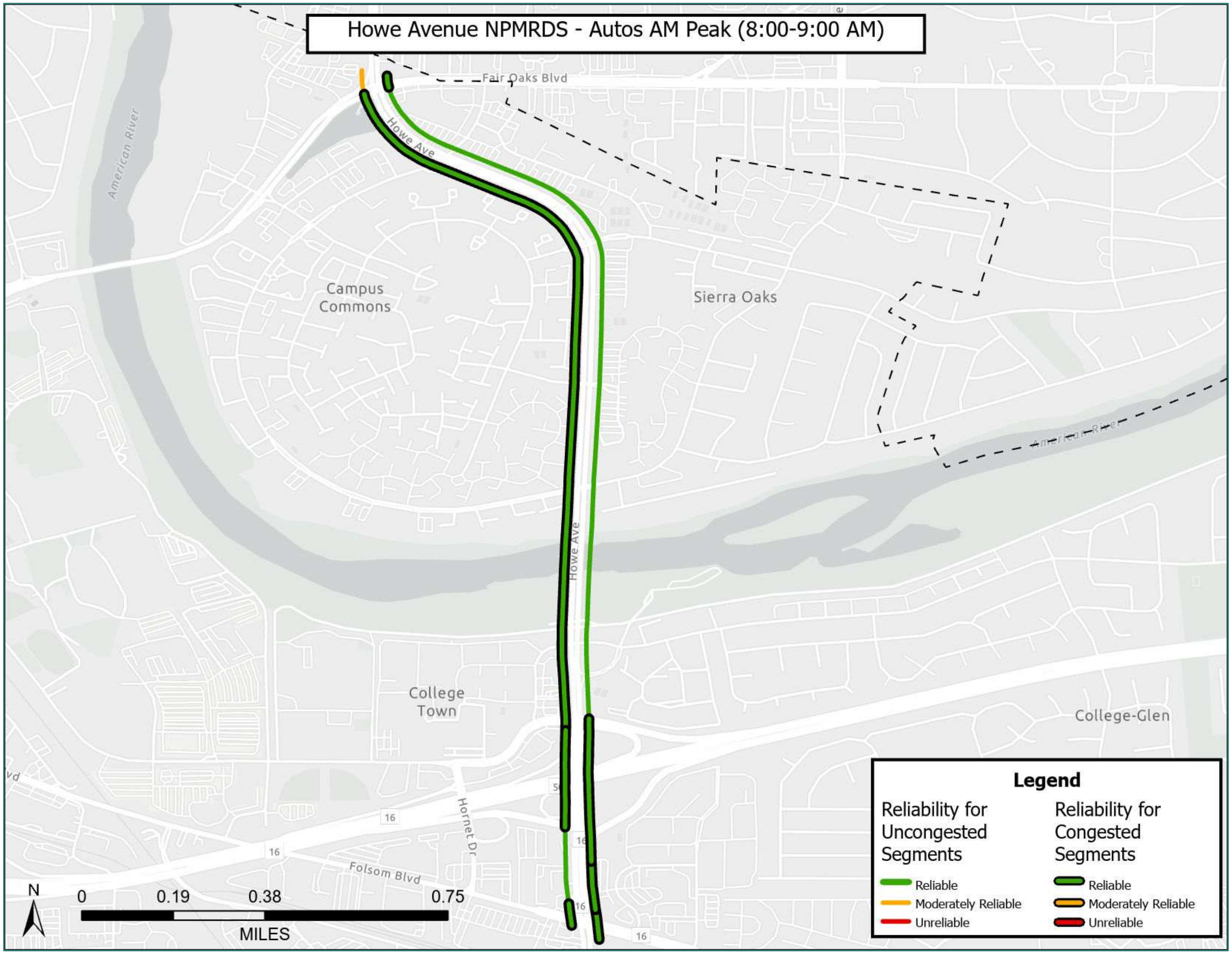


Figure 28. Autos A.M. Peak Hour Travel Time and Congestion

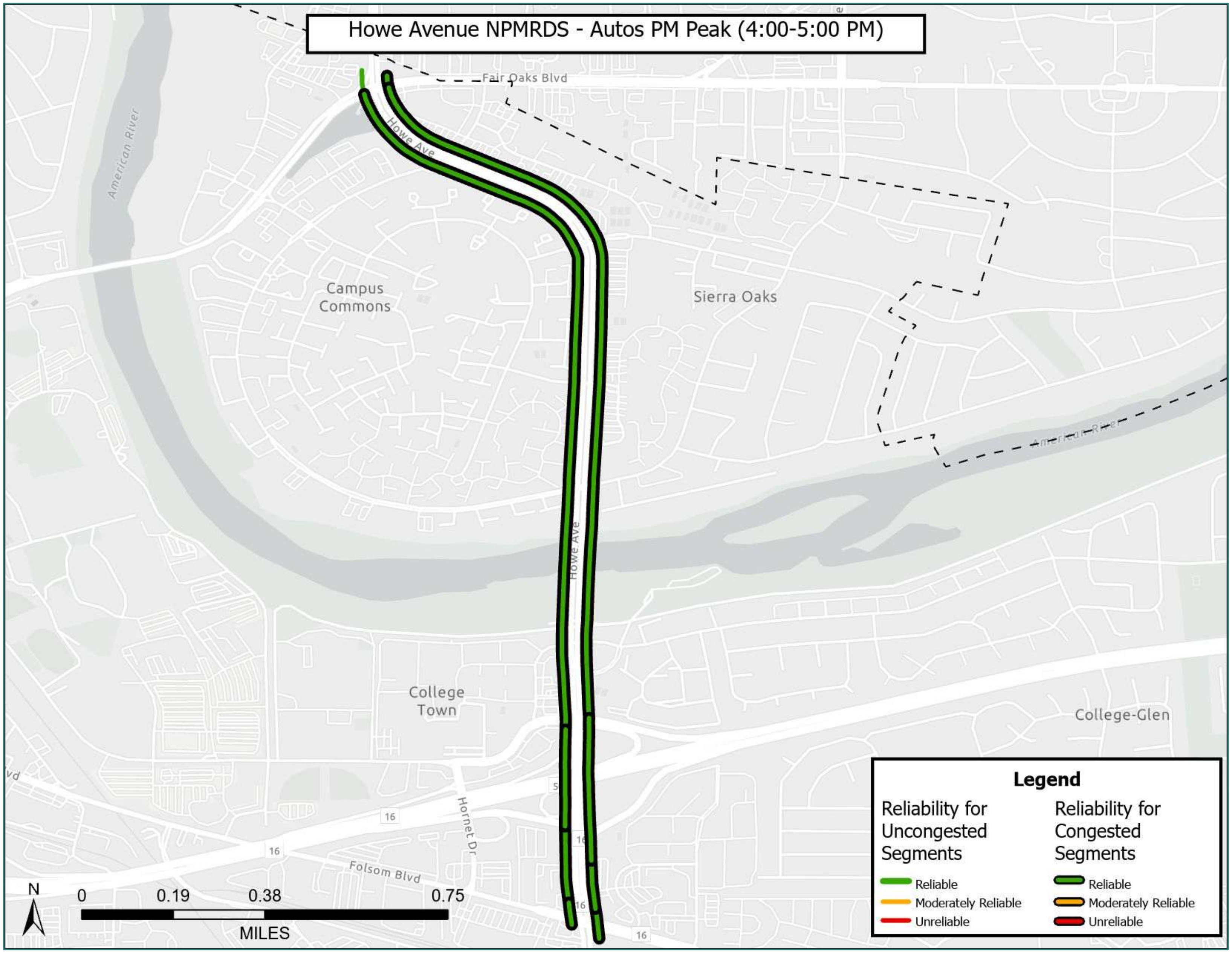


Figure 29. Autos P.M. Peak Hour Reliability and Congestion

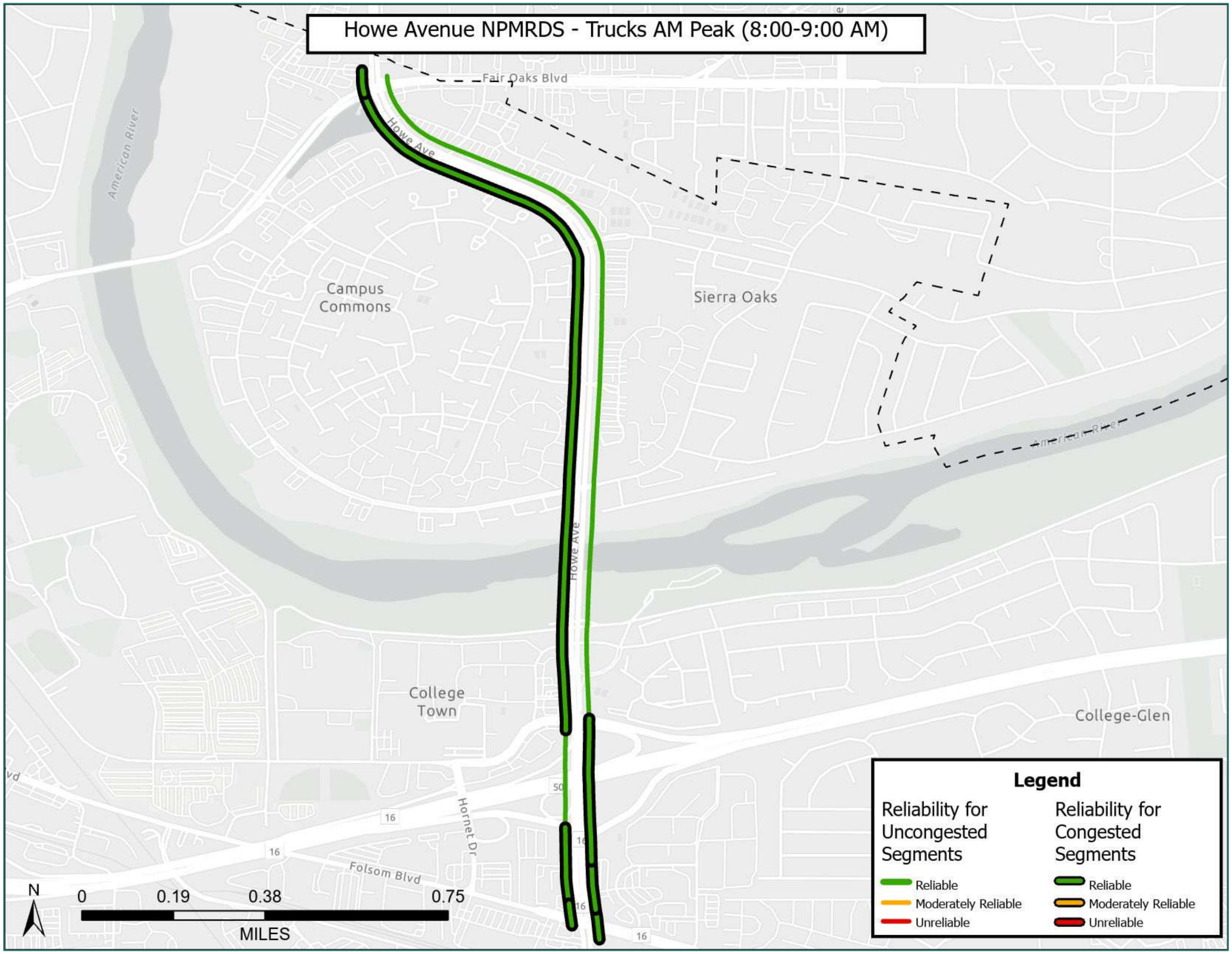


Figure 30. Trucks A.M. Peak Hour Reliability and Congestion

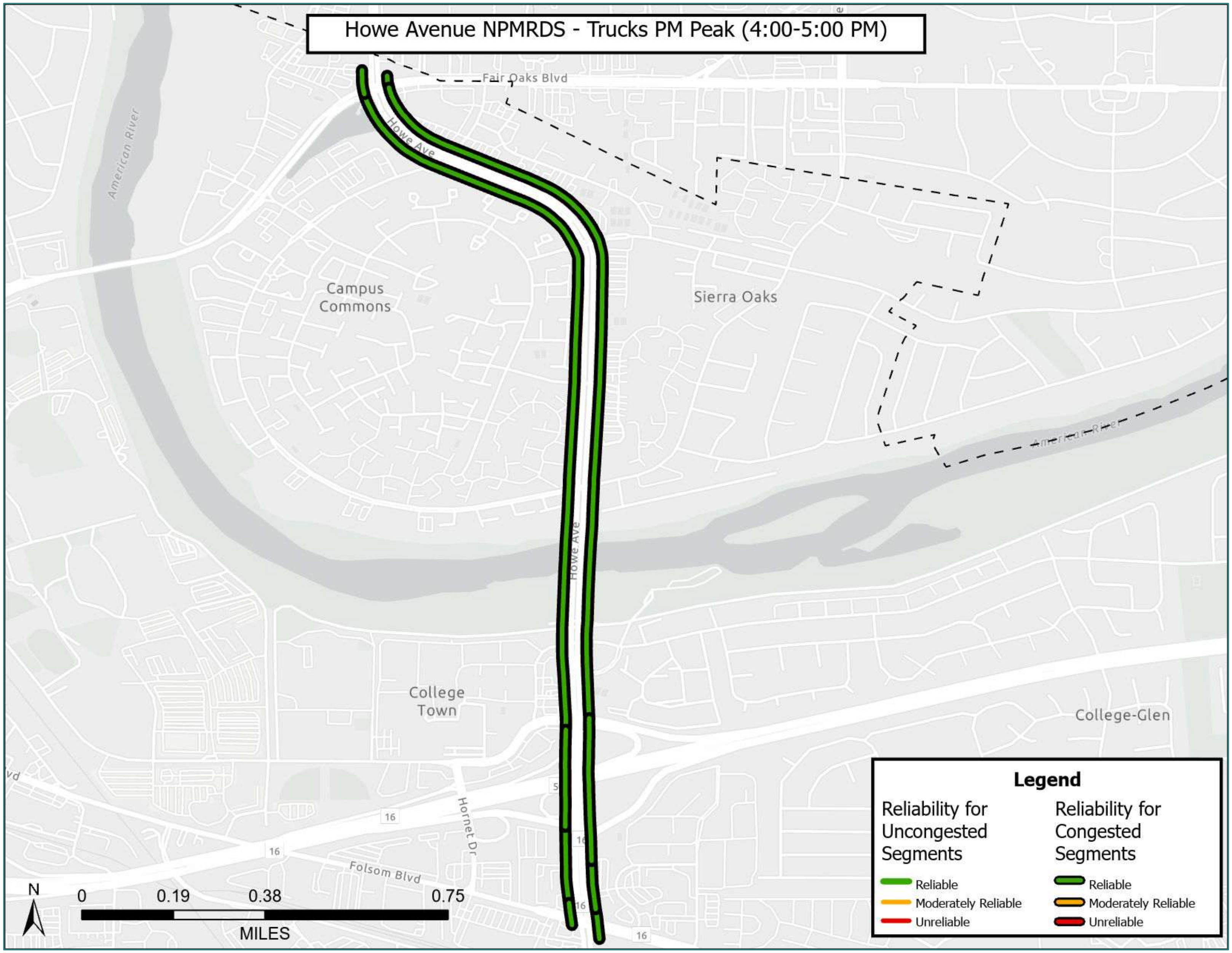


Figure 31. Trucks P.M. Peak Hour Reliability and Congestion

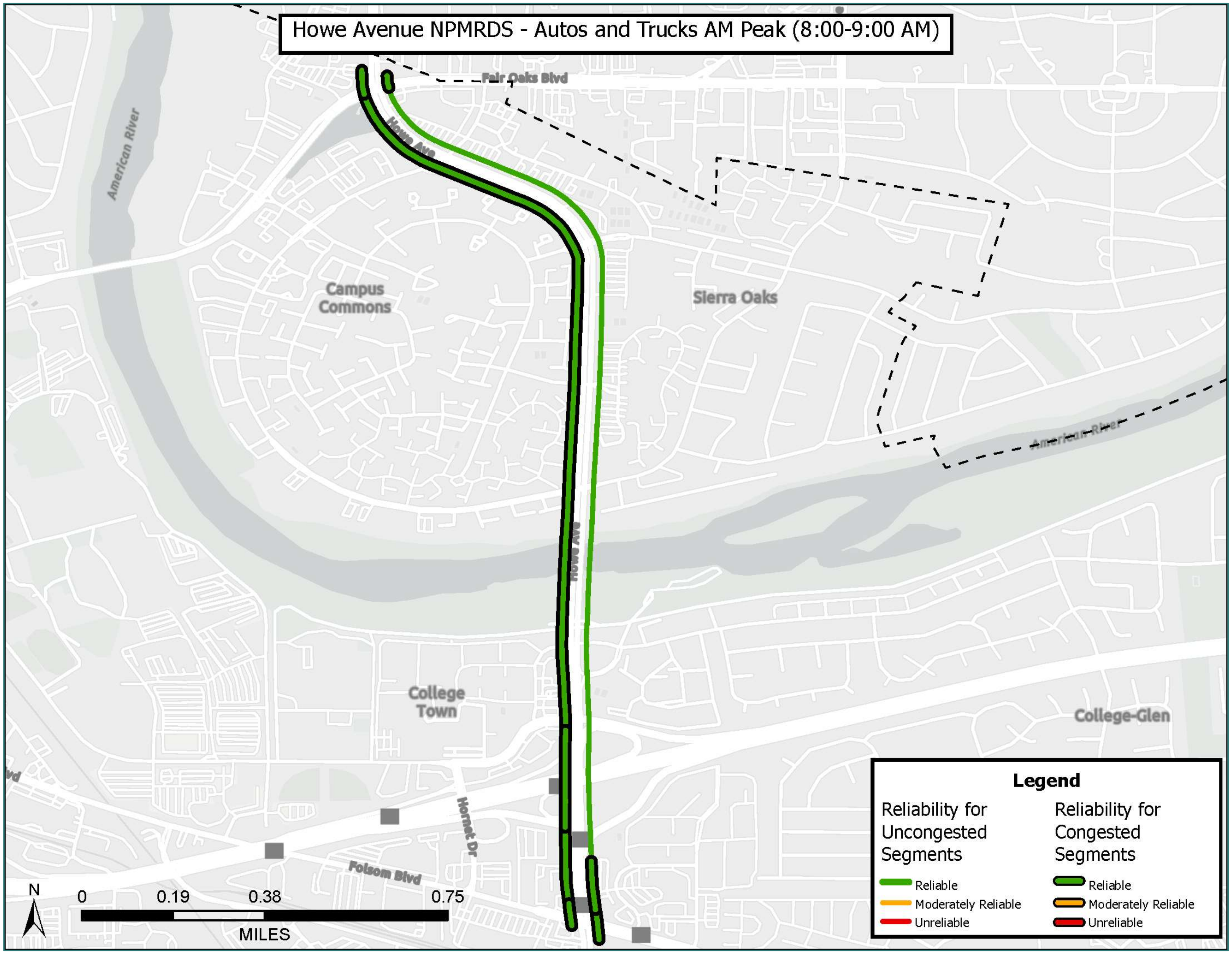


Figure 32. Autos and Trucks A.M. Peak Hour Reliability and Congestion

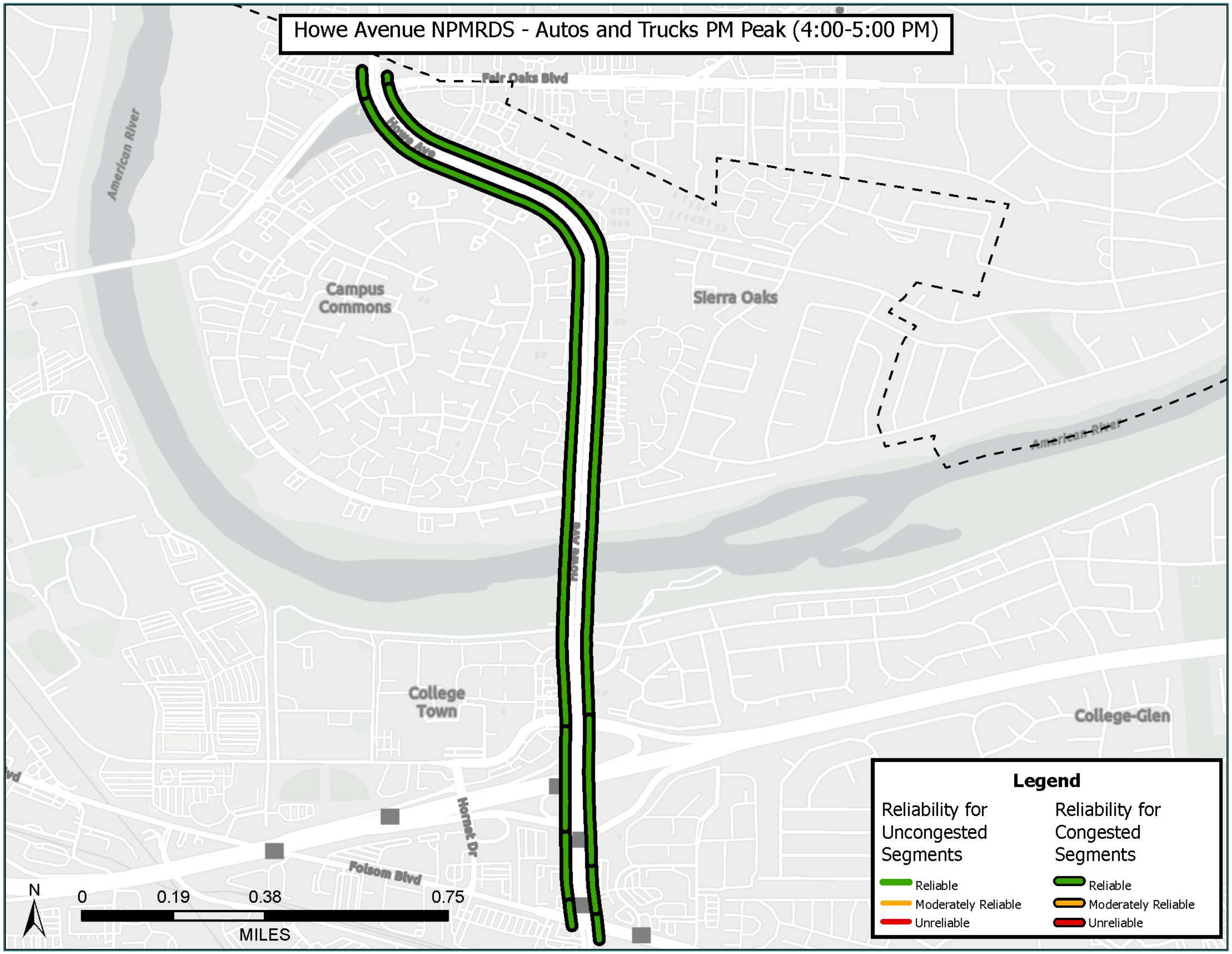


Figure 33. Autos and Trucks P.M. Peak Hour Reliability and Congestion

Public Engagement Summary

This section outlines public engagement events, engagement media methods, and public feedback results for the Connecting Howe Avenue Safety & Mobility Plan, including an overview of in-person and virtual meetings, methods for collecting community input, and a summary of feedback through surveys and interactive maps.

Public Engagement Events

In Person Event

On Wednesday, November 20, 2024, the project team hosted an in-person engagement event to engage community members on the Connecting Howe Avenue Safety & Mobility Plan. The event was held from 6:30 to 8:00 p.m. at the Scottish Rite Masonic Center (6151 H St, Sacramento, CA 95819).

To promote awareness of the public workshop and virtual meeting, a flyer was circulated on the City of Sacramento website, pop-up events, and social media outlets to promote the upcoming events. The event flyer consisted of meeting information, project background, links, and a QR code to route views to the project website, survey, and comment map.

The workshop began with a presentation outlining the project's purpose, goals, and need. Following the presentation, attendees were encouraged to participate by completing a community survey or contributing feedback via an interactive map on Social Pinpoint. The project team set up four comment boards dedicated to different transportation modes—walking, biking, driving, and transit- to solicit feedback.

Approximately eight to ten attendees participated in the event, engaging with the project team. Attendees shared feedback about concerns along Howe Avenue and suggested potential improvements. Materials from events are provided in **Appendix E**.

Virtual Meeting

On Monday, December 2, 2024, the project team held a virtual community meeting to engage community members and gather public input. This event, conducted via Zoom from 6:30 p.m. to 7:30 p.m., served as an alternative option for those who may not be able to attend in-person events.

The workshop began with a brief presentation outlining the project's purpose, need, and goals. Participants were encouraged to share their comments, questions, and concerns with project staff during the session. Additionally, attendees received information about the project website, where they could complete a survey and/or explore the interactive map at their convenience.

Approximately 10 community members attended the meeting and provided input and feedback on existing conditions on Howe Avenue.

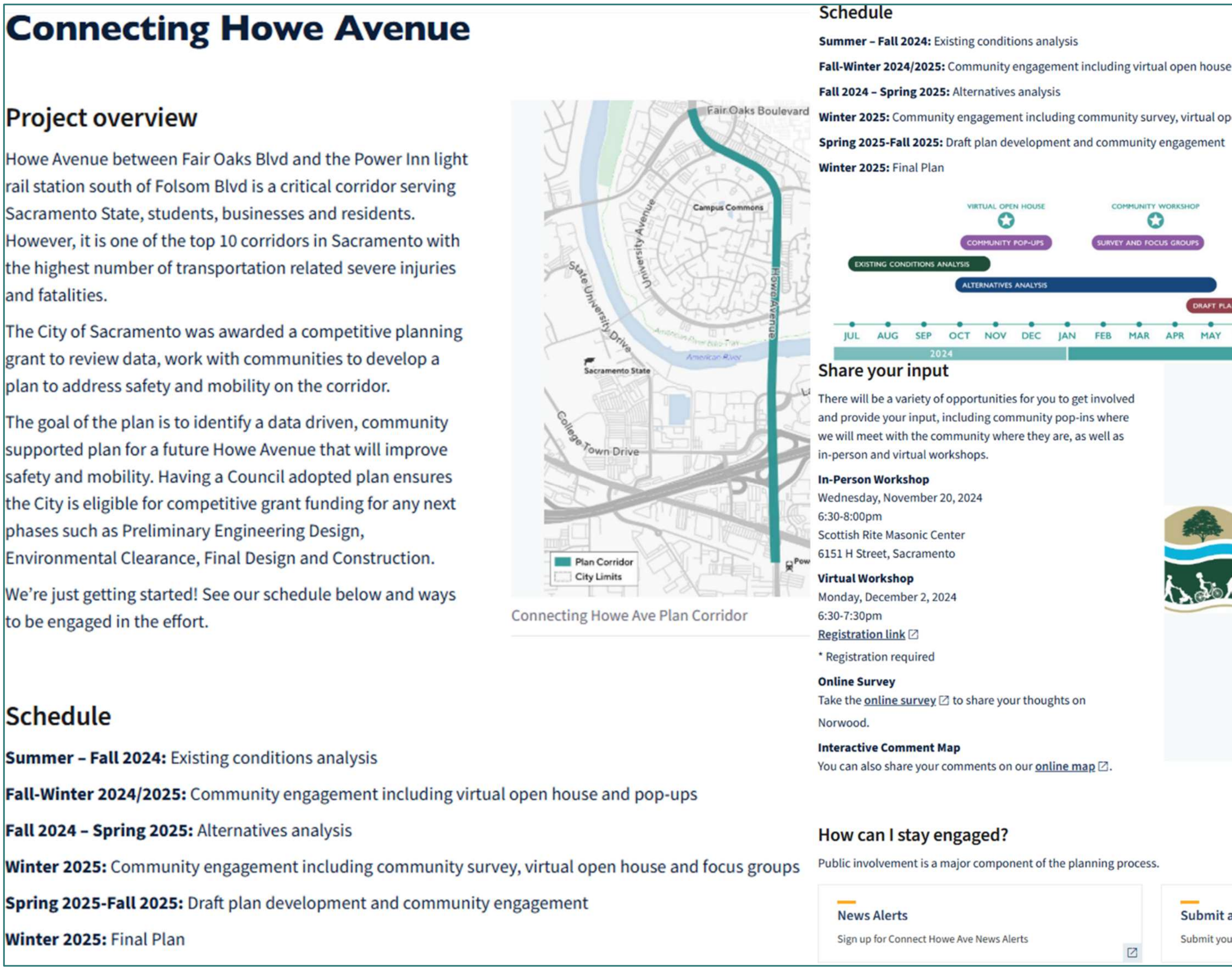
On Wednesday, December 11, 2024, City staff presented at a standing Folsom Boulevard Coalition meeting, similar to the workshop mentioned above.

Project Website

The Connecting Howe Avenue Safety & Mobility Plan has a dedicated page[22] on the City of Sacramento's website. As shown in **Figure 34**, the project webpage provides details including the project background, corridor extents, schedule, and methods for public input. The webpage offers two primary ways for community engagement: a survey and an interactive Social Pinpoint map for public comments (**Figure 35**).

The community survey was available both online and at the in-person workshop, where it was offered in English and Spanish (**Figure 36**).

[22] City of Sacramento. (n.d.). *Connecting Howe Avenue*. Public Works Department. Retrieved January 9, 2025, from https://www.cityofsacramento.gov/public-works/transportation/current_transportation_efforts/connecting-howe-avenue


Connecting Howe Avenue

Project overview

Howe Avenue between Fair Oaks Blvd and the Power Inn light rail station south of Folsom Blvd is a critical corridor serving Sacramento State, students, businesses and residents. However, it is one of the top 10 corridors in Sacramento with the highest number of transportation related severe injuries and fatalities.

The City of Sacramento was awarded a competitive planning grant to review data, work with communities to develop a plan to address safety and mobility on the corridor.

The goal of the plan is to identify a data driven, community supported plan for a future Howe Avenue that will improve safety and mobility. Having a Council adopted plan ensures the City is eligible for competitive grant funding for any next phases such as Preliminary Engineering Design, Environmental Clearance, Final Design and Construction.

We're just getting started! See our schedule below and ways to be engaged in the effort.

Connecting Howe Ave Plan Corridor

Schedule

Summer – Fall 2024: Existing conditions analysis

Fall-Winter 2024/2025: Community engagement including virtual open house and pop-ups

Fall 2024 – Spring 2025: Alternatives analysis

Winter 2025: Community engagement including community survey, virtual open house and focus groups

Spring 2025-Fall 2025: Draft plan development and community engagement

Winter 2025: Final Plan

Schedule

Summer – Fall 2024: Existing conditions analysis

Fall-Winter 2024/2025: Community engagement including virtual open house a

Fall 2024 – Spring 2025: Alternatives analysis

Winter 2025: Community engagement including community survey, virtual ope

Spring 2025-Fall 2025: Draft plan development and community engagement

Winter 2025: Final Plan

Share your input

There will be a variety of opportunities for you to get involved and provide your input, including community pop-ins where we will meet with the community where they are, as well as in-person and virtual workshops.

In-Person Workshop
Wednesday, November 20, 2024
6:30-8:00pm
Scottish Rite Masonic Center
6151 H Street, Sacramento

Virtual Workshop
Monday, December 2, 2024
6:30-7:30pm
Registration link

* Registration required

Online Survey
Take the online survey to share your thoughts on Norwood.

Interactive Comment Map
You can also share your comments on our online map.

How can I stay engaged?

Public involvement is a major component of the planning process.

News Alerts
Sign up for Connect Howe Ave News Alerts

Submit a
Submit your

Figure 34. Connecting Howe Avenue Safety & Mobility Plan Project Web Page

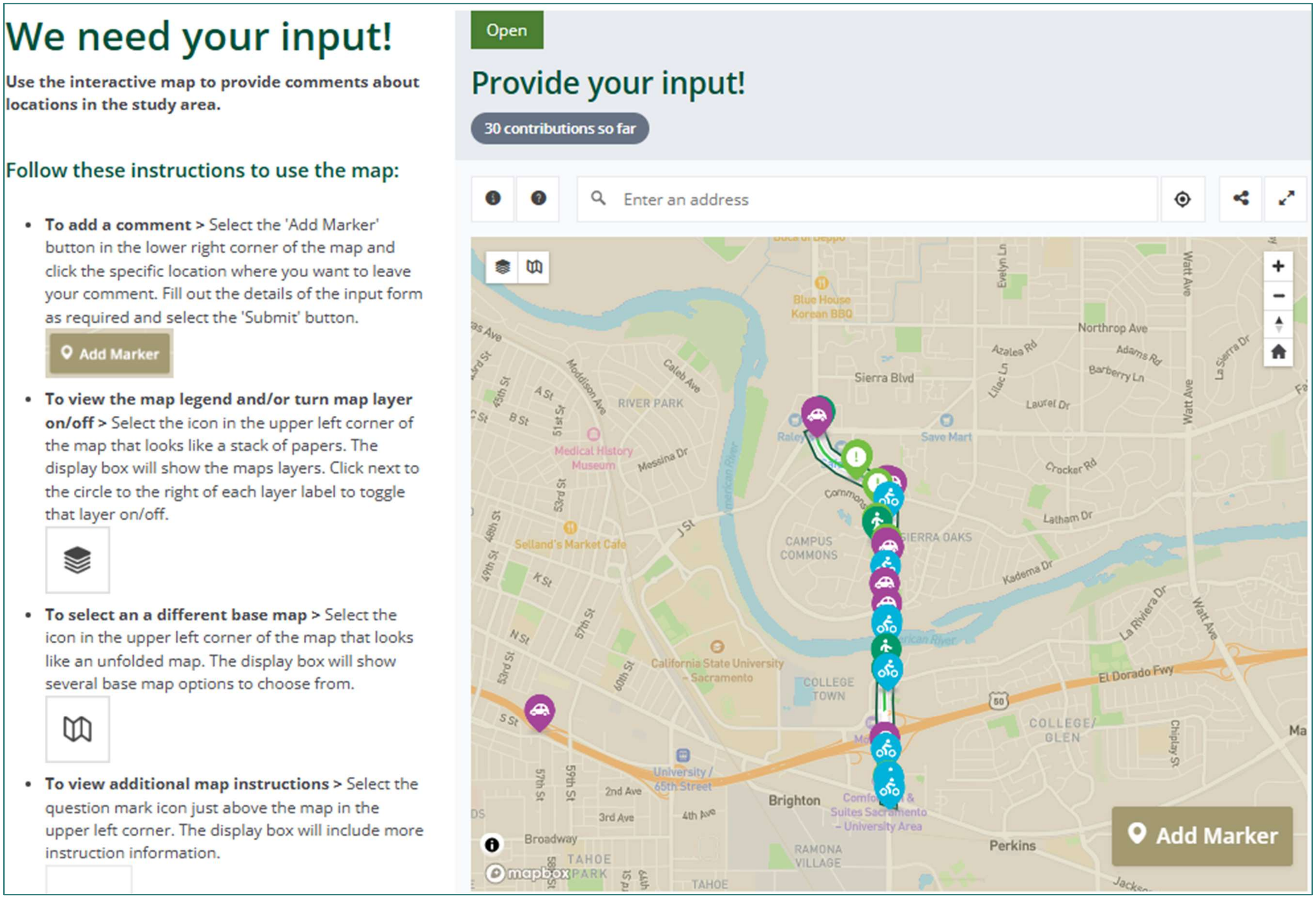


Figure 35. Interactive Comment Map

Community Survey

Please take the following brief survey. Your input is extremely valuable, and it will help the project team select the preferred future options and potential physical changes to Howe Avenue.

What is your zip code?

How often do you typically travel on Howe Avenue?

- ○ Daily
- ○ Some Days (e.g., work commute, shopping, and errands)
- ○ Weekly
- ○ Every Couple of Weeks
- ○ Monthly
- ○ Rarely

How do you typically travel on Howe Avenue? Select all that apply.

- ☐ Driving in a Personal Vehicle
- ☐ Riding in a Personal Vehicle (being driven by someone)
- ☐ Public Transit
- ☐ Paratransit
- ☐ Walking/Rolling
- ☐ Bicycling (including using e-bikes)
- ☐ Scooting
- ☐ Ride-Sharing (Uber, Lyft), Taxi
- ☐ Other (please specify)

For the next questions, please rate your interest in each potential change to Howe Avenue on a scale from 1 (least interested) to 5 (most interested).

Improved public transit stop conditions and access

1 = least interested, 5 = most interested

- ○ 1
- ○ 2
- ○ 3

Figure 36. Community Survey

Public Engagement Results

Since the launch of the project webpage in September 2024, through December 2024, the Connecting Howe Avenue Safety & Mobility Plan Social Pinpoint Platform has received 179 views, over 70 interactive map comments, and more than 100 community survey responses. The following sections summarize public feedback collected through the Social Pinpoint interactive map and project survey.

Social Pinpoint Results

The interactive map allowed visitors to provide feedback across six categories: walking, bicycling, driving, transit, general safety, and other concerns. Due to the volume of responses, the results have been organized by primary intersections.

Figure 37 presents a cartogram illustrating public comments by transportation mode across intersections on Howe Avenue. The vertical axis shows the number of comments, while the horizontal axis highlights specific intersections and locations along the corridor. The area near University Park Drive received the most feedback, with 14 to 16 comments focusing on various issues. Walking and bicycling concerns were consistent throughout the corridor, while transit-related comments were concentrated near Swarthmore Drive.

Overall, the primary concerns identified were related to driving, bicycling, safety, and walking and rolling (see **Figure 38**). Key themes from the social pinpoint comments and public survey are summarized as follows:

Major Safety Priorities

- Excessive vehicle speeds
- High-risk crosswalks at major intersections
- Unsafe merging areas and unclear lane markings
- Poor visibility at intersections and crosswalks

Missing Connections

- Incomplete sidewalk network
- Gaps in bike lanes and trails
- Poor access to transit stations
- Disconnected multi-use paths near La Riviera and Folsom Blvd

Problem Intersections & Areas

- Fair Oaks/Howe: Difficult turns, safety risks for people walking, and challenges with business access.
- Howe/American River: Crash-prone area with frequent red light running.
- Swarthmore Drive: Dangerous merging and speeding concerns.

- Power Inn LRT Station: An isolated feel and poor connectivity.

Community Impact

- People driving short distances instead of walking/biking due to safety concerns
- Difficulty accessing local businesses and amenities
- Navigation challenges during peak hours
- Concerns about neighborhood quality of life (noise, traffic)

The overarching message from this community feedback is that current road conditions prioritize vehicle throughput at the expense of safety and accessibility for other modes of travel, particularly affecting local community access to nearby destinations. A full summary of comments is provided in **Appendix F**.

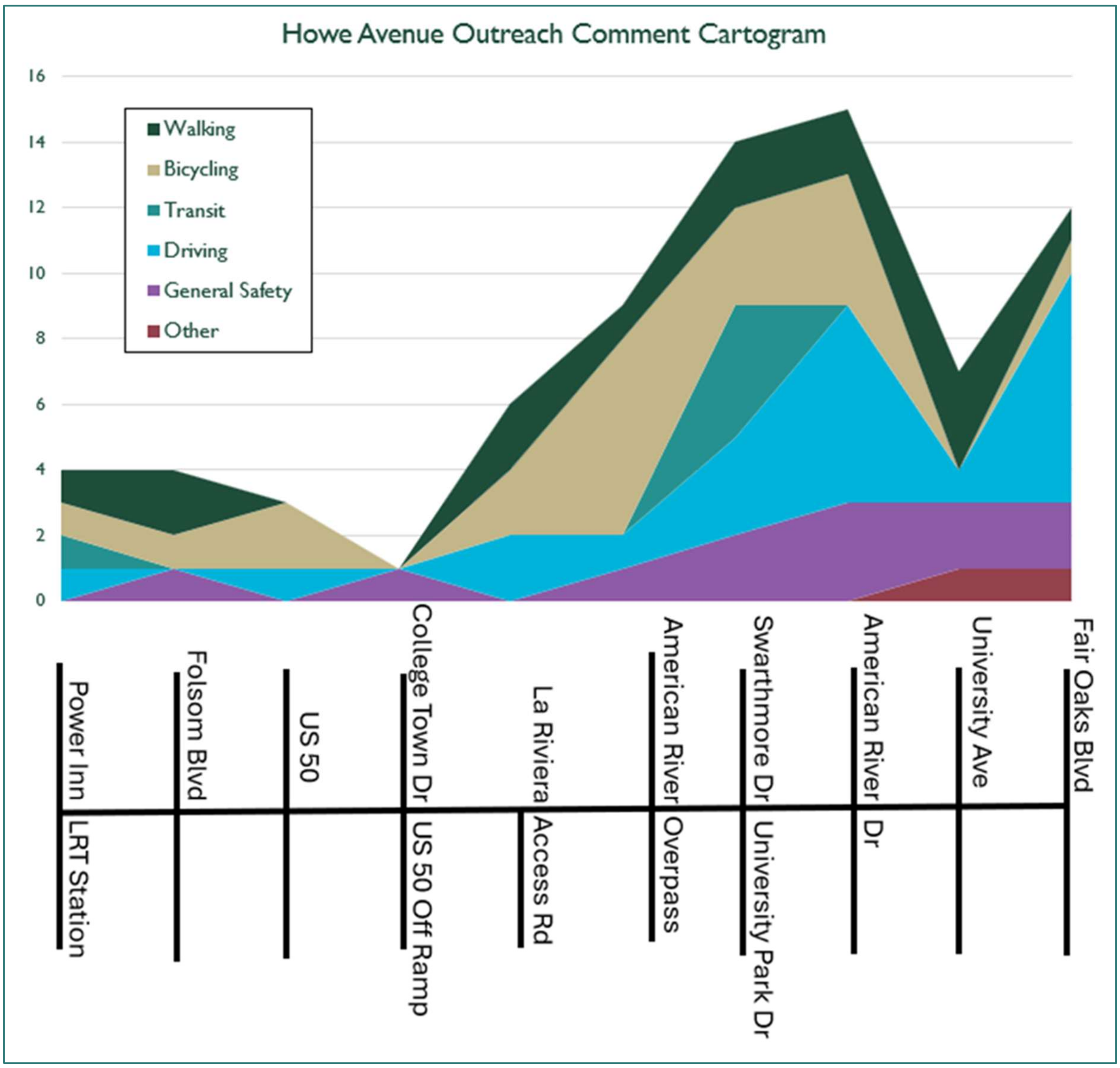


Figure 37. Comment Type by Intersection (Social Pinpoint and Survey)

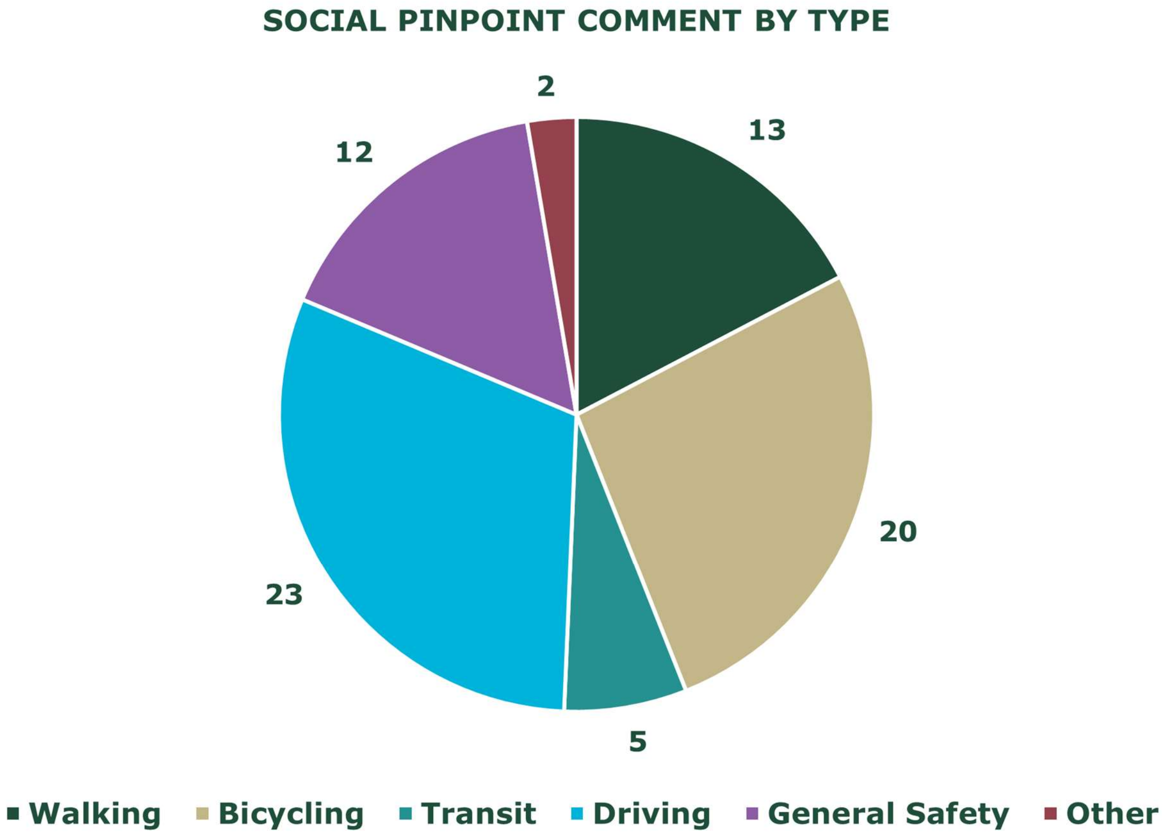


Figure 38. Social Pinpoint Comment by Type

Project Survey Results

The project webpage featured an interactive comment map, and a community survey designed to understand user interactions with the corridor and identify desired improvements. As illustrated in **Figure 39** and **Figure 40**, over 80% of respondents reported using Howe Avenue daily or occasionally, with the majority traveling by car.

The survey presented potential corridor enhancements, asking participants to rank their interest in each option on a scale from least to most interested. Results, highlighted in **Figure 41** to **Figure 43**, indicate strong community interest in improving biking, walking, and driving conditions along Howe Avenue.

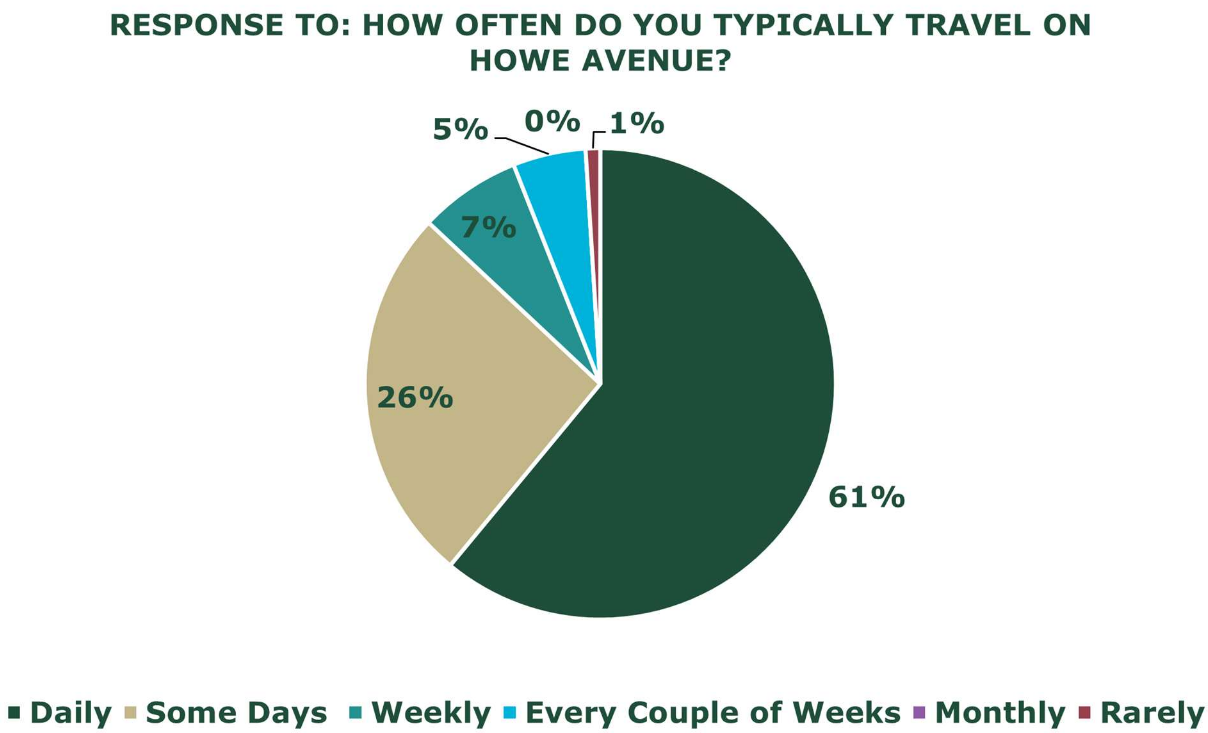


Figure 39. Community Survey - Question 2: How Often do you Typically Travel on Howe Avenue?

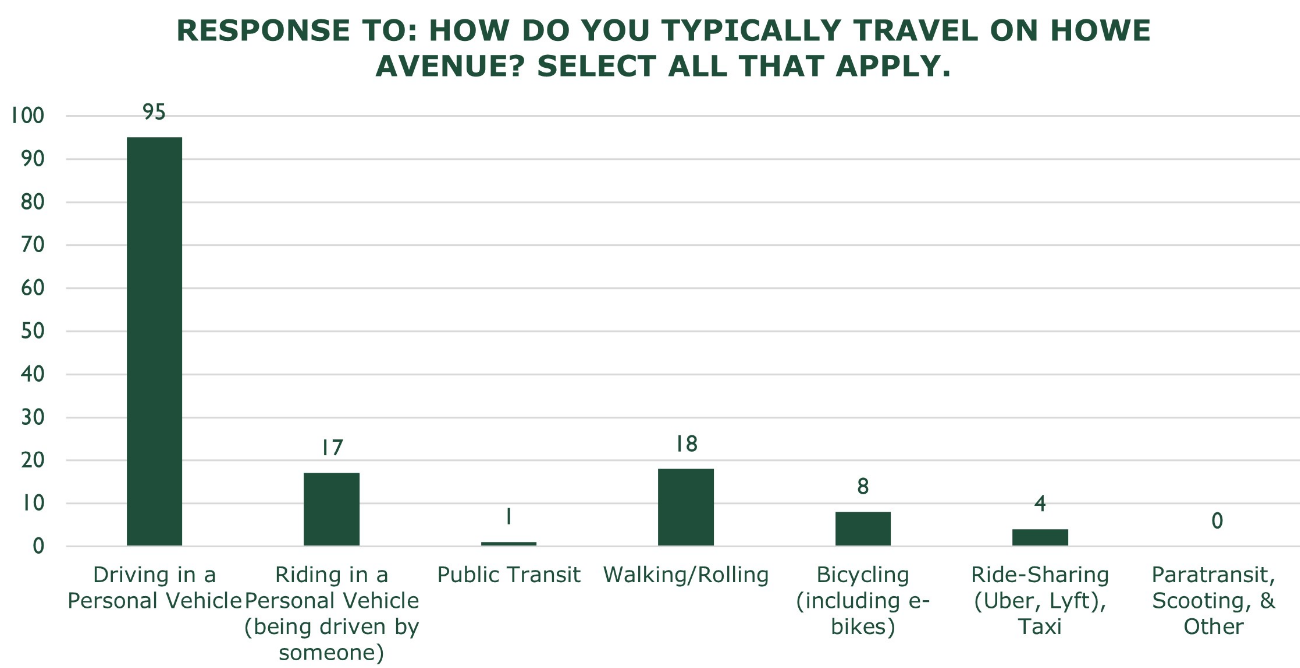


Figure 40. Community Survey - Question 3: HOW DO YOU TYPICALLY TRAVEL ON HOWE AVENUE?

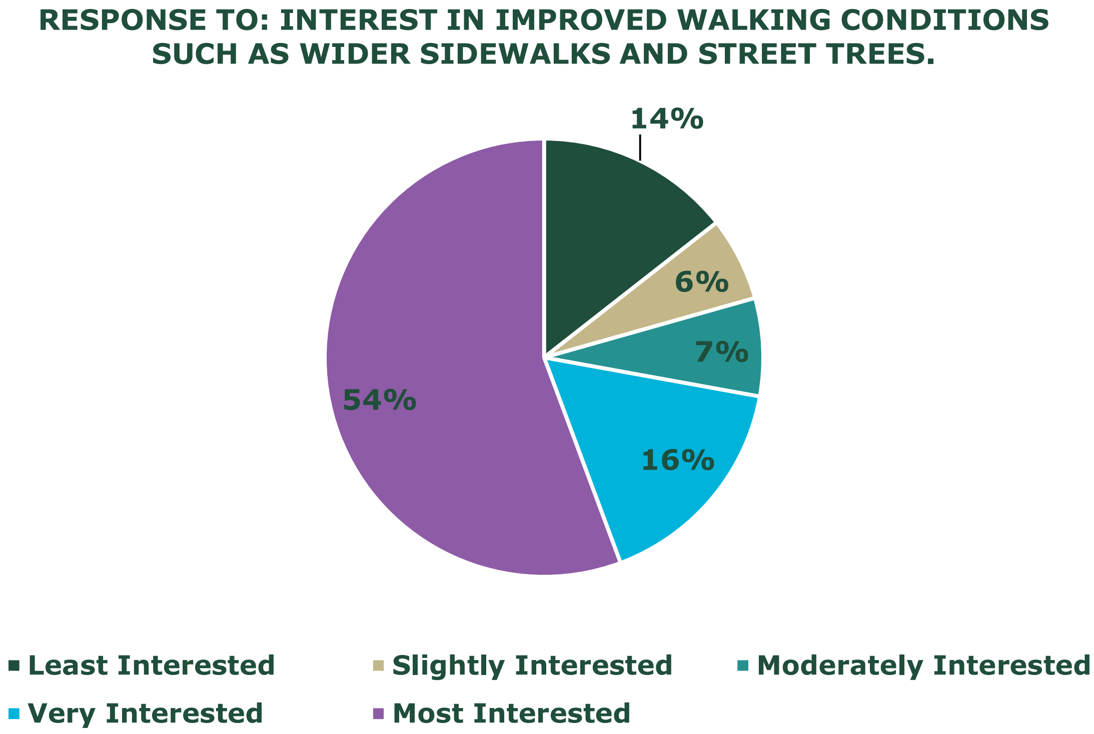


Figure 41. Community Survey - Interest in Improved Walking Conditions

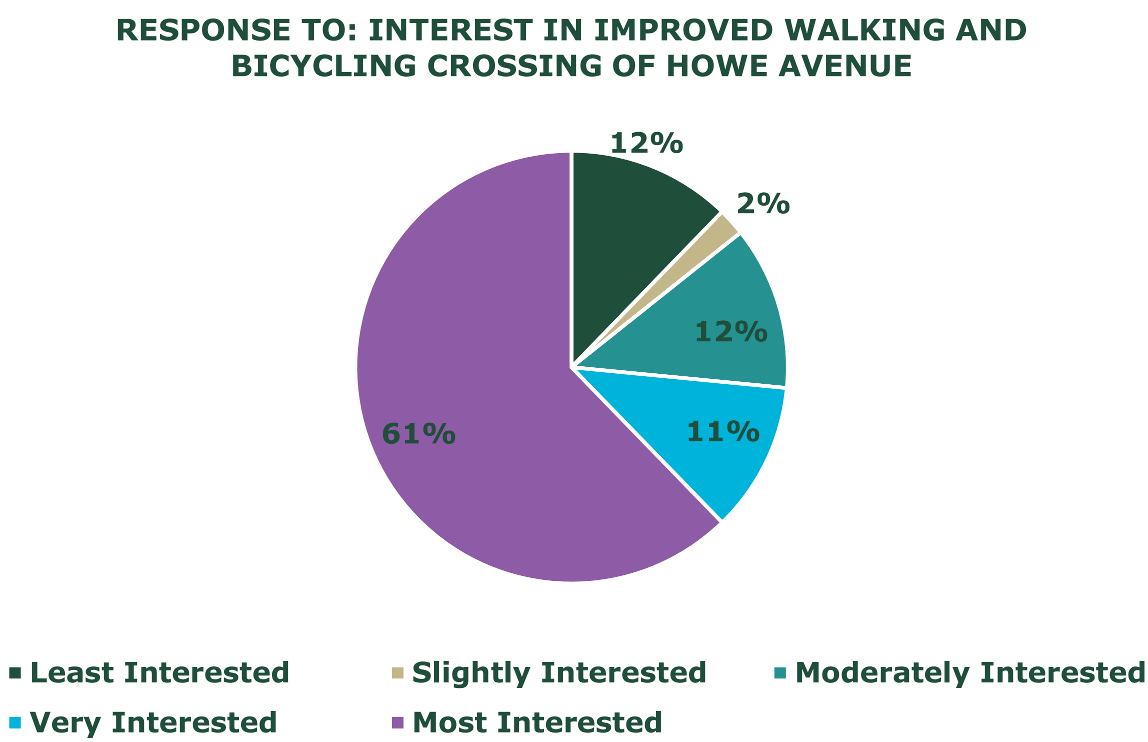


Figure 42. Community Survey - Interest in Walking and Bicycling Crossings

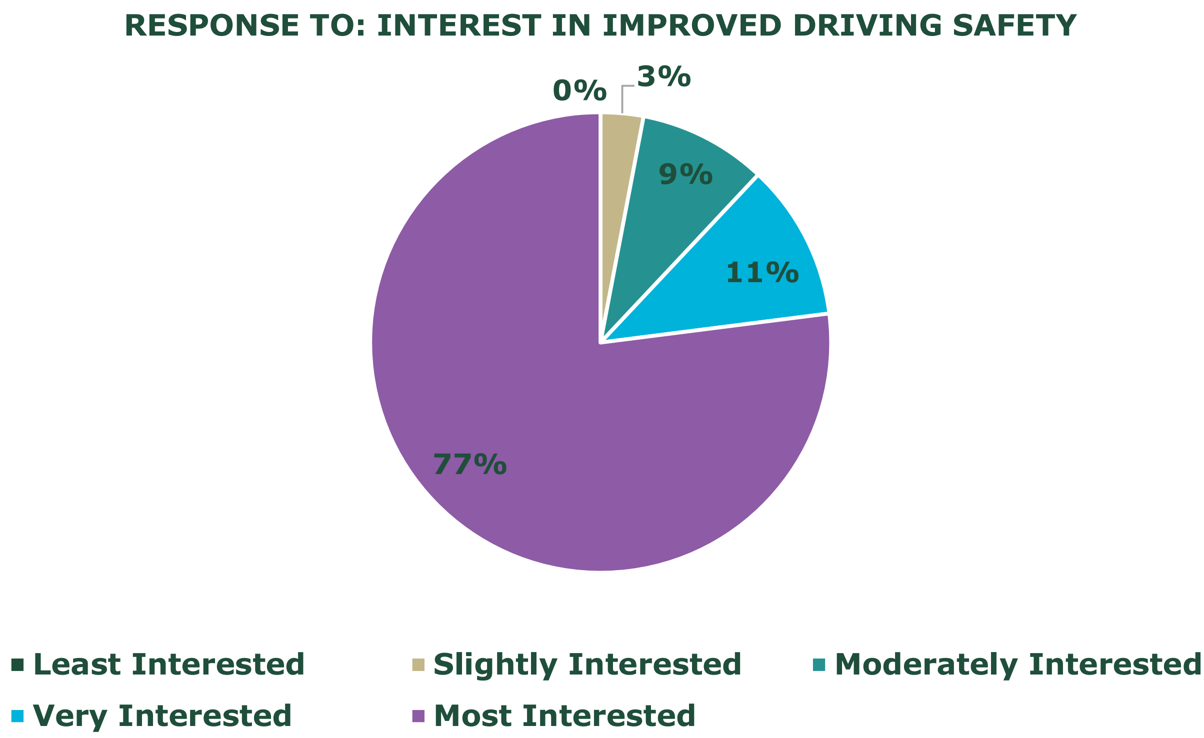


Figure 43. Community Survey - Interest in Improving Driver Safety

Existing Transportation Challenges and Constraints

This section outlines key issues with multimodal infrastructure along Howe Avenue identified as part of the existing conditions analysis and community engagement efforts. **Figure 44** illustrates the existing infrastructure along Howe Avenue and identifies bike lanes and sidewalk gaps.

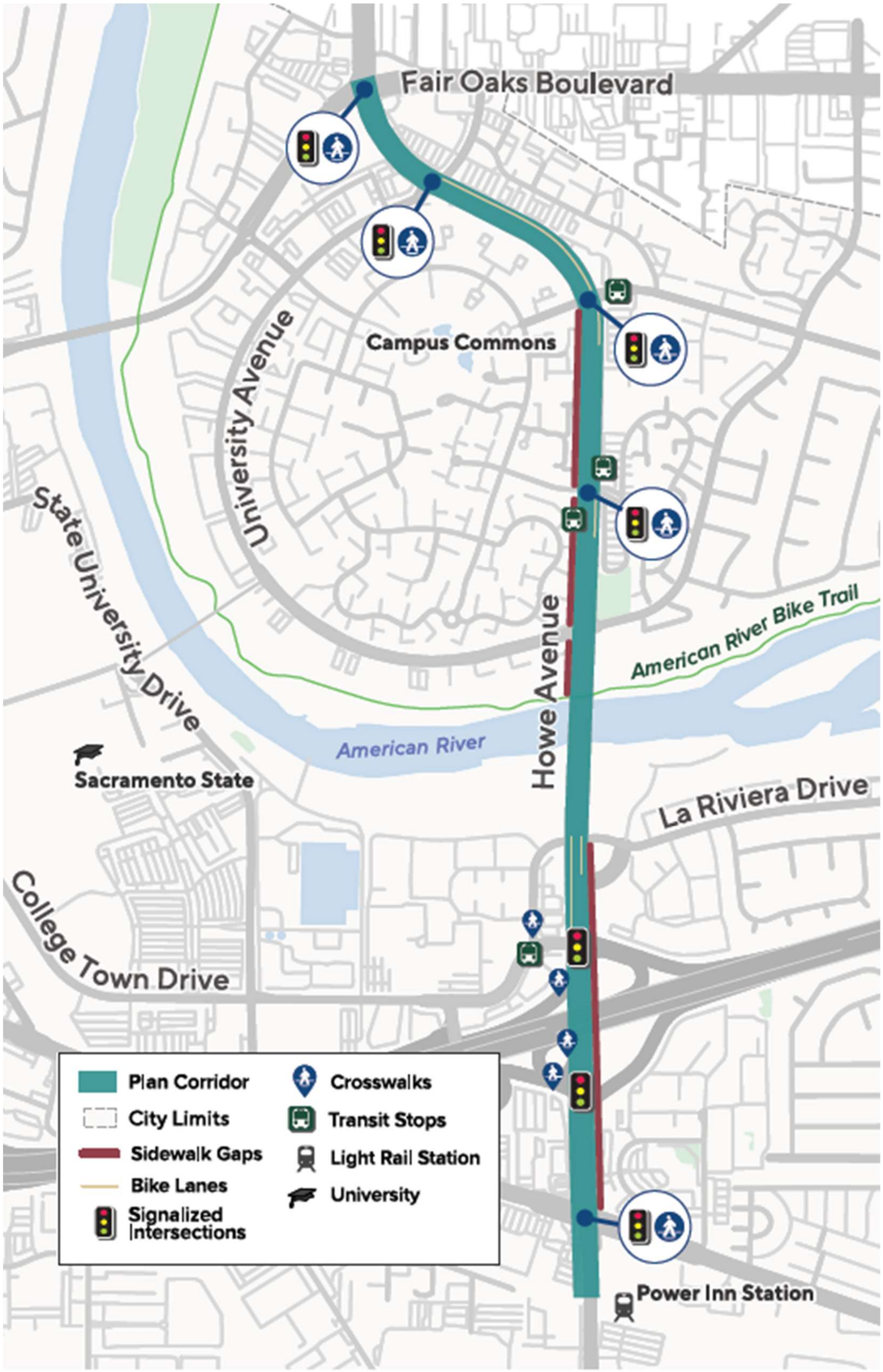


Figure 44. Infrastructure Gaps and Constraints

Infrastructure for Walking/Rolling

Existing sidewalks are generally five to six feet wide, but segments narrow to less than five feet near the Howe Avenue Bridge.

Gaps in the sidewalk network are present on both sides of Howe Avenue:

- West side of Howe Avenue:
  - From American River Drive to Swarthmore Drive.
  - From Swarthmore Drive to the University Avenue overcrossing.
  - From the University Avenue overcrossing to the Howe Avenue Bridge.
- East side of Howe Avenue:
  - From the La Riviera overcrossing to Folsom Boulevard.

All study intersections are equipped with pedestrian signals, push buttons, and marked crossings. Curb ramps are installed at all crossing locations; however, some intersections lack detectable warning surfaces and landing areas. These include:

- American River Drive
- Swarthmore Drive
- College Town Drive
- Folsom Boulevard

Crossings are not provided for the southern approach for intersections at the cross-streets of American River Drive and Swarthmore Drive/University Park Drive due to a lack of sidewalks on the west side of Howe Avenue.

The walking Level of Traffic Stress (LTS) score is four, reflecting uncomfortable and stressful conditions for most people walking or rolling, including those using mobility aids.

Community engagement efforts identified the following walking infrastructure concerns and priorities on Howe Avenue:

- Traffic safety concerns at major intersections, particularly poor visibility at crosswalks and intersections such as Fair Oaks/Howe, which pose significant dangers to people walking or rolling.
- Incomplete sidewalk networks and disconnected walking paths, notably near La Riviera and Folsom Boulevard.
- Safety concerns discourage walking and biking, contributing to increased short-distance car trips.

Infrastructure for Biking

Bike lanes are present along Howe Avenue and are approximately five feet in width. These bike lanes connect to the broader bicycle network via the American River Parkway shared-use path, as well as painted bike lanes on American River Drive, University Avenue, and La Riviera Drive.

Given Howe Avenue's posted speeds of 40 to 50 mph and traffic volumes of up to 59,000 vehicles per day, the current Class II bicycle lanes do not align with FHWA or City of Sacramento guidance for recommended bicycle infrastructure on roadways with these characteristics.

The bicycle LTS score is four, reflecting high stress conditions for people biking on Howe Avenue.

Community engagement efforts identified several concerns related to bicycling from participants:

- Missing connections in the bicycle network, including connections to the American River Trail
- Confusion on merging zones and lane markings for people bicycling
- Hesitancy and concern over biking on Howe Avenue due to high vehicle travel speeds.
- Strong interest in improving biking conditions on Howe Avenue.

Transit Infrastructure

There are only two bus stops directly on the corridor, and both are equipped with shelters at Howe Avenue and Swarthmore Drive. SacRT Bus Route 26 operates along Howe Avenue with approximately 30-minute headways slowing to 60-minute headways after 7 p.m. Additionally at the south end point of the study corridor, south of Folsom Boulevard, is the **SacRT Power Inn Light Rail Station** which connects to the SacRT Gold Line.

There are several SacRT routes such as routes 82, 87, 210, 211, and 255 that operate adjacent to Howe Avenue. While these routes do not operate on Howe Avenue, people using these bus routes may travel on Howe Avenue to reach these stops. These adjacent routes operate with 15–60-minute headways on weekdays and 45–60 minute headways on weekends. Lines 210, 211, and 255 have limited schedules, serving schools on weekdays only. SacRT lines 82, 87, 210, 211, and 255 are poorly connected due to missing sidewalks near Fair Oaks Boulevard.

Weekday ridership data collected from January to August 2024 shows an average of 310 riders across all stops. Route 26 bus stops averaged three riders per stop per weekday, while the eastbound and westbound Power Inn LRT averaged 140 riders per weekday.

Community engagement efforts noted **poor access to transit stations** as a key challenge. Transit-related comments were concentrated near Swarthmore Drive. The community survey indicated interest in improving the walking and biking infrastructure along Howe Avenue and improving access to transit.

In 2023, SacRT developed the *Design Guidelines for Bus and Light Rail Facilities*, which outlines design and amenity considerations to improve accessibility and safety at transit stops. The design guidelines state that transit infrastructure is expected to provide access for people with disabilities, and include lighting, shelter, seating, and trash bins.

Safety

A total of 201 crashes occurred on Howe Avenue between 2018 and 2023. 18 crashes resulted in persons being killed or suffering severe injuries (KSI). The North Segment of Howe Avenue experienced the highest number of total crashes (77) and KSI crashes (9). The South Segment had 70 total crashes and 6 KSI crashes, while the Middle Segment had 54 total crashes and 3 KSI crashes. 151 crashes (75% of the total) occurred at intersections.

There were two bicycle-involved crashes, one each in the North and South Segments. There were three crashes involving people walking, two in the North Segment and one in the South Segment. All three crashes involved improper turning or failure to yield at intersections as the primary crash factor.

Rear-end collisions were the most frequent crash type, accounting for 101 (50%) of crashes, with a concentration at the intersection of American River Drive. Broadside crashes were the second most common, totaling 46 (23%).

Unsafe speed was the primary factor in 104 crashes (52%). Improper turning was a factor in 28 crashes (14%). Of the 18 KSI crashes, 7 (39%) involved unsafe speeds and 4 (22%) were related to driving under the influence (DUI).

The intersection of Howe Avenue and American River Drive is a location with a high rate of rear-end collisions and also where several "hit object" crashes resulting in KSI crashes occurred.

Community engagement revealed concerns about excessive vehicle speeds. Community members reported that they drive short distances instead of walking/biking due to safety concerns. The community survey indicated a strong interest in improving driving safety, and crossings for people walking or biking.

Right of Way

The ROW width along Howe Avenue varies across its three segments. From curb to curb, the ROW ranges from 90 to 115 feet involving the following components:

- The ROW narrows to 30 to 35 feet on the Howe Avenue Bridge.
- Lane widths are approximately 11-12 feet through the length of the study corridor but narrow to approximately 10 to 10.5 feet on portions of the Howe Avenue Bridge.

- Sidewalks along the study corridor are 5 feet but are the responsibility of the fronting property owner[23].

Additional consideration for ROW will need to be given to the Howe Avenue bridge due to reduced roadway width and the structure providing a constrained roadway width. Where the corridor is two lanes per direction, design alternatives can use existing roadway space to improve infrastructure for people walking or biking such as widening sidewalks or implementing Class I or Class IV facilities.

[23] Sacramento City Code, Section 12.32.020

APPENDIX

CONTENTS

APPENDIX A: TRAFFIC VOLUMES

Summary
Bin Size 15 minutes
Aggregatior Median
Time Zone America/Los_Angeles
Start Time 10/14/2024 0:00
End Time 10/18/2024 23:59
Location Howe Ave & Fair Oaks Blvd
Latitude an 38.57413508,-121.41541391
Lights

Entry	North						East						South						West					
Direction	Southbound						Westbound						Northbound						Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW
0:00:00	7	28	4	0	0	0	1	7	1	0	0	0	0	32	3	0	0	0	0	11	13	0	0	0
0:15:00	9	19	2	1	0	0	3	7	2	0	0	0	2	25	3	0	0	0	0	10	11	0	0	0
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3:45:00	5	22	1	0	0	0	1	7	0	0	0	0	0	9	1	0	0	0	0	3	2	0	0	0
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8:45:00	151	176	50	5	0	0	41	189	10	0	0	0	11	205	53	0	0	0	17	135	89	3	0	0
9:00:00	89	163	45	9	0	0	38	162	12	2	0	0	11	188	65	0	0	0	14	134	85	5	0	0
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10:00:00	102	156	54	7	0	0	36	131	16	0	0	0	15	172	47	0	0	0	16	124	94	5	0	0
10:15:00	102	150	43	4	0	0	41	153	20	1	0	0	13	180	48	0	0	0	23	120	92	5	0	0
10:30:00	90	162	55	3	0	0	40	125	18	0	0	0	10	169	46	0	0	0	18	130	88	9	0	0
10:45:00	101	163	48	5	0	0	42	126	19	2	0	0	13	181	39	0	0	0	14	130	87	10	0	0
11:00:00	90	165	66	4	0	0	44	130	21	0	0	0	12	193	45	0	0	0	19	129	106	7	0	0
11:15:00	118	171	56	3	0	0	48	145	21	0	0	0	13	181	45	0	0	0	17	151	92	9	0	0
11:30:00	104	162	56	3	0	0	41	148	22	1	0	0	12	176	56	0	0	0	21	158	90	9	0	0
11:45:00	120	187	66	8	0	0	46	152	20	1	0	0	14	237	51	0	0	0	20	147	118	11	0	0
12:00:00	98	186	66	6	0	0	60	140	25	0	0	0	15	218	57	0	0	0	28	187	148	9	0	0
12:15:00	102	192	69	5	0	0	57	161	31	3	0	0	16	206	56	0	0	0	24	168	110	7	0	0
12:30:00	124	192	70	7	0	0	57	154	28	0	0	0	14	198	53	0	0	0	26	160	113	10	0	0
12:45:00	116	183	71	7	0	0	57	170	25	2	0	0	14	206	53	1	0	0	21	145	105	5	0	0
13:00:00	135	217	66	6	0	0	61	151	21	2	0	0	16	215	52	0	0	0	19	158	122	10	0	0
13:15:00	121	196	66	7	0	0	55	141	25	0	0	0	15	203	53	0	0	0	26	175	136	7	0	0
13:30:00	108	212	65	4	0	0	59	140	25	1	0	0	22	214	43	0	0	0	24	183	148	6	0	0
13:45:00	111	223	69	8	0	0	63	135	25	1	0	0	18	258	47	0	0	0	20	144	113	8	0	0
14:00:00	104	219	60	5	0	0	54	145	33	2	0	0	13	233	49	0	0	0	15	168	114	3	0	0
14:15:00	115	208	62	6	0	0	48	152	26	0	0	0	14	220	55	0	0	0	22	171	108	4	0	0
14:30:00	115	209	62	5	0	0	60	169	30	1	0	0	13	210	49	0	0	0	23	179	113	6	0	0
14:45:00	89	220	59	4	0	0	61	175	26	1	0	0	10	282	46	0	0	0	23	200	148	5	0	0
15:00:00	70	230	65	6	0	0	54	154	25	0	0	0	13	288	49	0	0	0	26	218	175	4	0	0
15:15:00	100	257	59	5	0	0	51	180	23	1	0	0	14	291	57	0	0	0	25	242	150	3	0	0
15:30:00	119	249	65	5	0	0	50	189	25	1	0	0	11	305	55	0	0	0	17	189	121	5	0	0
15:45:00	144	253	61	3	0	0	45	184	18	2	0	0	11	300	63	0	0	0	23	201	133	6	0	0
16:00:00	137	248	61	5	0	0	42	191	23	2	0	0	15	301	64	0	0	0	22	204	151	5	0	0
16:15:00	128	273	58	3	0	0	31	184	17	1	0	0	14	312	55	0	0	0	24	244	175	5	0	0
16:30:00	136	260	57	8	0	0	29	180	18	0	0	0	12	307	55	0	0	0	29	285	176	6	0	0
16:45:00	149	272	63	4	0	0	18	192	17	1	0	0	20	313	56	0	0	0	32	231	131	9	0	0
17:00:00	138	260	58	7	0	0	33	192	21	0	0	0	16	326	63	1	0	0	28	254	148	8	0	0
17:15:00	138	293	68	7	0	0	55	189	17	0	0	0	13	329	67	0	0	0	21	229	160	9	0	0
17:30:00	148	280	54	4	0	0	42	188	12	0	0	0	12	314	53	0	0	0	15	208	143	10	0	0
17:45:00	115	213	53	2	0	0	46	183	18	1	0	0	12	302	50	0	0	0	17	211	145	6	0	0
18:00:00	104	216	45	5	0	0	46	164	16	0	0	0	11	232	51	0	0	0	17	193	139	11	0	0
18:15:00	114	204	49	2	0	0	41	135	14	0	0	0	10	205	58	0	0	0	15	151	115	6	0	0
18:30:00	82	205	48	3	0	0	46	134	17	1	0	0	11	200	48	0	0	0	13	129	86	7	0	0
18:45:00	82	198	49	3	0	0	32	112	20	1	0	0	11	150	42	0	0	0	9	120	94	5	0	0
19:00:00	64	157	47	1	0	0	19	87	15	0	0	0	12	158	34	1	0	0	11	123	91	4	0	0
19:15:00	63	167	42	4	0	0	17	80	24	0	0	0	7	147	29	0	0	0	7	104	81	3	0	0
19:30:00	59	149	36	3	0	0	15	86	19	1	0	0	8	108	31	0	0	0	4	98	69	2	0	0
19:45:00	56	138	35	2	0	0	14	67	11	0	0	0	8	112	24	0	0	0	5	92	63	3	0	0
20:00:00	48	126	28	2	0	0	17	64	16	0	0	0	7	100	23	0	0	0	5	89	62	0	0	0
20:15:00	52	137	32	6	0	0	15	66	8	0	0	0	6	116	23	0	0	0	4	72	55	2	0	0
20:30:00	44	134	27	3	0	0	18	58	18	0	0	0	8	101	20	0	0	0	3	65	68	2	0	0
20:45:00	44	108	27	5	0	0	8	51	9	1	0	0	5	107	25	0	0	0	3	79	63	2	0	0
21:00:00	38	108	24	3	0	0	10	56	9	0	0	0	8	98	23	0	0	0	4	60	50	2	0	0
21:15:00	42	84	21	2	0	0	12	54	11	1	0	0	6	87	21	0	0	0	1	45	45	2	0	0
21:30:00	43	94	22	5	0	0	11	48	8	0	0	0	5	90	14	0	0	0	3	43	47	2	0	0
21:45:00	38	86	20	3	0	0	9	48	7	0	0	0	3	78	16	0	0	0	2	36	31	1	0	0
22:00:00	36	87	20	2	0	0	12	34	8	0	0	0	3	79	16	0	0	0	1	34	33	1	0	0
22:15:00	26	75	17	2	0	0	10	33	5	0	0	0	4	55	10	0	0	0	0	31	25	1	0	0
22:30:00	24	50	10	3	0	0	5	25	6	0	0	0	3	48	8	0	0	0	1	17	27	0	0	0
22:45:00	22	52	9	1	0	0	5	19	3	0	0	0	2	56	6	0	0	0	1	17	19	0	0	0
23:00:00	18	54	7	2	0	0	4	14	3	0	0	0	2	46	7	0	0	0	0	17	22	1	0	0
23:15:00	18	38	5	2	0	0	3	11	3	0	0	0	1	41	7	0	0	0	1	20	15	1	0	0
23:30:00	13	35	4	0	0	0	3	10	2	0	0	0	2	40	6	0	0	0	0	13	13	0	0	0
23:45:00	14	30	4	1	0	0	3	13	2	0	0	0	3	40	5	0	0	0	0	15	13	0	0	0

Autoscope

Vision Data Automator

User Input:

Location:	**Demo**
Comm Manager I.P.	**172.31.56.92**
Bin Interval:	**15**
Start Date:	**10/14/2024**

Completed:

Last Imported: *10/26/24 1:36 PM*

Comm Manager:	
id	421800935
model	Comm Manager
name	PowerInn & Folsom-Howe
firmwareVersion	3.0.0.279
serialNumber	D53426

Camera 1		**Camera 2**		**Camera 3**		**Camera 4**	
id	471365346	id	471343709	id	471365148	id	471353458
model	Vision	model	Vision	model	Vision	model	Vision
name	Power Inn & Folsom-Hov	name	Power Inn & Folsom-Hov	name	Power Inn & Folsom-Hov	name	Power Inn & Folsom-Howe - WB phases 2 & 5
firmwareVersion	3.0.0.279	firmwareVersion	3.0.0.279	firmwareVersion	3.0.0.279	firmwareVersion	3.0.0.279
serialNumber	066755	serialNumber	066747	serialNumber	066753	serialNumber	066758

	Cam1	Cam2	Cam3	Cam4	Total						
700	315	59	364	250	988	4505	4846	0.94			
715	366	100	438	339	1242	4657					
730	394	113	435	192	1134	4702					
745	442	119	388	193	1142	4780					
800	420	119	355	247	1140	4846					
815	433	141	352	361	1286						
830	368	120	323	401	1212						
845	388	135	305	381	1208						
400	464	164	398	364	1390	5640	5712	0.98			
415	476	189	384	337	1385	5712					
430	495	207	376	359	1436	5698					
445	529	198	373	328	1428	5598					
500	509	182	395	376	1462	5474					
515	482	199	363	329	1372						
530	505	187	341	303	1336						
545	470	224	321	289	1303						

	Northbound			**Southbound**			**Eastbound**		**Westbound**		
	NBL	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**EBL**	**EBR**	**WBL**	**WBT**	**WBR**
AM	257	1074	4	373	1234	0	108	141	203	764	422
PM	191	1331	6	495	1513	1	92	232	300	592	507
	SBL	SBR	SBT	EBL	EBR	EBT	NBR	NBL	WBR	WBT	WBL
	373	0	1234	108	141	267	4	257	422	764	203
	495	1	1513	92	232	452	6	191	507	592	300

Summary
Bin Size 15 minutes
Aggregatior Median
Time Zone America/Los_Angeles
Start Time ########
End Time ########
Location Howe Ave & University Ave
Latitude an 38.57209163,-121.41325959
Lights

Entry	North						East						South						West					
Direction	Southbound						Westbound						Northbound						Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW
0:00:00	0	27	0	0	0	0	0	1	2	0	0	0	2	32	1	0	0	0	1	0	0	0	0	0
0:15:00	0	23	0	0	0	0	0	0	3	0	0	0	1	26	2	0	0	0	1	0	0	0	0	0
0:30:00	0	25	0	0	0	0	0	0	3	0	0	0	1	22	1	0	0	0	0	0	0	0	0	0
0:45:00	0	19	1	0	0	0	1	0	1	0	0	0	1	19	1	0	0	0	3	0	0	0	0	0
1:00:00	0	16	0	0	0	0	0	0	1	0	0	0	1	15	1	0	0	0	2	0	0	0	0	0
1:15:00	0	15	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	3	0	0	0	0	0
1:30:00	0	18	0	0	0	0	0	1	3	0	0	0	0	14	0	0	0	0	1	0	0	0	0	0
1:45:00	0	16	0	0	0	0	0	0	0	0	0	0	1	13	1	0	0	0	2	0	0	0	0	0
2:00:00	0	9	0	0	0	0	1	0	1	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0
2:15:00	0	10	0	0	0	0	0	0	0	0	0	0	2	10	0	0	0	0	0	0	0	0	0	0
2:30:00	0	13	0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	0	0	0	0	0	0
2:45:00	0	13	0	0	0	0	0	0	0	0	0	0	1	8	0	0	0	0	0	0	1	0	0	0
3:00:00	0	10	0	0	0	0	0	0	0	0	0	0	2	9	1	0	0	0	1	0	0	0	0	0
3:15:00	0	13	0	0	0	0	0	0	3	0	0	0	1	8	1	0	0	0	0	0	0	0	0	0
3:30:00	0	16	0	0	0	0	0	0	1	0	0	0	1	14	0	0	0	0	0	0	0	0	0	0
3:45:00	0	19	0	0	0	0	0	0	1	0	0	0	1	10	1	0	0	0	0	0	0	0	0	0
4:00:00	0	15	1	0	0	0	0	1	0	0	0	0	1	11	0	0	0	0	1	0	0	0	0	0
4:15:00	0	33	0	0	0	0	0	1	2	0	0	0	1	16	1	0	0	0	1	0	0	0	0	0
4:30:00	0	62	0	0	0	0	0	1	1	0	0	0	1	14	1	0	0	0	3	0	0	0	0	0
4:45:00	0	54	1	0	0	0	0	2	3	0	0	0	3	28	1	0	0	0	1	0	0	0	0	0
5:00:00	0	37	0	0	0	0	1	1	2	0	0	0	2	34	2	0	0	0	2	0	0	0	0	0
5:15:00	0	44	1	0	0	0	1	0	3	0	0	0	3	27	2	0	0	0	3	0	0	0	0	0
5:30:00	0	101	0	0	0	0	0	2	3	0	0	0	3	49	3	0	0	0	3	1	0	0	0	0
5:45:00	0	105	0	0	0	0	1	3	8	0	0	0	7	67	7	0	0	0	5	2	1	0	0	0
6:00:00	0	95	1	0	0	0	1	2	7	0	0	0	8	76	4	0	0	0	5	2	1	0	0	0
6:15:00	0	113	1	1	0	0	3	4	8	0	0	0	12	83	6	0	0	0	4	1	1	0	0	0
6:30:00	0	156	2	1	0	0	1	7	17	0	0	0	17	116	14	0	0	0	7	1	2	0	0	0
6:45:00	0	136	3	0	0	0	3	7	20	0	0	0	21	159	21	0	0	0	9	3	3	0	0	0
7:00:00	0	139	2	0	0	0	3	14	18	0	0	0	29	172	19	0	0	0	14	4	2	0	0	0
7:15:00	0	137	3	1	0	0	7	23	32	0	0	0	29	188	24	0	0	0	13	5	6	0	0	0
7:30:00	0	215	4	1	0	0	7	18	27	0	0	0	20	225	27	0	0	0	22	6	6	0	0	0
7:45:00	0	228	3	0	0	0	7	34	40	0	0	0	29	207	38	0	0	0	24	10	8	0	0	0
8:00:00	0	207	8	1	0	0	8	27	38	0	0	0	54	244	48	0	0	0	34	8	4	0	0	0
8:15:00	0	183	6	1	0	0	9	46	35	0	0	0	60	259	49	0	0	0	20	10	5	0	0	0
8:30:00	0	195	7	1	0	0	15	35	38	0	0	0	54	264	51	0	0	0	29	8	8	0	0	0
8:45:00	0	158	6	1	0	0	10	42	34	0	0	0	56	258	43	0	0	0	23	11	12	0	0	0
9:00:00	0	149	6	3	0	0	11	34	30	0	0	0	66	247	39	0	0	0	20	11	8	0	0	0
9:15:00	0	136	4	2	0	0	9	30	36	0	0	0	52	217	31	0	0	0	23	14	13	0	0	0
9:30:00	0	144	6	2	0	0	11	24	37	0	0	0	45	210	29	0	0	0	23	13	13	0	0	0
9:45:00	0	155	9	1	0	0	13	31	38	0	0	0	65	222	27	0	0	0	28	20	12	0	0	0
10:00:00	0	159	8	2	0	0	16	18	46	0	0	0	63	194	32	0	0	0	27	19	21	0	0	0
10:15:00	0	151	8	3	0	0	18	16	43	0	0	0	46	218	27	0	0	0	28	16	17	0	0	0
10:30:00	0	144	8	2	0	0	19	19	52	0	0	0	54	207	25	0	0	0	33	15	18	0	0	0
10:45:00	0	173	7	3	0	0	16	23	51	0	0	0	67	230	29	0	0	0	33	17	15	0	0	0
11:00:00	0	171	9	4	0	0	16	17	48	0	0	0	58	206	21	0	0	0	32	21	16	0	0	0
11:15:00	0	178	10	2	0	0	19	20	48	0	0	0	64	218	24	0	0	0	35	24	22	0	0	0
11:30:00	0	172	8	3	0	0	18	24	55	0	0	0	66	221	27	0	0	0	41	24	21	0	0	0
11:45:00	0	183	8	4	0	0	21	26	62	0	0	0	74	249	28	0	0	0	36	30	21	0	0	0
12:00:00	0	190	12	4	0	0	24	24	60	0	0	0	55	228	20	0	0	0	46	40	37	0	0	0
12:15:00	0	192	11	6	0	0	20	36	67	0	0	0	65	229	22	0	0	0	30	29	27	0	0	0
12:30:00	0	204	9	3	0	0	21	28	63	0	0	0	61	232	22	0	0	0	31	29	20	0	0	0
12:45:00	0	199	11	2	0	0	17	35	62	0	0	0	71	230	29	0	0	0	31	27	16	0	0	0
13:00:00	0	216	10	3	0	0	21	35	72	0	0	0	55	234	25	0	0	0	36	30	14	0	0	0
13:15:00	0	220	8	3	0	0	18	31	55	0	0	0	58	247	21	0	0	0	38	23	18	0	0	0
13:30:00	0	217	8	4	0	0	20	20	49	0	0	0	53	261	20	0	0	0	39	25	10	0	0	0
13:45:00	0	212	13	2	0	0	16	26	70	0	0	0	64	286	26	0	0	0	35	21	14	0	0	0
14:00:00	0	221	6	3	0	0	24	25	71	0	0	0	57	259	21	0	0	0	42	17	16	0	0	0
14:15:00	0	230	8	2	0	0	19	19	61	0	0	0	53	265	14	0	0	0	35	21	11	0	0	0
14:30:00	0	236	9	1	0	0	19	18	72	0	0	0	60	260	12	0	0	0	45	22	20	0	0	0
14:45:00	0	256	8	4	0	0	21	23	58	0	0	0	53	311	15	0	0	0	39	22	14	0	0	0
15:00:00	0	250	13	2	0	0	20	20	60	0	0	0	59	307	13	0	0	0	57	23	19	0	0	0
15:15:00	0	277	8	1	0	0	17	15	55	0	0	0	56	319	9	0	0	0	47	16	17	0	0	0
15:30:00	0	265	9	2	0	0	21	19	60	0	0	0	54	325	13	0	0	0	48	21	20	0	0	0
15:45:00	1	263	8	2	0	0	25	23	52	0	0	0	58	351	11	0	0	0	43	24	20	0	0	0
16:00:00	1	259	9	3	0	0	22	19	66	0	0	0	51	321	11	0	0	0	63	30	29	0	0	0
16:15:00	1	287	9	5	0	0	23	16	61	0	0	0	55	310	10	0	0	0	60	25	24	0	0	0
16:30:00	0	276	7	2	0	0	24	9	69	0	0	0	65	314	10	0	0	0	67	31	40	0	0	0
16:45:00	0	270	8	2	0	0	20	11	72	0	0	0	74	326	12	0	0	0	56	34	27	0	0	0
17:00:00	0	278	10	3	0	0	37	13	76	0	0	0	60	289	11	0	0	0	88	47	57	0	0	0
17:15:00	0	290	7	3	0	0	19	12	49	0	0	0	62	331	7	0	0	0	51	24	29	0	0	0
17:30:00	0	282	7	3	0	0	19	13	55	0	0	0	62	323	10	0	0	0	49	27	19	0	0	0
17:45:00	0	247	8	2	0	0	13	11	52	0	0	0	57	322	8	0	0	0	35	23	13	0	0	0
18:00:00	0	241	7	2	0	0	18	8	57	0	0	0	41	243	7	0	0	0	36	19	9	0	0	0
18:15:00	0	230	6	4	0	0	9	9	54	0	0	0	41	256	5	0	0	0	25	14	8	0	0	0
18:30:00	0	220	5	4	0	0	12	10	45	0	0	0	37	211	8	0	0	0	28	10	6	0	0	0
18:45:00	0	215	6	3	0	0	10	10	45	0	0	0	33	191	5	0	0	0	20	8	5	0	0	0
19:00:00	0	180	7	5	0	0	9	9	51	0	0	0	35	176	4	0	0	0	17	7	4	0	0	0
19:15:00	0	171	7	3	0	0	9	9	49	0	0	0	25	156	4	0	0	0	17	9	4	0	0	0
19:30:00	0	170	3	3	0	0	8	9	39	0	0	0	19	114	7	0	0	0	13	5	4	0	0	0
19:45:00	0	157	4	1	0	0	9	5	35	0	0	0	18	123	6	0	0	0	10	4	4	0	0	0
20:00:00	0	147	6	2	0	0	5	5	38	0	0	0	15	110	3	0	0	0	10	2	4	0	0	0
20:15:00	0	148	4	2	0	0	2	5	32	0	0	0	21	123	3	0	0	0	9	4	3	0	0	0
20:30:00	0	141	2	1	0	0	5	5	32	0	0	0	18	107	3	0	0	0	9	4	3	0	0	0
20:45:00	0	122	4	3	0	0	6	5	27	0	0	0	19	115	4	0	0	0	7	3	2	0	0	0
21:00:00	0	105	4	1	0	0	5	5	26	0	0	0	12	112	3	0	0	0	8	3	1	0	0	0
21:15:00	0	98	3	1	0	0	3	4	24	0	0	0	14	102	3	0	0	0	6	2	1	0	0	0
21:30:00	0	94	2	0	0	0	2	3	16	0	0	0	11	95	5	0	0	0	6	3	1	0	0	0
21:45:00	0	91	2	0	0	0	3	2	11	0	0	0	9	84	1	0	0	0	7	1	1	0	0	0
22:00:00	0	89	2	0	0	0	3	3	13	0	0	0	12	79	3	0	0	0	7	1	2	0	0	0
22:15:00	0	87	1	0	0	0	2	3	10	0	0	0	7	60	3	0	0	0	6	2	1	0	0	0
22:30:00	0	51	0	1	0	0	1	4	12	0	0	0	4	56	4	0	0	0	4	1	1	0	0	0
22:45:00	0	51	3	0	0	0	2	2	8	0	0	0	7	54	4	0	0	0	2	1	1	0	0	0
23:00:00	0	51	2	0	0	0	0	2	7	0	0	0	3	51	2	0	0	0	2	1	0	0	0	0
23:15:00	0	41	1	1	0	0	0	2	8	0	0	0	7	42	3	0	0	0	4	0	0	0	0	0
23:30:00	0	36	1	1	0	0	0	1	7	0	0	0	4	42	3	0	0	0	3	0	0	0	0	0
23:45:00	0	39	1	0	0	0	2	0	4	0	0	0	2	42	1	0	0	0	3	0	1	0	0	0

APPENDIX B: TRANSIT DATA

DAY_OF_WEEK	UNIQUE_STOP_NUMBER	STOP_NAME	ROUTE	ON	OFF	TOTAL	LAT	LONG	MONTH
WEEKDAY	01541	COLLEGE TOWNE DR & LA RIVIER	26	11	7	18	38.555114	-121.411040	JAN
WEEKDAY	01542	HOWE AVE & SWARTHMORE DR	26	2	1	3	38.565075	-121.409228	JAN
WEEKDAY	01545	HOWE AVE & SWARTHMORE DR	26	1	1	2	38.565797	-121.408840	JAN
WEEKDAY	01546	AMERICAN RIVER DR & HOWE AVE	26	4	5	9	38.569573	-121.408263	JAN
WEEKDAY	09915	POWER INN LRT & POWER IN	26	0	0	0	38.546280	-121.407750	JAN
WEEKDAY	09915	POWER INN LRT & POWER INN RD	26	154	162	316	38.547001	-121.407632	JAN
WEEKDAY	01541	COLLEGE TOWNE DR & LA RIVIER	26	11	9	20	38.555114	-121.411039	FEB
WEEKDAY	01542	HOWE AVE & SWARTHMORE DR	26	2	1	2	38.565073	-121.409228	FEB
WEEKDAY	01545	HOWE AVE & SWARTHMORE DR	26	1	0	1	38.566632	-121.408715	FEB
WEEKDAY	01546	AMERICAN RIVER DR & HOWE AVE	26	0	2	2	38.569481	-121.407216	FEB
WEEKDAY	01541	COLLEGE TOWNE DR & LA RIVIER	26	13	11	24	38.554896	-121.411148	MAR
WEEKDAY	01542	HOWE AVE & SWARTHMORE DR	26	1	0	2	38.564642	-121.409199	MAR
WEEKDAY	01545	HOWE AVE & SWARTHMORE DR	26	0	4	4	38.566230	-121.408882	MAR
WEEKDAY	01546	AMERICAN RIVER DR & HOWE AVE	26	4	4	8	38.569651	-121.407565	MAR
WEEKDAY	09915	POWER INN LRT & POWER IN	26	0	0	0	38.547310	-121.408500	MAR
WEEKDAY	09915	POWER INN LRT & POWER INN RD	26	47	51	98	38.547042	-121.407618	MAR
WEEKDAY	01541	COLLEGE TOWNE DR & LA RIVIER	26	13	8	21	38.554888	-121.411179	APR
WEEKDAY	01542	HOWE AVE & SWARTHMORE DR	26	2	1	3	38.564605	-121.409205	APR
WEEKDAY	01545	HOWE AVE & SWARTHMORE DR	26	0	2	2	38.566198	-121.408889	APR
WEEKDAY	01546	AMERICAN RIVER DR & HOWE AVE	26	3	5	8	38.569688	-121.407904	APR
WEEKDAY	01541	COLLEGE TOWNE DR & LA RIVIER	26	17	11	28	38.554879	-121.411182	MAY
WEEKDAY	01542	HOWE AVE & SWARTHMORE DR	26	2	2	4	38.564616	-121.409204	MAY
WEEKDAY	01545	HOWE AVE & SWARTHMORE DR	26	1	2	4	38.566180	-121.408892	MAY
WEEKDAY	01546	AMERICAN RIVER DR & HOWE AVE	26	3	6	9	38.569678	-121.407904	MAY
WEEKDAY	01541	COLLEGE TOWNE DR & LA RIVIER	26	18	11	29	38.554886	-121.411186	JUN
WEEKDAY	01542	HOWE AVE & SWARTHMORE DR	26	2	2	4	38.564630	-121.409201	JUN
WEEKDAY	01545	HOWE AVE & SWARTHMORE DR	26	2	3	4	38.566127	-121.408889	JUN
WEEKDAY	01546	AMERICAN RIVER DR & HOWE AVE	26	4	7	10	38.569682	-121.407965	JUN
WEEKDAY	01541	COLLEGE TOWNE DR & LA RIVIER	26	27	16	42	38.554881	-121.411199	AUG
WEEKDAY	01542	HOWE AVE & SWARTHMORE DR	26	2	1	3	38.564589	-121.409202	AUG
WEEKDAY	01545	HOWE AVE & SWARTHMORE DR	26	1	2	3	38.566196	-121.408893	AUG
WEEKDAY	01546	AMERICAN RIVER DR & HOWE AVE	26	3	5	7	38.569684	-121.407890	AUG
WEEKDAY	01541	COLLEGE TOWNE DR & LA RIVIER	26	27	15	42	38.554914	-121.411156	AUG
WEEKDAY	01542	HOWE AVE & SWARTHMORE DR	26	4	2	5	38.564552	-121.409209	AUG
WEEKDAY	01545	HOWE AVE & SWARTHMORE DR	26	2	2	3	38.566201	-121.408891	AUG
WEEKDAY	01546	AMERICAN RIVER DR & HOWE AVE	26	3	8	11	38.569686	-121.407850	AUG
WEEKDAY	01541	COLLEGE TOWNE DR & LA RIVIER	26	27	16	42	38.554881	-121.411199	JUL
WEEKDAY	01542	HOWE AVE & SWARTHMORE DR	26	2	1	3	38.564589	-121.409202	JUL
WEEKDAY	01545	HOWE AVE & SWARTHMORE DR	26	1	2	3	38.566196	-121.408893	JUL
WEEKDAY	01546	AMERICAN RIVER DR & HOWE AVE	26	3	5	7	38.569684	-121.407890	JUL

APPENDIX C: SIGNAL TIMING WORKSHEETS

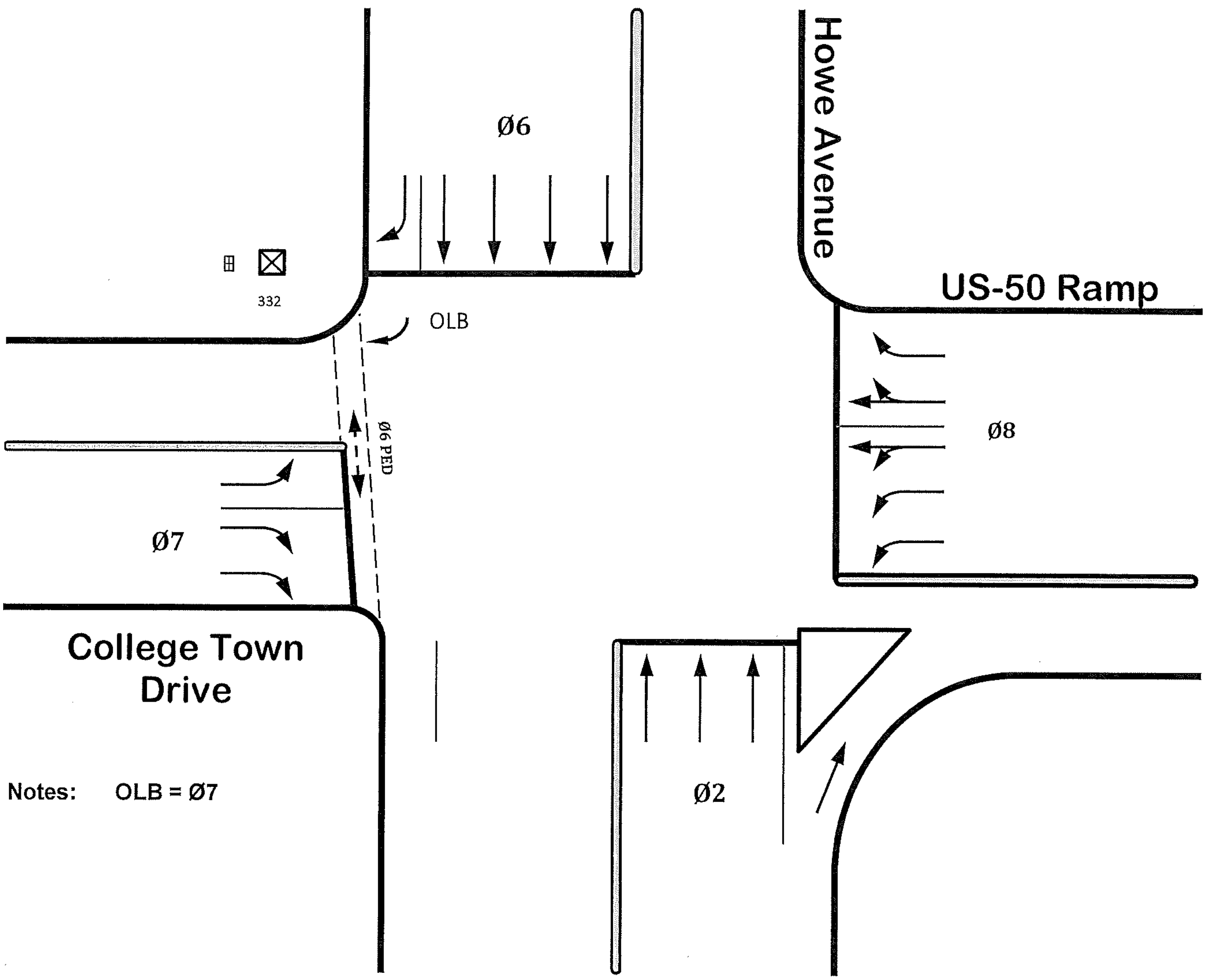
ECONOLITE ASC/2

TRAFFIC SIGNAL CONTROLLER PROGRAM CHART

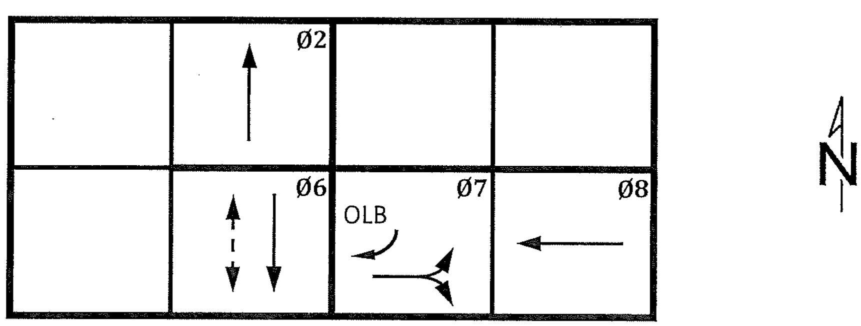
N/S **Howe Avenue** **E/W** **College Town/WB 50**

Intersection #: 270 System: IP Address:

Device ID: Channel: Drop #:



Notes: **OLB = Ø7**



Econolite ASC/2

CITY OF SACRAMENTO

PHASE TIMING

Prepared by: Gel   Approved by: J   Date Implemented: 5-29-19

Controller Timing Data   Key: (F1)-2-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12
Min Green		9				9	13	12				
Bike Green												
CndSrv MinGrn												
Walk						7						
Ped Clr						20						
Veh Ext		3.0				3.0	2.0	2.0				
Veh Ext 2												
Max Ext												
Max1		50				50	40	40				
Max2												
Max3												
Det Max												
Yellow		5.0				5.0	3.9	3.9				
Red Clr		0.7				0.7	1.5	1.0				
Red Rvt		2.0				2.0	2.0	2.0				
Act B4 Init												
Sec/Actuation												
Max Initial												
Time B4 Reduct												
Cars Wt												
Time To Reduce												
Min Gap												

Controller Recall Data   Key: (F1)-2-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12
Locking Memory												
Vehicle Recall												
Ped Recall												
Recall to Max												
Soft Recall		2				6						
Don't Rest Here												
Ped Dark N/Call												

Controller Start/Flash Data   Key: (F1)-2-6

Phase	1	2	3	4	5	6	7	8	9	10	11	12
ø's Startup		2				6						
Entry Rem Flash		2				6						
Exit Rem Flash		2				6						
Rem Flash Yello												
Flsh Together ø	.	2	.	4	.	6	.	8	.	10	.	12
Flsh Tgther OV	A:	.	B:	.	C:	.	D:	.				

Startup Intvl Rng1	Yellow
Startup Intvl Rng2	Yellow
Power Start All Red	6 sec
Power Start Flash	
Remote Flash Options	
Out of Flash Yellow	Yes
Out of Flash All Red	No
Minimum Recall	Yes
Spare	No
Flash Thru Ld Switch	No
Cycle Thru Phases	No

Controller Option Data   Key: (F1)-2-9

Phase	1	2	3	4	5	6	7	8	9	10	11	12
Guar Passage												
NonActuated I												
NonActuated II												
Dual Entry		2				6						
Cond Service												
Cond Reservice												
Rest in Walk												
Flashing Walk												

Five Section Left Turn Heads						
	5-2:		7-4:		1-6:	
	3-8:		11-10:		9-12:	

Dual Entry	ON	Backup Protection Grp 1	OFF
Cond Service Enable	OFF	Backup Protection Grp 2	OFF
Cond Service Det X Switch	OFF	Backup Protection Grp 3	OFF
Ped Clr Protect	ON	Simul Gap Grp 1	OFF
Spec Pre OVL Flash	OFF	Simul Gap Grp 2	OFF
Lock Det in Red	OFF	Simul Gap Grp 3	OFF
Reserved	OFF	unitBackup Time	OFF
Reserved	OFF	unitRed Revert	OFF

CONFIGURATION

Controller Sequence — Key: (F1)-1-1

Priority	1	2	3	4	5	6	7	8	9	10	11	12
Ring 1	1	2	3	4	9	10	0	0	0	0	0	0
Ring 2	5	6	7	8	11	12	0	0	0	0	0	0
CG Barrier	.	^	.	^	.	^	.	.	.	.	.	.

Phases in Use — Key: (F1)-1-2

Phase	1	2	3	4	5	6	7	8	9	10	11	12
Phases in Use	.	2				6	7	8	.	.	.	.
Exclusive Ped	.	.	.	.	.	.	.	.	.	.	.	.

SDLC Options — Key: (F1)-1-4

BIU Number	1	2	3	4	5	6	7	8
Term & Facil								
Detector Rack								

Type 2 Runs as Type 1	.
MMU Disable	X
Diagnostic Enable	.
Peer to Peer Enable	.

Peer to Peer Addresses				
1) 255	2) 255	3) 255	4) 255	5) 255
6) 255	7) 255	8) 255	9) 255	10) 255

NEW CONTROLLER SHOULD BE DEFAULTED BEFORE INSTALLATION

To Default Controller: (F1)-8-2 Select All Press ENTER
(F1)-8-1-3 Select All Press ENTER

Ped Timing Carryover

Key: (F1)-2-3	
Phase	**Carryover**
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0

Port 2 — Key: (F1)-1-5

Port 2 Protocol	TERMNL
Port 2 Enable	NO
Data Rate (bps)	9600
Data, Parity, Stop	8, N, 1
NTCIP Address	0
NTCIP Grp Address	0
NTCIP Resp Delay	0
NTCIP Sgl Flg Enal	NO
NTCIP BackUp Tim	0
NTCIP Drop-Out Time	0
Port2 Drop-Out Tim	0
NTCIP RTS Timing	NO
NTCIP RTS to CTS Dlay	0
NTCIP RTS TurnOff Dla	0
NTCIP Early RTS	NO

Port 3 — Key: (F1)-1-6

Port 3 Protocol	TELEM
Port 3 Enable	YES
Port 3 millisec Timing	NO
Port 3 RTS to CTS Delay	0
Port 3 RTS TurnOff Delay	0
Duplex -Half or Full	FULL
Modem Data Rate (bps)	1200
Data, Parity, Stop	8, N, 1
Telemetry Address	1
System Detector 9-16 Add	
Telemtry Response Delay	1
NTCIP Address	0
NTCIP Grp Address	0
NTCIP Resp Delay	0
NTCIP Single Flag Enable	NO
NTCIP BackUp Time	0
Port 3 Drop-Out Time	0
NTCIP Early RTS	NO

Options — Key: (F1)-1-8

Supervisor Access Code	0
Data Change Acces Code	0
Key Click Enable	NO
Backlight Enable	YES
Request Download	NO

CITY OF SACRAMENTO
OVERLAP TABLES

Phase Overlap Assignments Key: (F1)-2-2

OVLP Phase	Overlap Consists of Phases											
	1	2	3	4	5	6	7	8	9	10	11	12
1	X											
2		X										
3			X									
4				X								
5					X							
6						X						
7							X					
8								X				
9									X			
10										X		
11											X	
12												X

Ped Overlap Assignments Key: (F1)-2-5

OVLP Phase	Overlap Consists of Phases											
	1	2	3	4	5	6	7	8	9	10	11	12
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

Controller Overlap Data Key: (F1)-2-5

OverLap A	1	2	3	4	5	6	7	8	9	10	11	12
Standard												
Protected												
Permitted												
Enable Lag												
Enable Lead												
Spare												

Advance Green Timer	
Lag / Lead Green Timer	
Lag / Lead Yellow Timer	
Lag / Lead Red Timer	

OverLap B	1	2	3	4	5	6	7	8	9	10	11	12
Standard							7					
Protected							7					
Permitted												
Enable Lag												
Enable Lead												
Spare												

Advance Green Timer	
Lag / Lead Green Timer	
Lag / Lead Yellow Timer	3.9
Lag / Lead Red Timer	

OverLap C	1	2	3	4	5	6	7	8	9	10	11	12
Standard												
Protected												
Permitted												
Enable Lag												
Enable Lead												
Spare												

Advance Green Timer	
Lag / Lead Green Timer	
Lag / Lead Yellow Timer	
Lag / Lead Red Timer	

OverLap D	1	2	3	4	5	6	7	8	9	10	11	12
Standard												
Protected												
Permitted												
Enable Lag												
Enable Lead												
Spare												

Advance Green Timer	
Lag / Lead Green Timer	
Lag / Lead Yellow Timer	
Lag / Lead Red Timer	

CITY OF SACRAMENTO

COORDINATION PATTERN TABLES

Coordination Pattern Data **Key: (F1)-3-4**

PLAN FORMAT												
Cycle Length	120		Plan		1							
Offset	99											
SPLITS: BY PHASE	1)		2)	38	3)		4)					
	5)		6)	38	7)	19	8)	53				
	9)		10)		11)		12)					
Veh Permissive	[1]		[2]									
Veh Perm 2 Disp												
Phase Reservice	.											
Split Extension/Ring	[1]		[2]									
Splt Demand Pattern	[1]		[2]									
Xartery Pattern												
PHASE	1	2	3	4	5	6	7	8	9	10	11	12
Coord Phases		2				6						
Veh Recall												
Veh Max Recall												
Ped Recall												
Phase Omit												
Spare												
Alt Sequence	A:	.	B:	.	C:	.	D:	X	E:	.	F:	.

PLAN FORMAT												
Cycle Length	130		Plan		2							
Offset	99											
SPLITS: BY PHASE	1)		2)	82	3)		4)					
	5)		6)	82	7)	25	8)	23				
	9)		10)		11)		12)					
Veh Permissive	[1]	10	[2]	10								
Veh Perm 2 Disp												
Phase Reservice	.											
Split Extension/Ring	[1]		[2]									
Splt Demand Pattern	[1]		[2]									
Xartery Pattern												
PHASE	1	2	3	4	5	6	7	8	9	10	11	12
Coord Phases		2				6						
Veh Recall												
Veh Max Recall												
Ped Recall												
Phase Omit												
Spare												
Alt Sequence	A:	.	B:	.	C:	.	D:	.	E:	.	F:	.

PLAN FORMAT												
Cycle Length	130		Plan		3							
Offset	111											
SPLITS: BY PHASE	1)		2)	52	3)		4)					
	5)		6)	52	7)	30	8)	48				
	9)		10)		11)		12)					
Veh Permissive	[1]		[2]									
Veh Perm 2 Disp												
Phase Reservice	.											
Split Extension/Ring	[1]		[2]									
Splt Demand Pattern	[1]		[2]									
Xartery Pattern												
PHASE	1	2	3	4	5	6	7	8	9	10	11	12
Coord Phases		2				6						
Veh Recall												
Veh Max Recall												
Ped Recall												
Phase Omit												
Spare												
Alt Sequence												

PLAN FORMAT												
Cycle Length			Plan		4							
Offset												
SPLITS: BY PHASE	1)		2)		3)		4)					
	5)		6)		7)		8)					
	9)		10)		11)		12)					
Veh Permissive	[1]		[2]									
Veh Perm 2 Disp												
Phase Reservice	.											
Split Extension/Ring	[1]		[2]									
Splt Demand Pattern	[1]		[2]									
Xartery Pattern												
PHASE	1	2	3	4	5	6	7	8	9	10	11	12
Coord Phases												
Veh Recall												
Veh Max Recall												
Ped Recall												
Phase Omit												
Spare												
Alt Sequence	A:	.	B:	.	C:	.	D:	.	E:	.	F:	.

Alt Sequence: A=switch Ø1 & Ø2 C=switch Ø5 & Ø6 E=switch Ø9 & Ø10
B=switch Ø3 & Ø4 D=switch Ø7 & Ø8 F=switch Ø11 & Ø12

CITY OF SACRAMENTO

COORDINATION/TIME OF DAY DATA

Coordinator Options — Key: (F1)-3-1

Split Units	SEC	Actuated Coord ø						X
Offset Units	SEC	Actuated Rest In Wal						.
Interconnect Format	PLAN	Inhibit Max						X
Interconnect Source	NIC	Max 2 Select						.
Resync Count	0	Multisync						.
Transition	SMOOTH	Float Force Off						.
Dwell Period	0 sec	A	B	C	D	E	F	
	Free Alternate Sequence	.	.	.	.	.	.	

Coord Manual and Split Demand — Key: (F1)-3-2

Manual Enable	OFF	Manual Pattern	

Split Demand	Demand 1	Demand 2
Demand Call Time	0	0
Demand Cycle Count	0	0

Demand ø	1	2	3	4	5	6	7	8	9	10	11	12
Demand 1 ø's	.	.	.	.	.	.	.	.	.	.	.	.
Demand 2 ø's	.	.	.	.	.	.	.	.	.	.	.	.

Coord Auto Permissive Min Green — Key: (F1)-3-3

Phase	Perm Min Grn
1	0 sec
2	0 sec
3	0 sec
4	0 sec
5	0 sec
6	0 sec
7	0 sec
8	0 sec
9	0 sec
10	0 sec
11	0 sec
12	0 sec

Clock/ Calendar Data — Key: (F1)-5-1

DATE SET:	0/0/00	Enter Date/Time
TIME SET:	0:00:00	Then Press Enter
Manual NIC Prgrm Step	0	
Manual TOD Prgrm Step	0	
Sync Reference Time	0:00	
Sync Reference	REFERENCE TIME	
Week 1 begins on 1st Sunday	.	
Disable Daylight Savings	.	
DST begins Last Sunday	.	

TOD Yearly Program — Key: (F1)-5-3

Week of Year	1	2	3	4	5	6	7	8
Weekly Program	1	1	1	1	1	1	1	1
Week of Year	9	10	11	12	13	14	15	16
Weekly Program	1	1	1	1	1	1	1	1
Week of Year	17	18	19	20	21	22	23	24
Weekly Program	1	1	1	1	1	1	1	1
Week of Year	25	26	27	28	29	30	31	32
Weekly Program	1	1	1	1	1	1	1	1
Week of Year	33	34	35	36	37	38	39	40
Weekly Program	1	1	1	1	1	1	1	1
Week of Year	41	42	43	44	45	46	47	48
Weekly Program	1	1	1	1	1	1	1	1
Week of Year				49	50	51	52	53
Weekly Program				1	1	1	1	1

TOD Weekly Programs Key: (F1)-5-2

Week	SU	MO	TU	WE	TH	FR	SA
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1

CITY OF SACRAMENTO
NIC Program Table

NIC Program Step Key: (F1)-5-5

Step	Program	Time	Pattern	Override
1	1	7:00	1	
2	1	9:30	2	
3	1	14:00	3	
4	1	19:00	0	
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				

TOD Holiday Program Key: (F1)-5-4

Holiday	Float / Fixed	Month	DOW/ DOM	WOM / Year	Program
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					

CITY OF SACRAMENTO

PREEMPTION TABLES

Priority Preemptor 2 **Key: (F1)-4-1**

Phase	1	2	3	4	5	6	7	8	9	10	11	12
Term Phase Ovlp												
Trk Clr Phase												
Hold Phases						6						
Exit Phases												
Exit Calls												
Spare												
Term Overlaps	A:	.		B:	.		C:	.		D:	.	

Active	YES	Ped Dark	
Priority		Ped Active	
Det Lock		Zero PC Time	
Hold Flash		PC Thru Yellow	
Term Ovlp ASAP		Term Phases	

Don't Override Flash	X
Flash all Outputs	
Yellow-Red goes Green	
Enable Max Preempt Time	
Active only During Hold	
No CVM in Flash	
Fast Flash GRN on Hold	
Out of Flash	GREEN

					GRN	YEL	RED
Max Time	SS	Duration Time					
Min Hold Time	6	Delay Time		Minimum			
Min Ped Clear		Inhibit Time		Track Clear			
Exit Max		Hld Delay Tim		Hold			

Priority Preemptor 3 **Key: (F1)-4-2**

Phase	1	2	3	4	5	6	7	8	9	10	11	12
Term Phase Ovlp												
Trk Clr Phase												
Hold Phases		2										
Exit Phases												
Exit Calls												
Spare												
Term Overlaps	A:	.		B:	.		C:	.		D:	.	

Active	YES	Ped Dark	
Priority		Ped Active	
Det Lock		Zero PC Time	
Hold Flash		PC Thru Yellow	
Term Ovlp ASAP		Term Phases	

Don't Override Flash	X
Flash all Outputs	
Yellow-Red goes Green	
Enable Max Preempt Time	
Active only During Hold	
No CVM in Flash	
Fast Flash GRN on Hold	
Out of Flash	GREEN

					GRN	YEL	RED
Max Time	SS	Duration Time					
Min Hold Time	6	Delay Time		Minimum			
Min Ped Clear		Inhibit Time		Track Clear			
Exit Max		Hld Delay Tim		Hold			

Priority Preemptor 4 **Key: (F1)-4-3**

Phase	1	2	3	4	5	6	7	8	9	10	11	12
Term Phase Ovlp												
Trk Clr Phase												
Hold Phases								8				
Exit Phases												
Exit Calls												
Spare												
Term Overlaps	A:	.		B:	.		C:	.		D:	.	

Active	YES	Ped Dark	
Priority		Ped Active	
Det Lock		Zero PC Time	
Hold Flash		PC Thru Yellow	
Term Ovlp ASAP		Term Phases	

Don't Override Flash	X
Flash all Outputs	
Yellow-Red goes Green	
Enable Max Preempt Time	
Active only During Hold	
No CVM in Flash	
Fast Flash GRN on Hold	
Out of Flash	GREEN

					GRN	YEL	RED
Max Time	SS	Duration Time					
Min Hold Time	6	Delay Time		Minimum			
Min Ped Clear		Inhibit Time		Track Clear			
Exit Max		Hld Delay Tim		Hold			

Priority Preemptor 5 **Key: (F1)-4-4**

Phase	1	2	3	4	5	6	7	8	9	10	11	12
Term Phase Ovlp												
Trk Clr Phase												
Hold Phases							7					
Exit Phases												
Exit Calls												
Spare												
Term Overlaps	A:	.		B:	.		C:	.		D:	.	

Active	YES	Ped Dark	
Priority		Ped Active	
Det Lock		Zero PC Time	
Hold Flash		PC Thru Yellow	
Term Ovlp ASAP		Term Phases	

Don't Override Flash	X
Flash all Outputs	
Yellow-Red goes Green	
Enable Max Preempt Time	
Active only During Hold	
No CVM in Flash	
Fast Flash GRN on Hold	
Out of Flash	GREEN

					GRN	YEL	RED
Max Time	5S	Duration Time					
Min Hold Time	6	Delay Time		Minimum			
Min Ped Clear		Inhibit Time		Track Clear			
Exit Max		Hld Delay Tim		Hold			

Econolite ASC/2

CITY OF SACRAMENTO

DETECTION SCHEDULE

Howe Avenue at College Town Dr/Highway 50 EB offramp

	Phase	Controller Det. Input	Location	Direction	Controller / Detector Type / Function Extend	Delay	Passage	Notes
BIU 1	Loops or Retrofit Video							
	Ø1	1						
	Ø2	2	Front	NB			x	
	Ø3	3						
	Ø4	4						
	Ø5	5						
	Ø6	6	Front	SB			x	
	Ø7	7	Front	EB			x	
	Ø8	8	Front	WB			x	
	Loops							
	Ø1	9						
	Ø2	10						
	Ø3	11						
	Ø4	12						
	Ø5	13						
	Ø6	14						
	Ø7	15						
	Ø8	16						
New Video Detection		BIU 2 (RESERVED) 17-32						
BIU 3	Ø1	33						
	Ø1	34						
	Ø6	35						
	Ø6	36						
	Ø6	37						
	Ø6	38						
	Ø6	39						
	Ø6	40						
	Ø5	41						
	Ø5	42						
	Ø2	43						
	Ø2	44						
	Ø2	45						
	Ø2	46						
	Ø2	47						
	Ø2	48						
BIU 4	Ø3	49						
	Ø3	50						
	Ø8	51						
	Ø8	52						
	Ø8	53						
	Ø8	54						
	Ø8	55						
	Ø8	56						
	Ø7	57						
	Ø7	58						
	Ø4	59						
	Ø4	60						
	Ø4	61						
	Ø4	62						
	Ø4	63						
	Ø4	64						

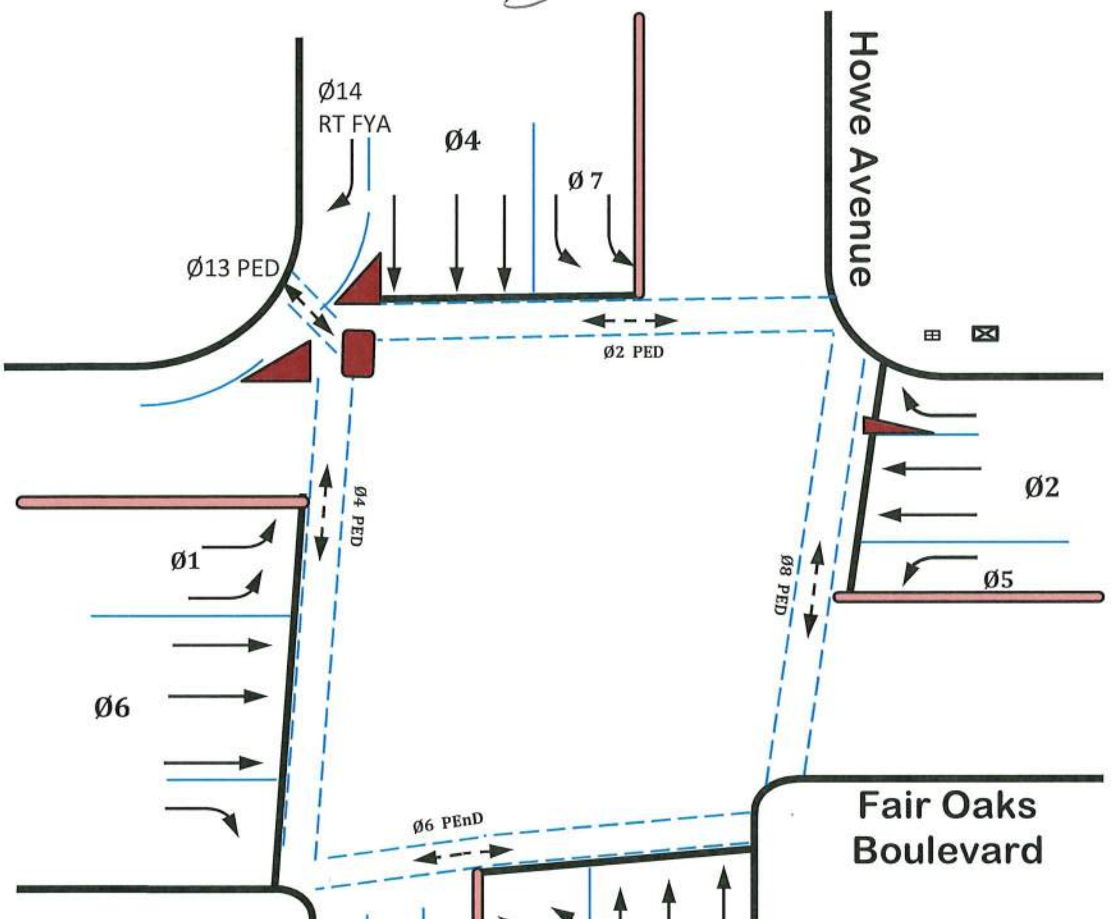
D4

TRAFFIC SIGNAL CONTROLLER PROGRAM CHART

N/S Howe Ave **E/W** Fair Oaks Blvd

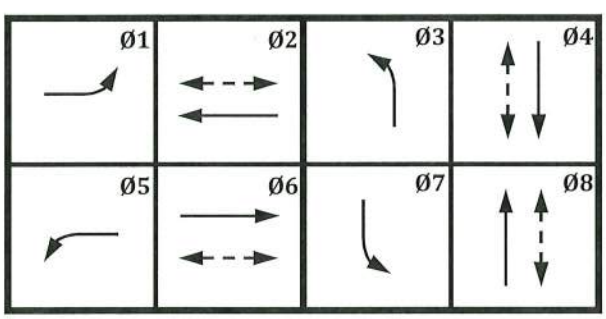
INTERSECTION # 281 SYSTEM: IP Address: 172.31.54.160

Prepared by: O.T. **Approved by:** RJS **Date Implemented:** 2/6/20



Notes: Aldis video detection

Ø13 PED = Ø1 Ped Detector
Ø14 Green = Driven LS15 Green
Ø14 Yellow = Driven LS 14 Green
Ø13 = Driven OVL 1
Ø14 = Driven OVL 3 & 4 & Logic



Ø13 PED	Ø14 YA

281 - Fair oaks & Howe Ave

Phase Timing

2/6/2020 2:33:54 PM

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Min Green	12	11	11	10	12	11	11	10	0	0	0	0	5	5	5	0
Veh Ext	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	0.0
Max Green 1	50	60	40	70	40	60	40	70	0	0	0	0	40	40	40	0
Max Green 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Ext	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellow	3.5	4.3	3.5	4.3	3.5	4.7	3.5	4.3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	0.0
Red Clr	1.0	0.7	0.5	0.7	1.0	0.8	0.5	0.7	0.0	0.0	0.0	0.0	0.3	0.2	0.3	0.0
Adv Flash	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bike MG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	4	0	7	0	7	0	7	0	0	0	0	5	0	0	0
Ped Clr	0	30	0	27	0	24	0	28	0	0	0	0	5	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sol DW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Early Wlk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Wlk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce After	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TTReduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Max Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	4.0	0.0	0.0
Neg Ped	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AP Disc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pmt Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pmt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pmt Ped Clr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

281 - Fair oaks & Howe Ave

Phase Options

2/6/2020 2:33:54 PM

Phases	1-8								9-16							
Min Recalls				4				8						4		
Max Recalls																
Ped Recalls																
Soft Recall																
Dual Entry																
Red Rest																
Walk Rest																
Walk Expand																
Ped Recycle																
Sim Ped Term																
PC Thru Clr																
Guar Passage																
No Simult Gap	1		3		5		7									
Yel Lock																
Red Lock																
PhaseNext Lock	1	2	3	4	5	6	7	8								
No Term Call																
Cond Serv																
CS Enable																
Cond Reserve																
Reserve																
Veh Omit																
Ped Omit																
Perm Phase																
Protect Calls																
Protect Calls 2																
Flash Entry																
Flash Exit																
Flash Exit Yel																
Flash Exit Red																
Ped Scramble																
No Min Yel																
No Min Red Rev																
Max Scramble Walk																
Flash Yellow																
Flash FYA																
CNA 1																
CNA 2																

281 - Fair oaks & Howe Ave

Phase Startup Options

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Startup Flash	0	Mode	Red->Yel
Startup All Red	6	Yellow	0.0

Phases	1-8								9-16							
Startup Phases		2				6										
Startup Yellow		2				6										
Startup Red																
Startup No Walk		2		4		6		8								
Startup Next																
Startup Yel Fls																
Startup FYA																
No Veh Call																
No Ped Call		2		4		6		8								

Phase Startup Timing

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Start Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Max Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Unit

Red Revert	2.0	Ped Protect	No	AdvFls in Flash	No

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Ring Sequence / Conflicting Phases

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Ringgroup 1

Ring 1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0
Ring 2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0

Ringgroup 2

Ring 3	13	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Custom Sequences

Seq 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Conflicting Phases	1-8								9-16							
Phase 1																
Phase 2																
Phase 3																
Phase 4																
Phase 5																
Phase 6																
Phase 7																
Phase 8																
Phase 9																
Phase 10																
Phase 11																
Phase 12																
Phase 13																
Phase 14																
Phase 15																
Phase 16																

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FYA/FRA

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FYA	1	2	3	4	5	6	7	8
Prot Phs	0	0	0	0	0	0	0	0
Opp Thru	0	0	0	0	0	0	0	0
Start Phs	0	0	0	0	0	0	0	0
Opp Ped	0	0	0	0	0	0	0	0
Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min FYA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Prot Red	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Head Mode	FYA 1	FYA 1	FYA 1	FYA 1	FYA 1	FYA 1	FYA 1	FYA 1

Ped Hawk 1

Veh Phase	0		
Ped Phase	0		
Flash Yel	0.0	Dark Signal	Yes
Flash Delay	0.0	Flash Carryover	0.0
Green Mode	Normal		

Ped Hawk 2

Veh Phase	0		
Ped Phase	0		
Flash Yel	0.0	Dark Signal	Yes
Flash Delay	0.0	Flash Carryover	0.0
Green Mode	Normal		

Ped Hawk 3

Veh Phase	0		
Ped Phase	0		
Flash Yel	0.0	Dark Signal	Yes
Flash Delay	0.0	Flash Carryover	0.0
Green Mode	Normal		

Ped Hawk 4

Veh Phase	0		
Ped Phase	0		
Flash Yel	0.0	Dark Signal	Yes
Flash Delay	0.0	Flash Carryover	0.0
Green Mode	Normal		

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Overlap 1

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Min Green	0.0	Trail Green	0.0	Trail Green 2	0.0	Delay Green	0.0
Yellow	3.5	Red	0.0	Red Revert	0.0		
Walk	5	Ped Clearance	10	Solid DW	0.0	Early Wlk	0.0
						Delay Wlk	0.0

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Parents													3			
Negative Green														4		
Start Next																
Trail Enable																
Trail Ena Next																
Trail Ena 2																
Trail Next 2																
Delay Enable																
Negative Veh																
Negative Ped																
Negative Olap			3	4												
Walk Rest																
Walk Thru																
Walk Halt																
Ped Recycle																
Overlap Start																
Overlap Ped Start																
Phase Calls																

Pmt Green	0	Walk	0	Ped Clr	0
PP Phase	0	PP Delay	0.0		
Min FR	0.0	FR Hold	0.0	FR Delay	0.0

LRV Start Enable								
LRV Enable								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Perm Phases																
Prot Phases																
FR Ena Phases																
FR Grn Phases																
FR Ped Conf																
FR OLPed Conf																

Overlap 3

Min Green	4.0	Trail Green	0.0	Trail Green 2	0.0	Delay Green	0.0
Yellow	3.5	Red	0.0	Red Revert	2.0		
Walk	0	Ped Clearance	0	Solid DW	0.0	Early Wlk	0.0
						Delay Wlk	0.0

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Parents	1		3		5	6	7	8								
Negative Green				4												
Start Next																
Trail Enable																
Trail Ena Next																
Trail Ena 2																
Trail Next 2																
Delay Enable																
Negative Veh		2											3			
Negative Ped																
Negative Olap	1			4												
Walk Rest																
Walk Thru																
Walk Halt																
Ped Recycle																
Overlap Start																
Overlap Ped Start																
Phase Calls																

Pmt Green	0	Walk	0	Ped Clr	0
PP Phase	0	PP Delay	0.0		
Min FR	0.0	FR Hold	0.0	FR Delay	0.0

LRV Start Enable								
LRV Enable								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Perm Phases																
Prot Phases																
FR Ena Phases																
FR Grn Phases																
FR Ped Conf																
FR OLPed Conf																

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Overlap 4

2/6/2020 2:33:54 PM

Min Green	0.0	Trail Green	0.0	Trail Green 2	0.0	Delay Green	0.0
Yellow	0.0	Red	0.0	Red Revert	0.0		
Walk	0	Ped Clearance	0	Solid DW	0.0	Early Wlk	0.0
Delay Wlk	0.0						

Phases	1-8								9-16							
Parents				4												
Negative Green																
Start Next																
Trail Enable																
Trail Ena Next																
Trail Ena 2																
Trail Next 2																
Delay Enable																
Negative Veh													3			
Negative Ped																
Negative Olap	1		3													
Walk Rest																
Walk Thru																
Walk Halt																
Ped Recycle																
Overlap Start																
Overlap Ped Start																
Phase Calls																

Pmt Green	0	Walk	0	Ped Clr	0
PP Phase	0	PP Delay	0.0		
Min FR	0.0	FR Hold	0.0	FR Delay	0.0

LRV Start Enable								
LRV Enable								

Phases	1-8								9-16							
Perm Phases																
Prot Phases																
FR Ena Phases																
FR Grn Phases																
FR Ped Conf																
FR OLPed Conf																

281 - Fair oaks & Howe Ave

Overlap Startup Options

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Overlaps	1-8								9-16							
Startup Overlap Green																
Startup Overlap Yellow																

Overlap Startup Timing

Overlap	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Start Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Min Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Overlap Unit Options

Overlaps	1-8								9-16							
Overlap Ped Recalls																
MCE Olap Ped Protect																
MCE Olap Ped Calls																
MCE Olap Ped Expand																
No Min Yellow																
No Min Red Rev																
Flash Yellow																
No Conflict																
Pre Signal																
Perm Red																
Perm FYA																
Perm FRA																

281 - Fair oaks & Howe Ave

Coordination Options

2/6/2020 2:33:54 PM

Sync Time	00:00	RTC Set Time	00:00
Transition Mode	Best 2	Ped Adjust	None
Trans Short %	20	Trans Long %	35
Offset Reference	Lag Grn	Short Cycles	0
Dual Entry	Strict	Overlap F/O	Disabled
Master Sync Mode	RTC	Master Sync Length	0
Adapt Thresh	3	Adapt Step	2
External Plan Max	0		
Hardwire No Match	Sched	Hardwire Sync Fail	0
Override Omit/Recall	No		

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
No Trans Recall																
Trans Ped Recall																
Trans Phases																

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Hardwire Plans

2/6/2020 2:33:54 PM

Hardwire	Plan Select								Pattern	Offset	Mode
Plan 1									0	0	Hardwire
Plan 2									0	0	Hardwire
Plan 3									0	0	Hardwire
Plan 4									0	0	Hardwire
Plan 5									0	0	Hardwire
Plan 6									0	0	Hardwire
Plan 7									0	0	Hardwire
Plan 8									0	0	Hardwire
Plan 9									0	0	Hardwire
Plan 10									0	0	Hardwire
Plan 11									0	0	Hardwire
Plan 12									0	0	Hardwire
Plan 13									0	0	Hardwire
Plan 14									0	0	Hardwire
Plan 15									0	0	Hardwire
Plan 16									0	0	Hardwire
Plan 17									0	0	Hardwire
Plan 18									0	0	Hardwire
Plan 19									0	0	Hardwire
Plan 20									0	0	Hardwire
Plan 21									0	0	Hardwire
Plan 22									0	0	Hardwire
Plan 23									0	0	Hardwire
Plan 24									0	0	Hardwire
Plan 25									0	0	Hardwire
Plan 26									0	0	Hardwire
Plan 27									0	0	Hardwire
Plan 28									0	0	Hardwire
Plan 29									0	0	Hardwire
Plan 30									0	0	Hardwire
Plan 31									0	0	Hardwire
Plan 32									0	0	Hardwire

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Soft Interconnect

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Mode	Slave	Remote Int Number	0
Yield Delay	0		
Yield Duration	0		
Permissive	0		
Local Hold Limit	0		

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Local Control Phases																
Local Hold Phases																
Local Perm Phases																
Local Call Phases																
Remote Perm Phases																
Remote Hold Phases																

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Coordination Pattern 1

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Cycle	120	Ringgroup 1 - Offset 1	17	Offset 2	0	Offset 3	0
		Ringgroup 2 - Offset 1	0	Offset 2	0	Offset 3	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Splits	20	40	20	40	20	40	20	40	0	0	0	0	0	0	0	0
Split Ext	0	0	0	20	0	0	0	20	0	0	0	0	0	0	0	0
Float Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Perm Min Green	8	11	8	11	8	11	8	11	0	0	0	0	0	0	0	0
Min Trans Split	11	11	11	11	11	11	11	11	0	0	0	0	0	0	0	0
Max Trans Split	55	55	55	55	55	55	55	55	0	0	0	0	0	0	0	0
Split 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PA Before	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PA After	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Permissive Mode	Sing Band	Max Mode	Max Inh	Walk Rest	Yield
Ped Permissive	Yield				
Permissive Limit	0	Perm 2 Start	0	Perm 2 End	0
Alt Sequence		TOD Link	0		

Alt Sequence								
			3					

Trans Mode	Default
Offset Ref	Default
Adaptive Mode	Enabled

Phases/Overlaps	1-8								9-16							
Coord Phases				4				8								
No Extend																
Float Enable																
Veh = Ped Perm																
Walk Rest																
Ped Recall																
Cond Ped Call																
Olap Ped Recall																
Ped Recycle																
Min Recall														4		
Max Recall																
Cond Serv																
Reservice																
Veh Omit																
Ped Omit																
Olap Omit																
Perm Reserve																
Perm 1 Phases																
Max Inhibit																
FYA Omit																
Adapt Phases																

Disable Priority																
Progression Phases																
Priority Alt Seq																
Reserve Extend																

Priority Timing-Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Priority Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Coordination Pattern 1

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Alternate Timing-Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Alt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Ped Clr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Sol DW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alt Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Veh Ext	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alt Max Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Red Clr	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alt Early Walk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alt Delay Walk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alt CS Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt CS Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Coordination Pattern 2

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Cycle 130 Ringgroup 1 - Offset 1: 1 | Offset 2: 5 | Offset 3: 0

Ringgroup 2 - Offset 1: 0 | Offset 2: 0 | Offset 3: 0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Splits	25	42	23	40	27	40	23	40	0	0	0	0	0	0	0	0
Split Ext	0	0	0	20	0	0	0	20	0	0	0	0	0	0	0	0
Float Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Perm Min Green	8	12	8	12	8	12	8	12	0	0	0	0	0	0	0	0
Min Trans Split	11	11	11	11	11	11	11	11	0	0	0	0	0	0	0	0
Max Trans Split	55	55	55	55	55	55	55	55	0	0	0	0	0	0	0	0
Split 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PA Before	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PA After	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Permissive Mode: Reservice | Max Mode: Max Inh | Walk Rest: Yield

Ped Permissive: Yield

Permissive Limit: 0 | Perm 2 Start: 0 | Perm 2 End: 0

Alt Sequence: 1 | TOD Link: 0

Trans Mode: Default

Offset Ref: Default

Adaptive Mode: Enabled

Phases/Overlaps	1-8	9-16
Coord Phases	4, 8	
No Extend		
Float Enable		
Veh = Ped Perm		
Walk Rest		
Ped Recall		
Cond Ped Call		
Olap Ped Recall		
Ped Recycle		
Min Recall		
Max Recall		
Cond Serv		
Reservice		
Veh Omit		
Ped Omit		
Olap Omit		
Perm Reserve		
Perm 1 Phases		
Max Inhibit		
FYA Omit		
Adapt Phases		

Disable Priority

Progression Phases

Priority Alt Seq

Reserve Extend

Priority Timing-Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Priority Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Alternate Timing-Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Alt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Ped Clr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Sol DW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alt Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Veh Ext	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alt Max Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Red Clr	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alt Early Walk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alt Delay Walk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alt CS Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt CS Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Coordination Pattern 3

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Cycle: 130 | Ringgroup 1 - Offset 1: 80 | Offset 2: 0 | Offset 3: 0

Ringgroup 2 - Offset 1: 0 | Offset 2: 0 | Offset 3: 0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Splits	40	22	20	48	20	42	20	48	0	0	0	0	0	0	0	0
Split Ext	0	0	0	25	0	0	0	25	0	0	0	0	0	0	0	0
Float Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Perm Min Green	9	11	9	11	9	11	9	11	0	0	0	0	0	0	0	0
Min Trans Split	9	9	9	9	9	9	9	9	0	0	0	0	0	0	0	0
Max Trans Split	55	55	55	60	55	55	55	60	0	0	0	0	0	0	0	0
Split 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PA Before	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PA After	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Permissive Mode: Reservice | Max Mode: Max Inh | Walk Rest: Yield

Ped Permissive: Yield

Permissive Limit: 0 | Perm 2 Start: 0 | Perm 2 End: 0

Alt Sequence: 1 | TOD Link: 0

Phases/Overlaps	1-8								9-16							
Coord Phases				4				8								
No Extend																
Float Enable																
Veh = Ped Perm																
Walk Rest																
Ped Recall																
Cond Ped Call																
Olap Ped Recall																
Ped Recycle																
Min Recall																
Max Recall																
Cond Serv																
Reservice																
Veh Omit																
Ped Omit																
Olap Omit																
Perm Reserve																
Perm 1 Phases																
Max Inhibit																
FYA Omit																
Adapt Phases																

Trans Mode: Default

Offset Ref: Default

Adaptive Mode: Enabled

Disable Priority:

Progression Phases:

Priority Alt Seq:

Reserve Extend:

Priority Timing-Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Priority Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Coordination Pattern 3

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Alternate Timing-Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Alt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Ped Clr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Sol DW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alt Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Veh Ext	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alt Max Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Red Clr	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alt Early Walk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alt Delay Walk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alt CS Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt CS Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Preempt Inputs

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Preempt Input	1	2	3	4	5	6	7	8	9	10
Delay	0	0	0	0	0	0	0	0	0	0
Checkout Limit	0	0	0	0	0	0	0	0	0	0
Locked	No	No	No	No	No	No	No	No	No	No
Interlock	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Input Number	0	0	3	4	5	6	3	4	5	6
Input Priority	All	All	High	High	High	High	Low	Low	Low	Low
Delay Mode	Inp	Inp	Inp	Inp	Inp	Inp	Inp	Inp	Inp	Inp

Preempt Priority

Preempt	1	2	3	4	5	6	7	8	9	10
Priority	0	0	0	0	0	0	0	0	0	0

Remote Preemption

Remote Preempt	RM 1	RM 2	RM 3	RM 4	RM 5	RM 6	RM 7	RM 8
Int Number	0	0	0	0	0	0	0	0
PE Number	0	0	0	0	0	0	0	0
Mode	Dis	Dis	Dis	Dis	Dis	Dis	Dis	Dis
Slack	0	0	0	0	0	0	0	0
Travel Time	0	0	0	0	0	0	0	0
Alt TT 1	0	0	0	0	0	0	0	0
Alt TT 2	0	0	0	0	0	0	0	0
Alt TT 3	0	0	0	0	0	0	0	0
Alt TT 4	0	0	0	0	0	0	0	0
Alt TT 5	0	0	0	0	0	0	0	0
Alt TT 6	0	0	0	0	0	0	0	0
Alt TT 7	0	0	0	0	0	0	0	0

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Preempt 3 (Configuration)

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Enabled	Yes	Dwell Mode	Normal	Output Mode	All
Output2 Mode	All	Fail Action	Preempt Off	Exit Mode	Normal
Override Flash	No	Change Phasenext	Yes		

	1-8								9-16							
Enable Phases																
Preempt Inputs			3													

	1-8									
LRV Disable									Max	0
LRV Dwell Flash										
LRV Omit									Delay	0
LRV No Yel										

Preempt 3 (Timing/Phases/Overlaps)

Phases/Overlaps	1-8								9-16							
Omit Olap Grn Clr																
Phs EWlk to Grn																
TClr 1 Veh Phases																
TClr 1 Ped Phases																
TClr 1 Olap																
TClr 1 Olap Ped																
TClr 2 Veh Phases																
TClr 2 Ped Phases																
TClr 2 Olap																
TClr 2 Olap Ped																
Init Dwell Phases																
Dwell Veh Phases	1					6										
Dwell Ped Phases																
Dwell Olap																
Dwell Olap Ped																
Exit Veh Phases																
Exit Ped Phases																
Exit Olap																
Exit Olap Ped																
Zero Phase Walk																
Zero Phase Ped Clr																
Zero Phase Green																
Zero Olap Walk																
Zero Olap Ped Clr																
Zero Olap Green																
Dwell-Phase Red																
Dwell-Phase Red Flash																
Dwell-Phase Yel Flash																
Dwell-Olap Red Flash																
Dwell-Olap Yel Flash																
Dwell-Ped Dark																
Dwell-Olap Ped Dark																

Start Green	0	Start Walk	0
		Start Ped Clr	0
Track Clear 1	0	Track Clear 2	0
TC1 Extend	0	TC1 Max	0
Exit Ped Clr	0	Exit Yellow	0.0
Exit Red	0.0		
Min Dwell	5	Min Duration	0
Dwell Extend	2		
Max Dwell	0	Max Call	85
Reserve Inh Same	0		
Reserve Inh All	0		
Delay	0		

Phases/Overlaps	1-8								9-16							
TClr 1 FR Olap																
TClr 2 FR Olap																
Dwell FR Olap																
TClr 1 FYA																
TClr 2 FYA																
Dwell FYA																

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Preempt 4 (Configuration)

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Enabled	Yes	Dwell Mode	Normal	Output Mode	All
Output2 Mode	All	Fail Action	Preempt Off	Exit Mode	Normal
Override Flash	No	Change Phasenext	Yes		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Phases																
Preempt Inputs				4												

	1	2	3	4	5	6	7	8		
LRV Disable									Max	0
LRV Dwell Flash										
LRV Omit									Delay	0
LRV No Yel										

Preempt 4 (Timing/Phases/Overlaps)

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Omit Olap Grn Clr																
Phs EWlk to Grn																
TClr 1 Veh Phases																
TClr 1 Ped Phases																
TClr 1 Olap																
TClr 1 Olap Ped																
TClr 2 Veh Phases																
TClr 2 Ped Phases																
TClr 2 Olap																
TClr 2 Olap Ped																
Init Dwell Phases																
Dwell Veh Phases		2			5											
Dwell Ped Phases																
Dwell Olap																
Dwell Olap Ped																
Exit Veh Phases																
Exit Ped Phases																
Exit Olap																
Exit Olap Ped																
Zero Phase Walk																
Zero Phase Ped Clr																
Zero Phase Green																
Zero Olap Walk																
Zero Olap Ped Clr																
Zero Olap Green																
Dwell-Phase Red																
Dwell-Phase Red Flash																
Dwell-Phase Yel Flash																
Dwell-Olap Red Flash																
Dwell-Olap Yel Flash																
Dwell-Ped Dark																
Dwell-Olap Ped Dark																

Start Green	0	Start Walk	0
		Start Ped Clr	0
Track Clear 1	0	Track Clear 2	0
TC1 Extend	0	TC1 Max	0
Exit Ped Clr	0	Exit Yellow	0.0
Exit Red	0.0		
Min Dwell	5	Min Duration	0
Dwell Extend	2		
Max Dwell	0	Max Call	85
Reserve Inh Same	0		
Reserve Inh All	0		
Delay	0		

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
TClr 1 FR Olap																
TClr 2 FR Olap																
Dwell FR Olap																
TClr 1 FYA																
TClr 2 FYA																
Dwell FYA																

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Preempt 5 (Configuration)

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Enabled	Yes	Dwell Mode	Normal	Output Mode	All
Output2 Mode	All	Fail Action	Preempt Off	Exit Mode	Normal
Override Flash	No	Change Phasenext	Yes		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Phases																
Preempt Inputs					5											

	1	2	3	4	5	6	7	8		
LRV Disable									Max	0
LRV Dwell Flash										
LRV Omit									Delay	0
LRV No Yel										

Preempt 5 (Timing/Phases/Overlaps)

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Omit Olap Grn Clr																
Phs EWlk to Grn																
TClr 1 Veh Phases																
TClr 1 Ped Phases																
TClr 1 Olap																
TClr 1 Olap Ped																
TClr 2 Veh Phases																
TClr 2 Ped Phases																
TClr 2 Olap																
TClr 2 Olap Ped																
Init Dwell Phases																
Dwell Veh Phases			3					8								
Dwell Ped Phases																
Dwell Olap																
Dwell Olap Ped																
Exit Veh Phases																
Exit Ped Phases																
Exit Olap																
Exit Olap Ped																
Zero Phase Walk																
Zero Phase Ped Clr																
Zero Phase Green																
Zero Olap Walk																
Zero Olap Ped Clr																
Zero Olap Green																
Dwell-Phase Red																
Dwell-Phase Red Flash																
Dwell-Phase Yel Flash																
Dwell-Olap Red Flash																
Dwell-Olap Yel Flash																
Dwell-Ped Dark																
Dwell-Olap Ped Dark																

Start Green	0	Start Walk	0
		Start Ped Clr	0
Track Clear 1	0	Track Clear 2	0
TC1 Extend	0	TC1 Max	0
Exit Ped Clr	0	Exit Yellow	0.0
Exit Red	0.0		
Min Dwell	5	Min Duration	0
Dwell Extend	2		
Max Dwell	0	Max Call	85
Reserve Inh Same	0		
Reserve Inh All	0		
Delay	0		

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
TClr 1 FR Olap																
TClr 2 FR Olap																
Dwell FR Olap																
TClr 1 FYA																
TClr 2 FYA																
Dwell FYA																

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Preempt 6 (Configuration)

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Enabled	Yes	Dwell Mode	Normal	Output Mode	All
Output2 Mode	All	Fail Action	Preempt Off	Exit Mode	Normal
Override Flash	No	Change Phasenext	Yes		

	1-8								9-16							
Enable Phases																
Preempt Inputs						6										

	1-8									
LRV Disable									Max	0
LRV Dwell Flash										
LRV Omit									Delay	0
LRV No Yel										

Preempt 6 (Timing/Phases/Overlaps)

Phases/Overlaps	1-8								9-16							
Omit Olap Grn Clr																
Phs EWlk to Grn																
TClr 1 Veh Phases																
TClr 1 Ped Phases																
TClr 1 Olap																
TClr 1 Olap Ped																
TClr 2 Veh Phases																
TClr 2 Ped Phases																
TClr 2 Olap																
TClr 2 Olap Ped																
Init Dwell Phases																
Dwell Veh Phases				4			7									
Dwell Ped Phases																
Dwell Olap																
Dwell Olap Ped																
Exit Veh Phases																
Exit Ped Phases																
Exit Olap																
Exit Olap Ped																
Zero Phase Walk																
Zero Phase Ped Clr																
Zero Phase Green																
Zero Olap Walk																
Zero Olap Ped Clr																
Zero Olap Green																
Dwell-Phase Red																
Dwell-Phase Red Flash																
Dwell-Phase Yel Flash																
Dwell-Olap Red Flash																
Dwell-Olap Yel Flash																
Dwell-Ped Dark																
Dwell-Olap Ped Dark																

Start Green	0	Start Walk	0
		Start Ped Clr	0
Track Clear 1	0	Track Clear 2	0
TC1 Extend	0	TC1 Max	0
Exit Ped Clr	0	Exit Yellow	0.0
Exit Red	0.0		
Min Dwell	5	Min Duration	0
Dwell Extend	2		
Max Dwell	0	Max Call	85
Reserve Inh Same	0		
Reserve Inh All	0		
Delay	0		

Phases/Overlaps	1-8								9-16							
TClr 1 FR Olap																
TClr 2 FR Olap																
Dwell FR Olap																
TClr 1 FYA																
TClr 2 FYA																
Dwell FYA																

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TOD Pattern Events

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	Time	DOW							Holidays								Mode	Pattern	Offset
Event 1	07:00	S	M	T	W	T	F	S									Free	1	1
Event 2	09:30	S	M	T	W	T	F	S									Free	2	1
Event 3	14:00	S	M	T	W	T	F	S									Free	3	1
Event 4	20:00	S	M	T	W	T	F	S									Free	0	0
Event 5	00:00																Sched	0	0
Event 6	00:00																Sched	0	0
Event 7	00:00																Sched	0	0
Event 8	00:00																Sched	0	0
Event 9	00:00																Sched	0	0
Event 10	00:00																Sched	0	0
Event 11	00:00																Sched	0	0
Event 12	00:00																Sched	0	0
Event 13	00:00																Sched	0	0
Event 14	00:00																Sched	0	0
Event 15	00:00																Sched	0	0
Event 16	00:00																Sched	0	0
Event 17	00:00																Sched	0	0
Event 18	00:00																Sched	0	0
Event 19	00:00																Sched	0	0
Event 20	00:00																Sched	0	0
Event 21	00:00																Sched	0	0
Event 22	00:00																Sched	0	0
Event 23	00:00																Sched	0	0
Event 24	00:00																Sched	0	0
Event 25	00:00																Sched	0	0
Event 26	00:00																Sched	0	0
Event 27	00:00																Sched	0	0
Event 28	00:00																Sched	0	0
Event 29	00:00																Sched	0	0
Event 30	00:00																Sched	0	0
Event 31	00:00																Sched	0	0
Event 32	00:00																Sched	0	0

281 - Fair oaks & Howe Ave

Detector Inputs (BIU 9)

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	Det 1	Det 2	Det 3	Det 4	Det 5	Det 6	Det 7	Det 8
Function	None	None	None	None	VehDet	VehDet	VehDet	VehDet
Index	0	0	0	0	5	6	7	8

	Det 9	Det 10	Det 11	Det 12	Det 13	Det 14	Det 15	Det 16
Function	None	None	None	None	VehDet	VehDet	None	VehDet
Index	0	0	0	0	13	14	0	16

Detector Inputs (BIU 10)

	Det 17	Det 18	Det 19	Det 20	Det 21	Det 22	Det 23	Det 24
Function	None	None	None	None	VehDet	VehDet	VehDet	VehDet
Index	17	18	19	20	21	22	23	24

	Det 25	Det 26	Det 27	Det 28	Det 29	Det 30	Det 31	Det 32
Function	None	None	None	None	VehDet	VehDet	VehDet	VehDet
Index	25	26	27	28	29	30	31	32

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Detector Inputs (BIU 11)

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	Det 33	Det 34	Det 35	Det 36	Det 37	Det 38	Det 39	Det 40
Function	VehDet	None	VehDet	None	None	None	None	None
Index	33	0	35	0	0	0	0	0

	Det 41	Det 42	Det 43	Det 44	Det 45	Det 46	Det 47	Det 48
Function	VehDet	None	VehDet	None	None	None	None	None
Index	41	0	43	0	0	0	0	0

Detector Inputs (BIU 12)

	Det 49	Det 50	Det 51	Det 52	Det 53	Det 54	Det 55	Det 56
Function	VehDet	None	VehDet	None	None	None	None	None
Index	49	0	51	0	0	0	0	0

	Det 57	Det 58	Det 59	Det 60	Det 61	Det 62	Det 63	Det 64
Function	VehDet	None	VehDet	None	None	None	None	None
Index	57	0	59	0	0	0	0	0

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T/F Inputs (BIU 1)

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	I/O 14	I/O 15	I/O 16	I/O 17	I/O 18	I/O 19	I/O 20	I/O 21
Input	Preempt	Preempt	VehDet	VehDet	None	None	ManCtrl	IntAdv
Index	1	2	57	51	0	0	5	5

	I/O 22	I/O 23	I/O 24	IN 1	IN 2	IN 3	IN 4	IN 5
Input	MinRec	ExtStr	None	StopTm	StopTm	VehDet	VehDet	VehDet
Index	5	5	0	5	5	33	43	49

	IN 6	IN 7	IN 8	OPTO 1	OPTO 2	OPTO 3	OPTO 4
Input	VehDet	VehDet	None	PedDet	PedDet	PedDet	PedDet
Index	59	41	0	1	2	3	4

T/F Inputs (BIU 2)

	I/O 16	I/O 17	I/O 18	I/O 19	I/O 20	I/O 21	I/O 22	I/O 23
Input	Preempt	Preempt	Preempt	Preempt	VehDet	None	None	None
Index	3	4	5	6	35	0	0	0

	I/O 24	IN 1	IN 2	IN 3	IN 4	IN 5	IN 6	IN 7
Input	None	MaxInh	MaxInh	LocFlash	None	Alarm	Alarm	None
Index	0	1	2	1	0	1	2	0

	IN 8	OPTO 1	OPTO 2	OPTO 3	OPTO 4
Input	None	PedDet	PedDet	PedDet	PedDet
Index	0	5	6	7	8

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T/F Inputs (BIU 3)

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	I/O 7	I/O 8	I/O 9	I/O 10	I/O 11	I/O 12	I/O 13	I/O 14
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0

	I/O 15	I/O 16	I/O 17	I/O 18	I/O 19	I/O 20	I/O 21	I/O 22
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0

	I/O 23	I/O 24	IN 1	IN 2	IN 3	IN 4	IN 5	IN 6
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0

	IN 7	IN 8	OPTO 1	OPTO 2	OPTO 3	OPTO 4
Input	None	None	None	None	None	None
Index	0	0	0	0	0	0

T/F Inputs (BIU 4)

	I/O 10	I/O 11	I/O 12	I/O 13	I/O 14	I/O 15	I/O 16	I/O 17
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0

	I/O 18	I/O 19	I/O 20	I/O 21	I/O 22	I/O 23	I/O 24	IN 1
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0

	IN 2	IN 3	IN 4	IN 5	IN 6	IN 7	IN 8	OPTO 1
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0

	OPTO 2	OPTO 3	OPTO 4
Input	None	None	None
Index	0	0	0

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Cabinet / MMU Configuration

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Cabinet Type	TS2-2N
MMU Disable	No

	1-8								9-16							
MMU Channel Ignore	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
Det BIU 1-No Fail Call															5	6
Det BIU 2-No Fail Call																
Alt LS Flash																
Alt Phase Flash																
Alt Overlap Flash																
Alt LRV Flash																

	1-8								9-16							
CMU Channel Ignore	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
	17-24								25-32							
	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2

	1-8								9-16							
Det IASM1-Det Diag																
	17-24															

	1-8								9-16							
Det IASM2-Det Diag																
	17-24															

Phase / Overlap Outputs

	Phase	Overlap
1	Normal	Normal
2	Normal	Normal
3	Normal	G Fls G
4	Normal	Normal
5	Normal	Normal
6	Normal	Normal
7	Normal	Normal
8	Normal	Normal
9	Normal	Normal
10	Normal	Normal
11	Normal	Normal
12	Normal	Normal
13	Normal	Normal
14	Normal	Normal
15	Normal	Normal
16	Normal	Normal

LRV Outputs

	LRV
1	2 Head
2	2 Head
3	2 Head
4	2 Head
5	2 Head
6	2 Head
7	2 Head
8	2 Head

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I/O Logic Channels

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	Func1	Idx	Oper	Func2	Idx	Out1	Idx	Out2	Idx	Dly	Ext	Trig	Fls
Chan 1	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 2	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 3	OlpYel	3	Or	OlpYel	4	None	0	None	0	0	0	No	No
Chan 4	OlpRed	3	And	OlpRed	4	None	0	None	0	0	0	No	No
Chan 5	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 6	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 7	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 8	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 9	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 10	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 11	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 12	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 13	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 14	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 15	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 16	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 17	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 18	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 19	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 20	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 21	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 22	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 23	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 24	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 25	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 26	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 27	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 28	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 29	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 30	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 31	None	0	Or	None	0	None	0	None	0	0	0	No	No
Chan 32	None	0	Or	None	0	None	0	None	0	0	0	No	No

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Vehicle Detector 5

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Enabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases						6										
Yellow Lock Phases																
Red Lock Phases																
Extend Phases						6										
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 6

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Enabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases						6										
Yellow Lock Phases																
Red Lock Phases																
Extend Phases						6										
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 7

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Enabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases						6										
Yellow Lock Phases																
Red Lock Phases																
Extend Phases						6										
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 8

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Enabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases						6										
Yellow Lock Phases																
Red Lock Phases																
Extend Phases						6										
XSwitch Phases																
Bike Call Phases																

281 - Fair oaks & Howe Ave

Vehicle Detector 13

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Delay 0.0 Extend 0.0 Carryover 0.0 Queue Limit 0

Mode No Disc Added Disabled System Disabled

Fail Mode None Max Pres 0 No Act 0 Erratic 0 Fail Time 0

Delay 2 0.0

Phases	1-8								9-16							
Call Phases		2														
Yellow Lock Phases																
Red Lock Phases																
Extend Phases		2														
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 14

Delay 0.0 Extend 0.0 Carryover 0.0 Queue Limit 0

Mode No Disc Added Disabled System Disabled

Fail Mode None Max Pres 0 No Act 0 Erratic 0 Fail Time 0

Delay 2 0.0

Phases	1-8								9-16							
Call Phases		2														
Yellow Lock Phases																
Red Lock Phases																
Extend Phases		2														
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 16

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases		2														
Yellow Lock Phases																
Red Lock Phases																
Extend Phases		2														
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 21

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Enabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases								8								
Yellow Lock Phases																
Red Lock Phases																
Extend Phases								8								
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 22

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Delay 0.0 | Extend 0.0 | Carryover 0.0 | Queue Limit 0

Mode No Disc | Added Disabled | System Enabled

Fail Mode None | Max Pres 0 | No Act 0 | Erratic 0 | Fail Time 0

Delay 2 0.0

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases								8								
Yellow Lock Phases																
Red Lock Phases																
Extend Phases								8								
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 23

Delay 0.0 | Extend 0.0 | Carryover 0.0 | Queue Limit 0

Mode No Disc | Added Disabled | System Disabled

Fail Mode None | Max Pres 0 | No Act 0 | Erratic 0 | Fail Time 0

Delay 2 0.0

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases								8								
Yellow Lock Phases																
Red Lock Phases																
Extend Phases								8								
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 24

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases								8								
Yellow Lock Phases																
Red Lock Phases																
Extend Phases								8								
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 29

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases				4												
Yellow Lock Phases																
Red Lock Phases																
Extend Phases				4												
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 30

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Delay 0.0 | Extend 0.0 | Carryover 0.0 | Queue Limit 0

Mode No Disc | Added Disabled | System Disabled

Fail Mode None | Max Pres 0 | No Act 0 | Erratic 0 | Fail Time 0

Delay 2 0.0

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases				4												
Yellow Lock Phases																
Red Lock Phases																
Extend Phases				4												
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 31

Delay 0.0 | Extend 0.0 | Carryover 0.0 | Queue Limit 0

Mode No Disc | Added Disabled | System Disabled

Fail Mode None | Max Pres 0 | No Act 0 | Erratic 0 | Fail Time 0

Delay 2 0.0

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases				4												
Yellow Lock Phases																
Red Lock Phases																
Extend Phases				4												
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 32

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Delay 0.0 Extend 0.0 Carryover 0.0 Queue Limit 0

Mode No Disc Added Disabled System Disabled

Fail Mode None Max Pres 0 No Act 0 Erratic 0 Fail Time 0

Delay 2 0.0

Phases	1-8								9-16							
Call Phases				4												
Yellow Lock Phases																
Red Lock Phases																
Extend Phases				4												
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 33

Delay 0.0 Extend 0.0 Carryover 0.0 Queue Limit 0

Mode No Disc Added Disabled System Disabled

Fail Mode None Max Pres 0 No Act 0 Erratic 0 Fail Time 0

Delay 2 0.0

Phases	1-8								9-16							
Call Phases	1															
Yellow Lock Phases																
Red Lock Phases																
Extend Phases	1															
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 35

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	Disconnect	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases						6										
Yellow Lock Phases																
Red Lock Phases																
Extend Phases						6										
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 41

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases					5											
Yellow Lock Phases																
Red Lock Phases																
Extend Phases					5											
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 43

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	Disconnect	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases		2														
Yellow Lock Phases																
Red Lock Phases																
Extend Phases		2														
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 49

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases			3													
Yellow Lock Phases																
Red Lock Phases																
Extend Phases			3													
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 51

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Delay 0.0 Extend 0.0 Carryover 0.0 Queue Limit 0

Mode Disconnect Added Disabled System Disabled

Fail Mode None Max Pres 0 No Act 0 Erratic 0 Fail Time 0

Delay 2 0.0

Phases	1-8								9-16							
Call Phases								8								
Yellow Lock Phases																
Red Lock Phases																
Extend Phases								8								
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 57

Delay 0.0 Extend 0.0 Carryover 0.0 Queue Limit 0

Mode No Disc Added Disabled System Disabled

Fail Mode None Max Pres 0 No Act 0 Erratic 0 Fail Time 0

Delay 2 0.0

Phases	1-8								9-16							
Call Phases							7									
Yellow Lock Phases																
Red Lock Phases																
Extend Phases							7									
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 59

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	Disconnect	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases				4												
Yellow Lock Phases																
Red Lock Phases																
Extend Phases				4												
XSwitch Phases																
Bike Call Phases																

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Pedestrian Detector 1

No Act: 0 | Max Pres: 0 | Erratic: 0 | Fail Mode: None

Phases/Overlaps	1-8								9-16							
Call Ped Phases													3			
Call Ped Olaps	1															
Call Phases																
Locked Call Phases																
Ped Entry Phases																
Olap Ped Entry Phases																
Ped Cascade Phases																
Call Walk2																

Pedestrian Detector 2

No Act: 0 | Max Pres: 0 | Erratic: 0 | Fail Mode: None

Phases/Overlaps	1-8								9-16							
Call Ped Phases		2														
Call Ped Olaps																
Call Phases																
Locked Call Phases																
Ped Entry Phases																
Olap Ped Entry Phases																
Ped Cascade Phases																
Call Walk2																

Pedestrian Detector 4

No Act: 0 | Max Pres: 0 | Erratic: 0 | Fail Mode: None

Phases/Overlaps	1-8								9-16							
Call Ped Phases				4												
Call Ped Olaps																
Call Phases																
Locked Call Phases																
Ped Entry Phases																
Olap Ped Entry Phases																
Ped Cascade Phases																
Call Walk2																

Pedestrian Detector 6

No Act: 0 | Max Pres: 0 | Erratic: 0 | Fail Mode: None

Phases/Overlaps	1-8								9-16							
Call Ped Phases						6										
Call Ped Olaps																
Call Phases																
Locked Call Phases																
Ped Entry Phases																
Olap Ped Entry Phases																

281 - Fair oaks & Howe Ave

Pedestrian Detector 8

2/6/2020 2:33:54 PM

No Act: 0 | Max Pres: 0 | Erratic: 0 | Fail Mode: None

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Ped Phases								8								
Call Ped Olaps																
Call Phases																
Locked Call Phases																
Ped Entry Phases																
Olap Ped Entry Phases																
Ped Cascade Phases																
Call Walk2																

281 - Fair oaks & Howe Ave

Control / Config

2/6/2020 2:33:54 PM

Pattern Mode	Central				
Manual Pattern	0	Manual Offset	0		
Stop Time Input	Enabled				
Aux Switch	StopTm		5		
DLS Mode	D4	Time Zone	Pac (UTC-8)	GPS Thresh	0
Password Timeout	5				

	1-8	9-16
Maint Phs Recalls		
Maint Ped Recalls		

Serial 1 Port Configuration

Broadcast Plan/Sync	Disabled	Broadcast Time	00:00
Serial Rebroadcast	Disabled	Response	None

Serial 2 Port Configuration

Broadcast Plan/Sync	Disabled	Broadcast Time	00:00

Ethernet Port Configuration

Broadcast Plan/Sync	Disabled	Broadcast Time	00:00
Serial Rebroadcast	Disabled		

Peer Configuration

Peer 1	0
Peer 2	0
Peer 3	0
Peer 4	0
Peer 5	0
Peer 6	0
Peer 7	0
Peer 8	0

281 - Fair oaks & Howe Ave

Logging

2/6/2020 2:33:54 PM

VO Log Period	15
Power On	Enabled
Ext Start	Enabled
Man Control	Enabled
Cabinet Door	Enabled
MMU Faults	Enabled
BIU Faults	Enabled
Det Faults	Enabled
Coordination	Enabled
Preempt	Enabled
Soft Preempt	Disabled
Zone	Disabled
Speed Traps	Disabled

1 of 2 Hits (Det BIU 1)
1 of 2 Hits (Det BIU 2)
1 of 2 Hits (Det BIU 3)
1 of 2 Hits (Det BIU 4)
SPmt 1 Req Switch
SPmt 2 Req Switch
SPmt 3 Req Switch
SPmt 4 Req Switch
Zone 1 Req Switch
Zone 2 Req Switch
Zone 3 Req Switch
Zone 4 Req Switch
Zone 5 Req Switch
Zone 6 Req Switch
Zone 7 Req Switch
Zone 8 Req Switch
Trap Grp 1 Req Switch
Trap Grp 2 Req Switch
Trap Grp 3 Req Switch
Trap Grp 4 Req Switch

281 - Fair oaks & Howe Ave

Restricted Data 2/6/2020 2:33:54 PM

(Serial Ports)

Serial Port 1: 4

Baud Rate: 9600 | 8N1 RTS On: 0 RTS Off: 0

Serial Port 2: 0

Baud Rate: 9600 | 8N1 RTS On: 0 RTS Off: 0

(Ethernet)

IP Address: 172. 31. 54. 160
Netmask: 255. 255. 254. 0
Broadcast Address: 0. 0. 0. 0
Gateway: 172. 31. 54. 254
Gateway 2: 0. 0. 0. 0
Gateway 3: 0. 0. 0. 0
Gateway 4: 0. 0. 0. 0

Admin IP: 0. 0. 0. 0 Leases: 0
Admin Netmask: 0. 0. 0. 0

Port: 161 Reply Mode: Host
Broadcast Port: 0 Response: Time/Plan
Time Port: 0

(General)

Controller Address: 1 Timeout: 0

Peer Address: 0 Timeout: 0

Remote Calls: Disabled

Remote Preempt: Disabled

Remote Soft Preempt: Disabled

Remote Priority: Disabled

Remote MCE: Disabled MCE Max: 0

McCain ATCeX D4

CITY OF SACRAMENTO
DETECTION SCHEDULE

281 - Fair Oaks at Howe Detection Summary

	Phase	Controller Det. Input	Location	Direction	Controller / Detector Type / Function			
					Extend	Delay	Passage	Notes
BIU 2	Ø	1						
	Ø	2						
	Ø	3						
	Ø	4						
	Ø6	5	Rear	EB			x	D1
	Ø6	6	Rear	EB			x	D2
	Ø6	7	Rear	EB			x	D3
	Ø6	8	Mid	EB			x	D4
	Ø	9						
	Ø	10						
	Ø	11						
	Ø	12						
	Ø2	13	Rear	WB			x	D1
	Ø2	14	Rear	WB			x	D2
	Ø2	15						
	Ø	16	Mid	WB			x	D3
	Ø	17						
	Ø	18						
	Ø	19						
	Ø	20						
	Ø4	21	Rear	SB			x	D1
	Ø4	22	Rear	SB			x	D2
	Ø4	23	Rear	SB			x	D3
	Ø4	24	Mid	SB			x	D4
	Ø	25						
	Ø	26						
	Ø	27						
	Ø	28						
	Ø8	29	Rear	NB			x	D1
	Ø8	30	Rear	NB			x	D2
	Ø8	31	Rear	NB			x	D3
	Ø8	32	Mid	NB			x	D4
BIU 3	Ø1	33	Left	E-N			x	Door Switch & Video
	Ø1	34						
	Ø6	35	Front	EB			x	Door Switch & Video; Disconnect
	Ø6	36						
	Ø6	37						
	Ø6	38						
	Ø6	39						
	Ø6	40						
	Ø5	41	Left	W-S			x	Door Switch & Video
	Ø5	42						
	Ø2	43	Front	WB			x	Door Switch & Video; Disconnect
	Ø2	44						
	Ø2	45						
	Ø2	46						
	Ø2	47						
	Ø2	48						
BIU 4	Ø3	49	Left	N-W			x	Door Switch & Video
	Ø3	50						
	Ø8	51	Front	NB			x	Door Switch & Video; Disconnect
	Ø8	52						
	Ø8	53						
	Ø8	54						
	Ø8	55						
	Ø8	56						
	Ø7	57	Left	S-E			x	Door Switch & Video
	Ø7	58						
	Ø4	59	Front	SB			x	Door Switch & Video; Disconnect
	Ø4	60						
	Ø4	61						
	Ø4	62						
	Ø4	63						
	Ø4	64						

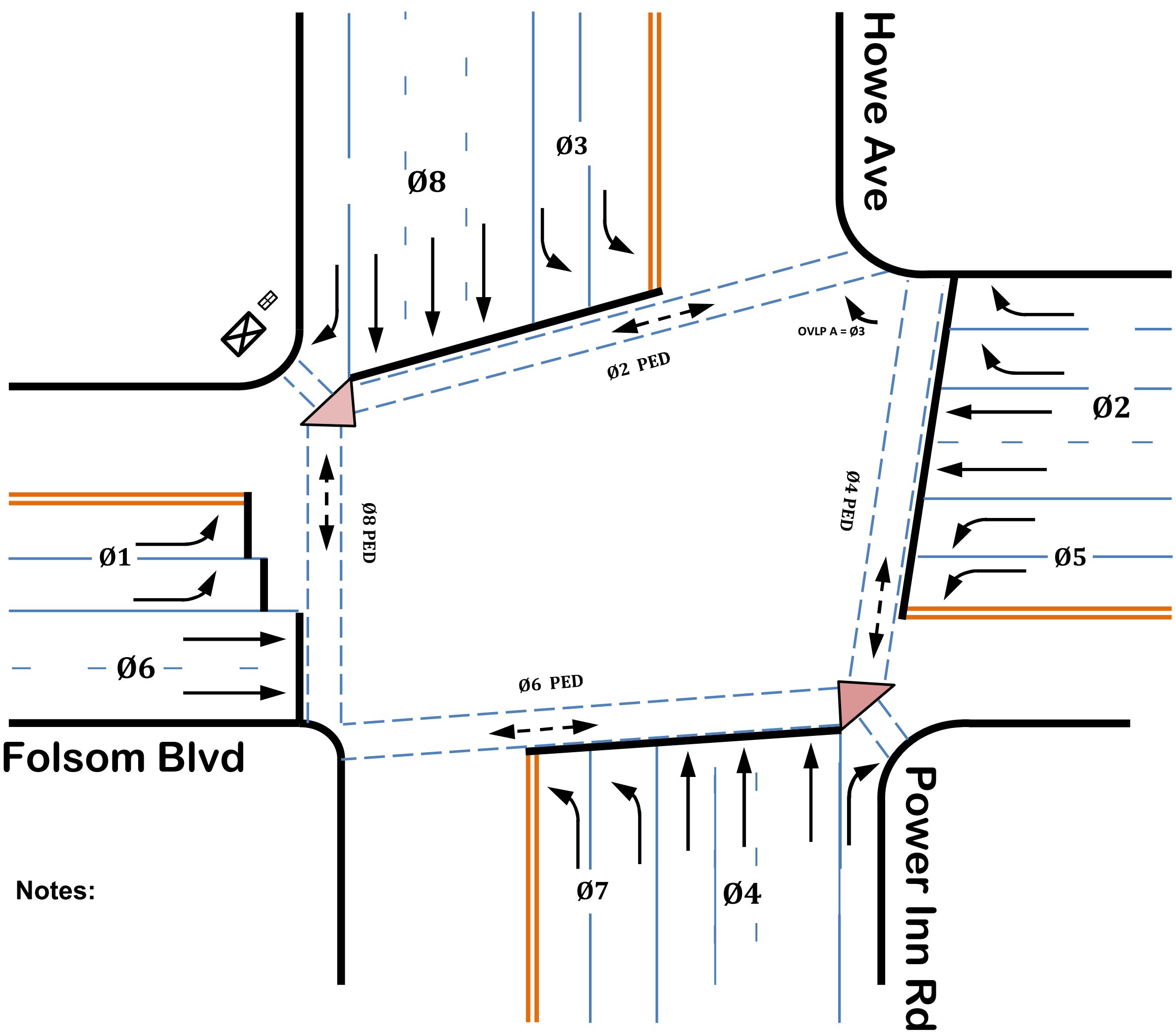
McCain D-4

TRAFFIC SIGNAL CONTROLLER PROGRAM CHART

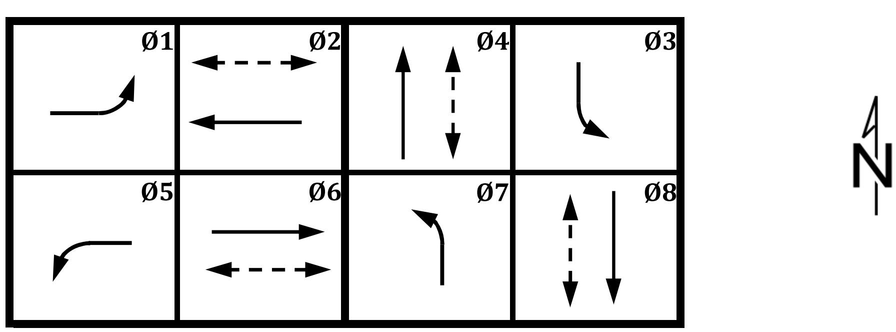
N/S **Howe/Power Inn Rd** **E/W** **Folsom Blvd**

INTERSECTION #: **324** System: IP Address:

Prepared by: smb Approved by: Draft Date Implemented: 10/21/2020



Notes:



324 - Folsom & Power Inn

Phase Timing

10/21/2020 1:50:10 PM

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Min Green	6	6	6	6	6	6	6	6	0	0	0	0	0	0	0	0
Veh Ext	1.5	2.5	1.5	3.2	1.5	3.2	1.5	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Green 1	35	40	60	50	35	40	35	60	0	0	0	0	0	0	0	0
Max Green 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Ext	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellow	3.5	4.7	3.5	4.3	3.5	4.7	3.5	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clr	0.8	0.9	1.6	0.6	0.5	1.0	1.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv Flash	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bike MG	11	11	13	10	11	11	13	10	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0
Ped Clr	0	30	0	29	0	27	0	23	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sol DW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Early Wlk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Wlk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce After	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TTReduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Max Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neg Ped	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AP Disc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pmt Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pmt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pmt Ped Clr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

324 - Folsom & Power Inn

Phase Options

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Phases	1-8								9-16							
Min Recalls																
Max Recalls																
Ped Recalls																
Soft Recall				4				8								
Dual Entry																
Red Rest																
Walk Rest																
Walk Expand																
Ped Recycle																
Sim Ped Term																
PC Thru Clr																
Guar Passage																
No Simult Gap		2		4		6		8								
Yel Lock																
Red Lock																
PhaseNext Lock																
No Term Call																
Cond Serv	1		3		5		7									
CS Enable																
Cond Reserve																
Reserve																
Veh Omit																
Ped Omit																
Perm Phase																
Protect Calls																
Protect Calls 2																
Flash Entry																
Flash Exit																
Flash Exit Yel																
Flash Exit Red																
Ped Scramble																
No Min Yel																
No Min Red Rev																
Max Scramble Walk																
Flash Yellow																
Flash FYA																
CNA 1																
CNA 2																

324 - Folsom & Power Inn

Phase Startup Options

10/21/2020 1:50:10 PM

Startup Flash	0	Mode	Red->Yel
Startup All Red	6	Yellow	0.0

Phases	1-8								9-16							
Startup Phases				4				8								
Startup Yellow				4				8								
Startup Red																
Startup No Walk		2		4		6		8								
Startup Next																
Startup Yel Fls																
Startup FYA																
No Veh Call																
No Ped Call		2		4		6		8								

Phase Startup Timing

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Start Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Max Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Unit

Red Revert	2.0	Ped Protect	No	AdvFls in Flash	No

324 - Folsom & Power Inn

Ring Sequence / Conflicting Phases

10/21/2020 1:50:10 PM

Ringgroup 1

Ring 1	1	2	4	3	0	0	0	0	0	0	0	0	0	0	0	0
Ring 2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0

Ringgroup 2

Custom Sequences

Seq 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Conflicting Phases	1-8	9-16
Phase 1		
Phase 2		
Phase 3		
Phase 4		
Phase 5		
Phase 6		
Phase 7		
Phase 8		
Phase 9		
Phase 10		
Phase 11		
Phase 12		
Phase 13		
Phase 14		
Phase 15		
Phase 16		

324 - Folsom & Power Inn

MCE Options

10/21/2020 1:50:10 PM

Phases	1-8								9-16							
MCE Ped Protect																
MCE Veh Call																
MCE Ped Call																
MCE Veh Omit																
MCE Ped Omit																
MCE Veh Sync																
MCE Ped Sync																
MCE Halt Don't Walk																

LRV Phases	1-8							
MCE LRV Term Early								

324 - Folsom & Power Inn

FYA/FRA

10/21/2020 1:50:10 PM

FYA	1	2	3	4	5	6	7	8
Prot Phs	0	0	0	0	0	0	0	0
Opp Thru	0	0	0	0	0	0	0	0
Start Phs	0	0	0	0	0	0	0	0
Opp Ped	0	0	0	0	0	0	0	0
Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min FYA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Prot Red	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Head Mode	FYA 1	FYA 1	FYA 1	FYA 1	FYA 1	FYA 1	FYA 1	FYA 1

Ped Hawk 1

Veh Phase	0		
Ped Phase	0		
Flash Yel	0.0	Dark Signal	Yes
Flash Delay	0.0	Flash Carryover	0.0
Green Mode	Normal		

Ped Hawk 2

Veh Phase	0		
Ped Phase	0		
Flash Yel	0.0	Dark Signal	Yes
Flash Delay	0.0	Flash Carryover	0.0
Green Mode	Normal		

Ped Hawk 3

Veh Phase	0		
Ped Phase	0		
Flash Yel	0.0	Dark Signal	Yes
Flash Delay	0.0	Flash Carryover	0.0
Green Mode	Normal		

Ped Hawk 4

Veh Phase	0		
Ped Phase	0		
Flash Yel	0.0	Dark Signal	Yes
Flash Delay	0.0	Flash Carryover	0.0
Green Mode	Normal		

324 - Folsom & Power Inn

Overlap Startup Options

10/21/2020 1:50:10 PM

Overlaps	1-8								9-16							
Startup Overlap Green																
Startup Overlap Yellow																

Overlap Startup Timing

Overlap	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Start Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Min Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Overlap Unit Options

Overlaps	1-8								9-16							
Overlap Ped Recalls																
MCE Olap Ped Protect																
MCE Olap Ped Calls																
MCE Olap Ped Expand																
No Min Yellow																
No Min Red Rev																
Flash Yellow																
No Conflict																
Pre Signal																
Perm Red																
Perm FYA																
Perm FRA																

324 - Folsom & Power Inn

Coordination Options

10/21/2020 1:50:10 PM

Sync Time	00:00	RTC Set Time	00:00
Transition Mode	Best 2	Ped Adjust	None
Trans Short %	25	Trans Long %	35
Offset Reference	Crd Grp End	Short Cycles	0
Dual Entry	Strict	Overlap F/O	Disabled
Master Sync Mode	RTC	Master Sync Length	0
Adapt Thresh	3	Adapt Step	2
External Plan Max	0		
Hardwire No Match	Sched	Hardwire Sync Fail	0
Override Omit/Recall	No		

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
No Trans Recall																
Trans Ped Recall																
Trans Phases																

324 - Folsom & Power Inn

Hardwire Plans

10/21/2020 1:50:10 PM

Hardwire	Plan Select								Pattern	Offset	Mode
Plan 1									0	0	Hardwire
Plan 2									0	0	Hardwire
Plan 3									0	0	Hardwire
Plan 4									0	0	Hardwire
Plan 5									0	0	Hardwire
Plan 6									0	0	Hardwire
Plan 7									0	0	Hardwire
Plan 8									0	0	Hardwire
Plan 9									0	0	Hardwire
Plan 10									0	0	Hardwire
Plan 11									0	0	Hardwire
Plan 12									0	0	Hardwire
Plan 13									0	0	Hardwire
Plan 14									0	0	Hardwire
Plan 15									0	0	Hardwire
Plan 16									0	0	Hardwire
Plan 17									0	0	Hardwire
Plan 18									0	0	Hardwire
Plan 19									0	0	Hardwire
Plan 20									0	0	Hardwire
Plan 21									0	0	Hardwire
Plan 22									0	0	Hardwire
Plan 23									0	0	Hardwire
Plan 24									0	0	Hardwire
Plan 25									0	0	Hardwire
Plan 26									0	0	Hardwire
Plan 27									0	0	Hardwire
Plan 28									0	0	Hardwire
Plan 29									0	0	Hardwire
Plan 30									0	0	Hardwire
Plan 31									0	0	Hardwire
Plan 32									0	0	Hardwire

324 - Folsom & Power Inn

Soft Interconnect

10/21/2020 1:50:10 PM

Mode	Slave	Remote Int Number	0
Yield Delay	0		
Yield Duration	0		
Permissive	0		
Local Hold Limit	0		

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Local Control Phases																
Local Hold Phases																
Local Perm Phases																
Local Call Phases																
Remote Perm Phases																
Remote Hold Phases																

324 - Folsom & Power Inn

Preempt Inputs

10/21/2020 1:50:10 PM

Preempt Input	1	2	3	4	5	6	7	8	9	10
Delay	0	0	0	0	0	0	0	0	0	0
Checkout Limit	0	0	0	0	0	0	0	0	0	0
Locked	No	No	No	No	No	No	No	No	No	No
Interlock	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Input Number	1	2	3	4	5	6	0	0	0	0
Input Priority	All	All	All	All	All	All	All	All	All	All
Delay Mode	Inp	Inp	Inp	Inp	Inp	Inp	Inp	Inp	Inp	Inp

Preempt Priority

Preempt	1	2	3	4	5	6	7	8	9	10
Priority	0	0	0	0	0	0	0	0	0	0

Remote Preemption

Remote Preempt	RM 1	RM 2	RM 3	RM 4	RM 5	RM 6	RM 7	RM 8
Int Number	0	0	0	0	0	0	0	0
PE Number	0	0	0	0	0	0	0	0
Mode	Dis	Dis	Dis	Dis	Dis	Dis	Dis	Dis
Slack	0	0	0	0	0	0	0	0
Travel Time	0	0	0	0	0	0	0	0
Alt TT 1	0	0	0	0	0	0	0	0
Alt TT 2	0	0	0	0	0	0	0	0
Alt TT 3	0	0	0	0	0	0	0	0
Alt TT 4	0	0	0	0	0	0	0	0
Alt TT 5	0	0	0	0	0	0	0	0
Alt TT 6	0	0	0	0	0	0	0	0
Alt TT 7	0	0	0	0	0	0	0	0

324 - Folsom & Power Inn

Preempt 2 (Configuration)

10/21/2020 1:50:10 PM

Enabled	Yes	Dwell Mode	Normal	Output Mode	All
Output2 Mode	All	Fail Action	Preempt Off	Exit Mode	Normal
Override Flash	Yes	Change Phasenext	Yes		

	1-8								9-16							
Enable Phases	1					6										
Preempt Inputs		2														

	1-8									
LRV Disable									Max	0
LRV Dwell Flash										
LRV Omit									Delay	0
LRV No Yel										

Preempt 2 (Timing/Phases/Overlaps)

Phases/Overlaps	1-8								9-16							
Omit Olap Grn Clr																
Phs EWlk to Grn																
TClr 1 Veh Phases																
TClr 1 Ped Phases																
TClr 1 Olap																
TClr 1 Olap Ped																
TClr 2 Veh Phases																
TClr 2 Ped Phases																
TClr 2 Olap																
TClr 2 Olap Ped																
Init Dwell Phases																
Dwell Veh Phases																
Dwell Ped Phases																
Dwell Olap																
Dwell Olap Ped																
Exit Veh Phases																
Exit Ped Phases																
Exit Olap																
Exit Olap Ped																
Zero Phase Walk		2		4		6		8								
Zero Phase Ped Clr																
Zero Phase Green																
Zero Olap Walk																
Zero Olap Ped Clr																
Zero Olap Green																
Dwell-Phase Red																
Dwell-Phase Red Flash																
Dwell-Phase Yel Flash																
Dwell-Olap Red Flash																
Dwell-Olap Yel Flash																
Dwell-Ped Dark																
Dwell-Olap Ped Dark																

Start Green	0	Start Walk	0
		Start Ped Clr	0
Track Clear 1	0	Track Clear 2	0
TC1 Extend	0	TC1 Max	0
Exit Ped Clr	0	Exit Yellow	0.0
Exit Red	0.0		
Min Dwell	5	Min Duration	0
Dwell Extend	3		
Max Dwell	55	Max Call	0
Reserve Inh Same	0		
Reserve Inh All	0		
Delay	0		

Phases/Overlaps	1-8								9-16							
TClr 1 FR Olap																
TClr 2 FR Olap																
Dwell FR Olap																
TClr 1 FYA																
TClr 2 FYA																
Dwell FYA																

324 - Folsom & Power Inn

Preempt 3 (Configuration)

10/21/2020 1:50:10 PM

Enabled	Yes	Dwell Mode	Normal	Output Mode	All
Output2 Mode	All	Fail Action	Preempt Off	Exit Mode	Normal
Override Flash	No	Change Phasenext	Yes		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Phases		2			5											
Preempt Inputs			3													

1-8	1	2	3	4	5	6	7	8		
LRV Disable									Max	0
LRV Dwell Flash										
LRV Omit									Delay	0
LRV No Yel										

Preempt 3 (Timing/Phases/Overlaps)

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Omit Olap Grn Clr																
Phs EWlk to Grn																
TClr 1 Veh Phases																
TClr 1 Ped Phases																
TClr 1 Olap																
TClr 1 Olap Ped																
TClr 2 Veh Phases																
TClr 2 Ped Phases																
TClr 2 Olap																
TClr 2 Olap Ped																
Init Dwell Phases																
Dwell Veh Phases	1					6										
Dwell Ped Phases																
Dwell Olap																
Dwell Olap Ped																
Exit Veh Phases	1					6										
Exit Ped Phases																
Exit Olap																
Exit Olap Ped																
Zero Phase Walk		2		4		6		8								
Zero Phase Ped Clr																
Zero Phase Green																
Zero Olap Walk																
Zero Olap Ped Clr																
Zero Olap Green																
Dwell-Phase Red																
Dwell-Phase Red Flash																
Dwell-Phase Yel Flash																
Dwell-Olap Red Flash																
Dwell-Olap Yel Flash																
Dwell-Ped Dark																
Dwell-Olap Ped Dark																

Start Green	0	Start Walk	0
		Start Ped Clr	0
Track Clear 1	0	Track Clear 2	0
TC1 Extend	0	TC1 Max	0
Exit Ped Clr	0	Exit Yellow	0.0
Exit Red	0.0		
Min Dwell	5	Min Duration	0
Dwell Extend	3		
Max Dwell	55	Max Call	0
Reserve Inh Same	0		
Reserve Inh All	0		
Delay	0		

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
TClr 1 FR Olap																
TClr 2 FR Olap																
Dwell FR Olap																
TClr 1 FYA																
TClr 2 FYA																
Dwell FYA																

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Preempt 4 (Configuration)

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Enabled	Yes	Dwell Mode	Normal	Output Mode	All
Output2 Mode	All	Fail Action	Preempt Off	Exit Mode	Normal
Override Flash	No	Change Phasenext	Yes		

	1-8								9-16							
Enable Phases			3					8								
Preempt Inputs				4												

	1-8									
LRV Disable									Max	0
LRV Dwell Flash										
LRV Omit									Delay	0
LRV No Yel										

Preempt 4 (Timing/Phases/Overlaps)

Phases/Overlaps	1-8								9-16							
Omit Olap Grn Clr																
Phs EWlk to Grn																
TClr 1 Veh Phases																
TClr 1 Ped Phases																
TClr 1 Olap																
TClr 1 Olap Ped																
TClr 2 Veh Phases																
TClr 2 Ped Phases																
TClr 2 Olap																
TClr 2 Olap Ped																
Init Dwell Phases																
Dwell Veh Phases			3					8								
Dwell Ped Phases																
Dwell Olap																
Dwell Olap Ped																
Exit Veh Phases			3					8								
Exit Ped Phases																
Exit Olap																
Exit Olap Ped																
Zero Phase Walk		2		4		6		8								
Zero Phase Ped Clr																
Zero Phase Green																
Zero Olap Walk																
Zero Olap Ped Clr																
Zero Olap Green																
Dwell-Phase Red																
Dwell-Phase Red Flash																
Dwell-Phase Yel Flash																
Dwell-Olap Red Flash																
Dwell-Olap Yel Flash																
Dwell-Ped Dark																
Dwell-Olap Ped Dark																

Start Green	0	Start Walk	0
		Start Ped Clr	0
Track Clear 1	0	Track Clear 2	0
TC1 Extend	0	TC1 Max	0
Exit Ped Clr	0	Exit Yellow	0.0
Exit Red	0.0		
Min Dwell	5	Min Duration	0
Dwell Extend	3		
Max Dwell	55	Max Call	0
Reserve Inh Same	0		
Reserve Inh All	0		
Delay	0		

Phases/Overlaps	1-8								9-16							
TClr 1 FR Olap																
TClr 2 FR Olap																
Dwell FR Olap																
TClr 1 FYA																
TClr 2 FYA																
Dwell FYA																

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Preempt 5 (Configuration)

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Enabled	Yes	Dwell Mode	Normal	Output Mode	All
Output2 Mode	All	Fail Action	Preempt Off	Exit Mode	Normal
Override Flash	No	Change Phasenext	Yes		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Phases				4			7									
Preempt Inputs					5											

	1	2	3	4	5	6	7	8		
LRV Disable									Max	0
LRV Dwell Flash										
LRV Omit									Delay	0
LRV No Yel										

Preempt 5 (Timing/Phases/Overlaps)

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Omit Olap Grn Clr																
Phs EWlk to Grn																
TClr 1 Veh Phases																
TClr 1 Ped Phases																
TClr 1 Olap																
TClr 1 Olap Ped																
TClr 2 Veh Phases																
TClr 2 Ped Phases																
TClr 2 Olap																
TClr 2 Olap Ped																
Init Dwell Phases																
Dwell Veh Phases				4			7									
Dwell Ped Phases																
Dwell Olap																
Dwell Olap Ped																
Exit Veh Phases				4			7									
Exit Ped Phases																
Exit Olap																
Exit Olap Ped																
Zero Phase Walk		2		4		6		8								
Zero Phase Ped Clr																
Zero Phase Green																
Zero Olap Walk																
Zero Olap Ped Clr																
Zero Olap Green																
Dwell-Phase Red																
Dwell-Phase Red Flash																
Dwell-Phase Yel Flash																
Dwell-Olap Red Flash																
Dwell-Olap Yel Flash																
Dwell-Ped Dark																
Dwell-Olap Ped Dark																

Start Green	0	Start Walk	0
		Start Ped Clr	0
Track Clear 1	0	Track Clear 2	0
TC1 Extend	0	TC1 Max	0
Exit Ped Clr	0	Exit Yellow	0.0
Exit Red	0.0		
Min Dwell	5	Min Duration	0
Dwell Extend	3		
Max Dwell	55	Max Call	0
Reserve Inh Same	0		
Reserve Inh All	0		
Delay	0		

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
TClr 1 FR Olap																
TClr 2 FR Olap																
Dwell FR Olap																
TClr 1 FYA																
TClr 2 FYA																
Dwell FYA																

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Soft Preempt 1 - Misc

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Dwell Step: 0 | Override SPE Flash: No

Override Steps

Phases/Overlaps	1-8								9-16							
Dwl Phase Red																
Dwl Phase Red Flash																
Dwl Phase Yel Flash																
Dwl Olap Red Flash																
Dwl Ped Dark																
Dwl Olap Ped Dark																
Dwl Zero Phase Ped Clr																
Dwl Zero Phase Green																
Dwl Zero Olap Ped Clr																
Dwl Zero Olap Green																

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Soft Preempt 2 - Misc

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Dwell Step: 0   Override SPE Flash: No

Override Steps

Phases/Overlaps	1-8								9-16							
Dwl Phase Red																
Dwl Phase Red Flash																
Dwl Phase Yel Flash																
Dwl Olap Red Flash																
Dwl Ped Dark																
Dwl Olap Ped Dark																
Dwl Zero Phase Ped Clr																
Dwl Zero Phase Green																
Dwl Zero Olap Ped Clr																
Dwl Zero Olap Green																

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Soft Preempt 3 - Misc

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Dwell Step	0	Override SPE Flash	No

Override Steps

Phases/Overlaps	1-8								9-16							
Dwl Phase Red																
Dwl Phase Red Flash																
Dwl Phase Yel Flash																
Dwl Olap Red Flash																
Dwl Ped Dark																
Dwl Olap Ped Dark																
Dwl Zero Phase Ped Clr																
Dwl Zero Phase Green																
Dwl Zero Olap Ped Clr																
Dwl Zero Olap Green																

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Soft Preempt 4 - Misc

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Dwell Step	0	Override SPE Flash	No

Override Steps								

Phases/Overlaps	1-8								9-16							
Dwl Phase Red																
Dwl Phase Red Flash																
Dwl Phase Yel Flash																
Dwl Olap Red Flash																
Dwl Ped Dark																
Dwl Olap Ped Dark																
Dwl Zero Phase Ped Clr																
Dwl Zero Phase Green																
Dwl Zero Olap Ped Clr																
Dwl Zero Olap Green																

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TOD Pattern Events

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	Time	DOW	Holidays	Mode	Pattern	Offset
Event 1	00:00			Sched	0	0
Event 2	00:00			Sched	0	0
Event 3	00:00			Sched	0	0
Event 4	00:00			Sched	0	0
Event 5	00:00			Sched	0	0
Event 6	00:00			Sched	0	0
Event 7	00:00			Sched	0	0
Event 8	00:00			Sched	0	0
Event 9	00:00			Sched	0	0
Event 10	00:00			Sched	0	0
Event 11	00:00			Sched	0	0
Event 12	00:00			Sched	0	0
Event 13	00:00			Sched	0	0
Event 14	00:00			Sched	0	0
Event 15	00:00			Sched	0	0
Event 16	00:00			Sched	0	0
Event 17	00:00			Sched	0	0
Event 18	00:00			Sched	0	0
Event 19	00:00			Sched	0	0
Event 20	00:00			Sched	0	0
Event 21	00:00			Sched	0	0
Event 22	00:00			Sched	0	0
Event 23	00:00			Sched	0	0
Event 24	00:00			Sched	0	0
Event 25	00:00			Sched	0	0
Event 26	00:00			Sched	0	0
Event 27	00:00			Sched	0	0
Event 28	00:00			Sched	0	0
Event 29	00:00			Sched	0	0
Event 30	00:00			Sched	0	0
Event 31	00:00			Sched	0	0
Event 32	00:00			Sched	0	0

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Holidays

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	Active Holidays								Month	Day	DOW							WOM
Date 1									0	0								0
Date 2									0	0								0
Date 3									0	0								0
Date 4									0	0								0
Date 5									0	0								0
Date 6									0	0								0
Date 7									0	0								0
Date 8									0	0								0
Date 9									0	0								0
Date 10									0	0								0
Date 11									0	0								0
Date 12									0	0								0
Date 13									0	0								0
Date 14									0	0								0
Date 15									0	0								0
Date 16									0	0								0
Date 17									0	0								0
Date 18									0	0								0
Date 19									0	0								0
Date 20									0	0								0
Date 21									0	0								0
Date 22									0	0								0
Date 23									0	0								0
Date 24									0	0								0
Date 25									0	0								0
Date 26									0	0								0
Date 27									0	0								0
Date 28									0	0								0
Date 29									0	0								0
Date 30									0	0								0
Date 31									0	0								0
Date 32									0	0								0

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Load Switch Outputs (BIU 1)

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	LS 1	LS 2	LS 3	LS 4	LS 5	LS 6	LS 7	LS 8
Red Function	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed
Red Index	1	2	3	4	5	6	7	8
Yellow Function	VehYel	VehYel	VehYel	VehYel	VehYel	VehYel	VehYel	VehYel
Yellow Index	1	2	3	4	5	6	7	8
Green Function	VehGrn	VehGrn	VehGrn	VehGrn	VehGrn	VehGrn	VehGrn	VehGrn
Green Index	1	2	3	4	5	6	7	8

Load Switch Outputs (BIU 2)

	LS 9	LS 10	LS 11	LS 12	LS 13	LS 14	LS 15	LS 16
Red Function	VehRed	DntWlk	DntWlk	DntWlk	VehRed	VehRed	VehRed	VehRed
Red Index	0	0	0	0	0	0	0	0
Yellow Function	VehRed	PedClr	PedClr	PedClr	VehRed	VehRed	VehRed	VehRed
Yellow Index	0	0	0	0	0	0	0	0
Green Function	VehRed	Walk	Walk	Walk	VehRed	VehRed	VehRed	VehRed
Green Index	0	0	0	0	0	0	0	0

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T/F Outputs (BIU 1)

	I/O 10	I/O 11	I/O 12	I/O 13
Output	VehRed	VehRed	VehRed	VehRed
Index	0	0	0	0

T/F Outputs (BIU 2)

	I/O 10	I/O 11	I/O 12	I/O 13	I/O 14	I/O 15
Output	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed
Index	0	0	0	0	0	0

T/F Outputs (BIU 3)

	OUT 1	OUT 2	OUT 3	OUT 4	OUT 5	OUT 6	OUT 7	OUT 8
Output	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed
Index	0	0	0	0	0	0	0	0

	OUT 9	OUT 10	OUT 11	OUT 12	OUT 13	OUT 14	OUT 15	I/O 1
Output	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed
Index	0	0	0	0	0	0	0	0

	I/O 2	I/O 3	I/O 4	I/O 5	I/O 6
Output	VehRed	VehRed	VehRed	VehRed	VehRed
Index	0	0	0	0	0

T/F Outputs (BIU 4)

	OUT 1	OUT 2	OUT 3	OUT 4	OUT 5	OUT 6	OUT 7	OUT 8
Output	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed
Index	0	0	0	0	0	0	0	0

	OUT 9	OUT 10	OUT 11	OUT 12	OUT 13	OUT 14	OUT 15	I/O 1
Output	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed
Index	0	0	0	0	0	0	0	0

	I/O 2	I/O 3	I/O 4	I/O 5	I/O 6	I/O 7	I/O 8	I/O 9
Output	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed
Index	0	0	0	0	0	0	0	0

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Detector Inputs (BIU 9)

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	Det 1	Det 2	Det 3	Det 4	Det 5	Det 6	Det 7	Det 8
Function	None	None	None	None	None	None	None	None
Index	1	2	3	4	0	0	0	0

	Det 9	Det 10	Det 11	Det 12	Det 13	Det 14	Det 15	Det 16
Function	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0

Detector Inputs (BIU 10)

	Det 17	Det 18	Det 19	Det 20	Det 21	Det 22	Det 23	Det 24
Function	None	None	None	None	None	None	None	None
Index	17	18	19	20	21	22	23	24

	Det 25	Det 26	Det 27	Det 28	Det 29	Det 30	Det 31	Det 32
Function	None	None	None	None	None	None	None	None
Index	25	26	27	28	29	30	31	32

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Detector Inputs (BIU 11)

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	Det 33	Det 34	Det 35	Det 36	Det 37	Det 38	Det 39	Det 40
Function	VehDet	VehDet	VehDet	None	VehDet	None	VehDet	VehDet
Index	33	34	35	36	37	38	39	40

	Det 41	Det 42	Det 43	Det 44	Det 45	Det 46	Det 47	Det 48
Function	VehDet	VehDet	VehDet	VehDet	VehDet	None	VehDet	VehDet
Index	41	42	43	44	45	46	47	48

Detector Inputs (BIU 12)

	Det 49	Det 50	Det 51	Det 52	Det 53	Det 54	Det 55	Det 56
Function	VehDet	VehDet	VehDet	VehDet	None	None	VehDet	VehDet
Index	49	50	51	52	53	54	55	56

	Det 57	Det 58	Det 59	Det 60	Det 61	Det 62	Det 63	Det 64
Function	VehDet	VehDet	VehDet	VehDet	None	None	VehDet	VehDet
Index	57	58	59	60	61	62	63	64

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T/F Inputs (BIU 1)

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	I/O 14	I/O 15	I/O 16	I/O 17	I/O 18	I/O 19	I/O 20	I/O 21
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0
	I/O 22	I/O 23	I/O 24	IN 1	IN 2	IN 3	IN 4	IN 5
Input	None	None	None	None	StopTm	None	None	None
Index	0	0	0	0	0	0	0	0
	IN 6	IN 7	IN 8	OPTO 1	OPTO 2	OPTO 3	OPTO 4	
Input	None	None	None	None	PedDet	PedDet	PedDet	
Index	0	0	0	0	0	0	0	

T/F Inputs (BIU 2)

	I/O 16	I/O 17	I/O 18	I/O 19	I/O 20	I/O 21	I/O 22	I/O 23
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0
	I/O 24	IN 1	IN 2	IN 3	IN 4	IN 5	IN 6	IN 7
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0
	IN 8	OPTO 1	OPTO 2	OPTO 3	OPTO 4			
Input	None	None	PedDet	PedDet	PedDet			
Index	0	0	0	0	0			

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T/F Inputs (BIU 3)

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	I/O 7	I/O 8	I/O 9	I/O 10	I/O 11	I/O 12	I/O 13	I/O 14
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0
	I/O 15	I/O 16	I/O 17	I/O 18	I/O 19	I/O 20	I/O 21	I/O 22
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0
	I/O 23	I/O 24	IN 1	IN 2	IN 3	IN 4	IN 5	IN 6
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0
	IN 7	IN 8	OPTO 1	OPTO 2	OPTO 3	OPTO 4		
Input	None	None	None	None	None	None		
Index	0	0	0	0	0	0		

T/F Inputs (BIU 4)

	I/O 10	I/O 11	I/O 12	I/O 13	I/O 14	I/O 15	I/O 16	I/O 17
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0
	I/O 18	I/O 19	I/O 20	I/O 21	I/O 22	I/O 23	I/O 24	IN 1
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0
	IN 2	IN 3	IN 4	IN 5	IN 6	IN 7	IN 8	OPTO 1
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0
	OPTO 2	OPTO 3	OPTO 4					
Input	None	None	None					
Index	0	0	0					

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Cabinet / MMU Configuration

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Cabinet Type	TS2-Type2
MMU Disable	Yes

	1-8								9-16							
MMU Channel Ignore																
Det BIU 1-No Fail Call																
Det BIU 2-No Fail Call																
Alt LS Flash																
Alt Phase Flash																
Alt Overlap Flash																
Alt LRV Flash																

	1-8								9-16							
CMU Channel Ignore																
	17-24								25-32							

	1-8								9-16							
Det IASM1-Det Diag																
	17-24															

	1-8								9-16							
Det IASM2-Det Diag																
	17-24															

Phase / Overlap Outputs

	Phase	Overlap
1	Normal	Normal
2	Normal	Normal
3	Normal	Normal
4	Normal	Normal
5	Normal	Normal
6	Normal	Normal
7	Normal	Normal
8	Normal	Normal
9	Normal	Normal
10	Normal	Normal
11	Normal	Normal
12	Normal	Normal
13	Normal	Normal
14	Normal	Normal
15	Normal	Normal
16	Normal	Normal

LRV Outputs

	LRV
1	2 Head
2	2 Head
3	2 Head
4	2 Head
5	2 Head
6	2 Head
7	2 Head
8	2 Head

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Vehicle Detector 1

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases	1															
Yellow Lock Phases																
Red Lock Phases																
Extend Phases	1															
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 2

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases		2														
Yellow Lock Phases																
Red Lock Phases																
Extend Phases		2														
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 3

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases			3													
Yellow Lock Phases																
Red Lock Phases																
Extend Phases			3													
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 4

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases				4												
Yellow Lock Phases																
Red Lock Phases																
Extend Phases				4												
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 5

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases					5											
Yellow Lock Phases																
Red Lock Phases																
Extend Phases					5											
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 6

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases						6										
Yellow Lock Phases																
Red Lock Phases																
Extend Phases						6										
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 7

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0
Mode	No Disc	Added	Disabled	System	Disabled		
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0
Fail Time	0						
Delay 2	0.0						

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases							7									
Yellow Lock Phases																
Red Lock Phases																
Extend Phases							7									
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 8

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0
Mode	No Disc	Added	Disabled	System	Disabled		
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0
Fail Time	0						
Delay 2	0.0						

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases								8								
Yellow Lock Phases																
Red Lock Phases																
Extend Phases								8								
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 9

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases	1															
Yellow Lock Phases																
Red Lock Phases																
Extend Phases	1															
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 10

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases		2														
Yellow Lock Phases																
Red Lock Phases																
Extend Phases		2														
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 11

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases			3													
Yellow Lock Phases																
Red Lock Phases																
Extend Phases			3													
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 12

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases				4												
Yellow Lock Phases																
Red Lock Phases																
Extend Phases				4												
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 13

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases					5											
Yellow Lock Phases																
Red Lock Phases																
Extend Phases					5											
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 14

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases						6										
Yellow Lock Phases																
Red Lock Phases																
Extend Phases						6										
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 15

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases							7									
Yellow Lock Phases																
Red Lock Phases																
Extend Phases							7									
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 16

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases								8								
Yellow Lock Phases																
Red Lock Phases																
Extend Phases								8								
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 17

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases						6										
Yellow Lock Phases																
Red Lock Phases																
Extend Phases						6										
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 18

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases						6										
Yellow Lock Phases																
Red Lock Phases																
Extend Phases						6										
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 19

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases						6										
Yellow Lock Phases																
Red Lock Phases																
Extend Phases						6										
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 20

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases							7									
Yellow Lock Phases																
Red Lock Phases																
Extend Phases							7									
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 21

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases							7									
Yellow Lock Phases																
Red Lock Phases																
Extend Phases							7									
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 22

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases							7									
Yellow Lock Phases																
Red Lock Phases																
Extend Phases							7									
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 31

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases					5											
Yellow Lock Phases																
Red Lock Phases																
Extend Phases					5											
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 32

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases					5											
Yellow Lock Phases																
Red Lock Phases																
Extend Phases					5											
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 33

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases	1															
Yellow Lock Phases																
Red Lock Phases																
Extend Phases	1															
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 34

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases	1															
Yellow Lock Phases																
Red Lock Phases																
Extend Phases																
XSwitch Phases																
Bike Call Phases	1															

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Vehicle Detector 35

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0
Mode	Disconnect	Added	Disabled	System	Disabled		
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0
Fail Time	0						
Delay 2	0.0						

Phases	1-8								9-16							
Call Phases						6										
Yellow Lock Phases																
Red Lock Phases																
Extend Phases						6										
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 39

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0
Mode	No Disc	Added	Disabled	System	Disabled		
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0
Fail Time	0						
Delay 2	0.0						

Phases	1-8								9-16							
Call Phases						6										
Yellow Lock Phases																
Red Lock Phases																
Extend Phases																
XSwitch Phases																
Bike Call Phases						6										

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Vehicle Detector 40

10/21/2020 1:50:10 PM

Delay	10.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	Disconnect	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases						6										
Yellow Lock Phases																
Red Lock Phases																
Extend Phases						6										
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 41

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases					5											
Yellow Lock Phases																
Red Lock Phases																
Extend Phases					5											
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 42

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0
Mode	No Disc	Added	Disabled	System	Disabled		
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0
Fail Time	0						
Delay 2	0.0						

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases					5											
Yellow Lock Phases																
Red Lock Phases																
Extend Phases																
XSwitch Phases																
Bike Call Phases					5											

Vehicle Detector 43

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0
Mode	Disconnect	Added	Disabled	System	Disabled		
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0
Fail Time	0						
Delay 2	0.0						

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases		2														
Yellow Lock Phases																
Red Lock Phases																
Extend Phases		2														
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 44

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases		2														
Yellow Lock Phases																
Red Lock Phases																
Extend Phases		2														
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 45

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases		2														
Yellow Lock Phases																
Red Lock Phases																
Extend Phases		2														
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 47

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases		2														
Yellow Lock Phases																
Red Lock Phases																
Extend Phases																
XSwitch Phases																
Bike Call Phases		2														

Vehicle Detector 48

Delay	8.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	Disconnect	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases		2														
Yellow Lock Phases																
Red Lock Phases																
Extend Phases		2														
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 49

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases			3													
Yellow Lock Phases																
Red Lock Phases																
Extend Phases			3													
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 50

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases			3													
Yellow Lock Phases																
Red Lock Phases																
Extend Phases																
XSwitch Phases																
Bike Call Phases			3													

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Vehicle Detector 51

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	Disconnect	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases								8								
Yellow Lock Phases																
Red Lock Phases																
Extend Phases								8								
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 55

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases								8								
Yellow Lock Phases																
Red Lock Phases																
Extend Phases																
XSwitch Phases																
Bike Call Phases								8								

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Vehicle Detector 56

10/21/2020 1:50:10 PM

Delay	10.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	Disconnect	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases								8								
Yellow Lock Phases																
Red Lock Phases																
Extend Phases								8								
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 57

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases							7									
Yellow Lock Phases																
Red Lock Phases																
Extend Phases							7									
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 58

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0
Mode	No Disc	Added	Disabled	System	Disabled		
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0
Fail Time	0						
Delay 2	0.0						

Phases	1-8								9-16							
Call Phases							7									
Yellow Lock Phases																
Red Lock Phases																
Extend Phases																
XSwitch Phases																
Bike Call Phases							7									

Vehicle Detector 59

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0
Mode	Disconnect	Added	Disabled	System	Disabled		
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0
Fail Time	0						
Delay 2	0.0						

Phases	1-8								9-16							
Call Phases				4												
Yellow Lock Phases																
Red Lock Phases																
Extend Phases				4												
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 60

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases				4												
Yellow Lock Phases																
Red Lock Phases																
Extend Phases				4												
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 63

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases				4												
Yellow Lock Phases																
Red Lock Phases																
Extend Phases																
XSwitch Phases																
Bike Call Phases				4												

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Vehicle Detector 64

10/21/2020 1:50:10 PM

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases				4												
Yellow Lock Phases																
Red Lock Phases																
Extend Phases				4												
XSwitch Phases																
Bike Call Phases																

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Pedestrian Detector 2

No Act: 0 | Max Pres: 0 | Erratic: 0 | Fail Mode: None

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Ped Phases		2														
Call Ped Olaps																
Call Phases																
Locked Call Phases																
Ped Entry Phases																
Olap Ped Entry Phases																
Ped Cascade Phases																
Call Walk2																

Pedestrian Detector 4

No Act: 0 | Max Pres: 0 | Erratic: 0 | Fail Mode: None

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Ped Phases				4												
Call Ped Olaps																
Call Phases																
Locked Call Phases																
Ped Entry Phases																
Olap Ped Entry Phases																
Ped Cascade Phases																
Call Walk2																

Pedestrian Detector 6

No Act: 0 | Max Pres: 0 | Erratic: 0 | Fail Mode: None

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Ped Phases						6										
Call Ped Olaps																
Call Phases																
Locked Call Phases																
Ped Entry Phases																
Olap Ped Entry Phases																
Ped Cascade Phases																
Call Walk2																

Pedestrian Detector 8

No Act: 0 | Max Pres: 0 | Erratic: 0 | Fail Mode: None

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Ped Phases								8								
Call Ped Olaps																
Call Phases																
Locked Call Phases																
Ped Entry Phases																
Olap Ped Entry Phases																
Ped Cascade Phases																
Call Walk2																

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Adaptive Priority - General/Local Detectors

10/21/2020 1:50:10 PM

Local Detector Slack	0
Remote Detector Slack	0
Local Adjust Threshold	0
Remote Adjust Threshold	0

Detector	1	2	3	4	5	6	7	8
Step (Base)	0	0	0	0	0	0	0	0
Max (Base)	0	0	0	0	0	0	0	0
Step (Alt 1)	0	0	0	0	0	0	0	0
Max (Alt 1)	0	0	0	0	0	0	0	0
Step (Alt 2)	0	0	0	0	0	0	0	0
Max (Alt 2)	0	0	0	0	0	0	0	0
Step (Alt 3)	0	0	0	0	0	0	0	0
Max (Alt 3)	0	0	0	0	0	0	0	0

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Estimated Delay

10/21/2020 1:50:10 PM

Transit	1	2	3	4	5	6	7	8
Disable	No	No	No	No	No	No	No	No
Rem Phs	0	0	0	0	0	0	0	0
Loc Int	0	0	0	0	0	0	0	0
Loc TT	0	0	0	0	0	0	0	0
RM1 Int	0	0	0	0	0	0	0	0

324 - Folsom & Power Inn

Transit/LRV Startup/Options

10/21/2020 1:50:10 PM

No Startup Call	LRV 1-8:	Warn Flash Rate	1 Hz	Rsrv Inh Mode	Seconds

324 - Folsom & Power Inn

Control / Config

10/21/2020 1:50:10 PM

Pattern Mode	Central				
Manual Pattern	0	Manual Offset	0		
Stop Time Input	Enabled				
Aux Switch	StopTm		5		
DLS Mode	D4	Time Zone	Pac (UTC-8)	GPS Thresh	0
Password Timeout	5				

	1-8	9-16
Maint Phs Recalls		
Maint Ped Recalls		

Serial 1 Port Configuration

Broadcast Plan/Sync	Disabled	Broadcast Time	00:00
Serial Rebroadcast	Disabled	Response	None

Serial 2 Port Configuration

Broadcast Plan/Sync	Disabled	Broadcast Time	00:00

Ethernet Port Configuration

Broadcast Plan/Sync	Disabled	Broadcast Time	00:00
Serial Rebroadcast	Disabled		

Peer Configuration

Peer 1	0
Peer 2	0
Peer 3	0
Peer 4	0
Peer 5	0
Peer 6	0
Peer 7	0
Peer 8	0

324 - Folsom & Power Inn

Logging

10/21/2020 1:50:10 PM

VO Log Period	15
Power On	Enabled
Ext Start	Enabled
Man Control	Enabled
Cabinet Door	Enabled
MMU Faults	Enabled
BIU Faults	Enabled
Det Faults	Enabled
Coordination	Enabled
Preempt	Enabled
Soft Preempt	Disabled
Zone	Disabled
Speed Traps	Disabled

1 of 2 Hits (Det BIU 1)																
1 of 2 Hits (Det BIU 2)																
1 of 2 Hits (Det BIU 3)																
1 of 2 Hits (Det BIU 4)																
SPmt 1 Req Switch																
SPmt 2 Req Switch																
SPmt 3 Req Switch																
SPmt 4 Req Switch																
Zone 1 Req Switch																
Zone 2 Req Switch																
Zone 3 Req Switch																
Zone 4 Req Switch																
Zone 5 Req Switch																
Zone 6 Req Switch																
Zone 7 Req Switch																
Zone 8 Req Switch																
Trap Grp 1 Req Switch																
Trap Grp 2 Req Switch																
Trap Grp 3 Req Switch																
Trap Grp 4 Req Switch																

324 - Folsom & Power Inn

Restricted Data 10/21/2020 1:50:10 PM

(Serial Ports)

Serial Port 1	4					
Baud Rate	9600	8N1	RTS On	0	RTS Off	0
Serial Port 2	0					
Baud Rate	9600	8N1	RTS On	0	RTS Off	0

(Ethernet)

IP Address	172. 31. 54. 80
Netmask	255. 255. 254. 0
Broadcast Address	0. 0. 0. 0
Gateway	172. 31. 54. 254
Gateway 2	0. 0. 0. 0
Gateway 3	0. 0. 0. 0
Gateway 4	0. 0. 0. 0

Admin IP	0. 0. 0. 0	Leases	0
Admin Netmask	0. 0. 0. 0		

Port	161	Reply Mode	Host
Broadcast Port	0	Response	Time/Plan
Time Port	0		

(General)

Controller Address	1	Timeout	0
Peer Address	0	Timeout	0

Remote Calls	Disabled		
Remote Preempt	Disabled		
Remote Soft Preempt	Disabled		
Remote Priority	Disabled		
Remote MCE	Disabled	MCE Max	0

Detector

Detector	Pin	Mode	Call	Ext	Delay	Extend	Carryover	Queue
1	56	Normal	1	1	0.0	0.0	0.0	0
2	39	Normal	2	2	0.0	0.0	0.0	0
3	58	Normal	3	3	0.0	0.0	0.0	0
4	41	Normal	4	4	0.0	0.0	0.0	0
5	55	Normal	5	5	0.0	0.0	0.0	0
6	40	Normal	6	6	0.0	0.0	0.0	0
7	57	Normal	7	7	0.0	0.0	0.0	0
8	42	Normal	8	8	0.0	0.0	0.0	0
9	-1	Normal	1	1	0.0	0.0	0.0	0
10	-1	Normal	2	2	0.0	0.0	0.0	0
11	-1	Normal	3	3	0.0	0.0	0.0	0
12	-1	Normal	4	4	0.0	0.0	0.0	0
13	-1	Normal	5	5	0.0	0.0	0.0	0
14	-1	Normal	6	6	0.0	0.0	0.0	0
15	-1	Normal	7	7	0.0	0.0	0.0	0
16	-1	Normal	8	8	0.0	0.0	0.0	0
17	-1	Normal	6	6	0.0	0.0	0.0	0
18	-1	Normal	6	6	0.0	0.0	0.0	0
19	-1	Normal	6	6	0.0	0.0	0.0	0
20	-1	Normal	7	7	0.0	0.0	0.0	0
21	-1	Normal	7	7	0.0	0.0	0.0	0
22	-1	Normal	7	7	0.0	0.0	0.0	0
23								
24								
25								
26								
27								
28								
29								
30								

Phase Detector

Detector	Pin	Mode	Call	Ext	Delay	Extend	Carryover	Queue
31	-1	Normal	5	5	0.0	0.0	0.0	0
32	-1	Normal	5	5	0.0	0.0	0.0	0
33	-1	Normal	1	1	0.0	0.0	0.0	0
34	-1	Normal	1		0.0	0.0	0.0	0
35	-1	Disc	6	6	0.0	0.0	0.0	0
36								
37								
38								
39	-1	Normal	6		0.0	0.0	0.0	0
40	-1	Disc	6	6	10.0	0.0	0.0	0
41	-1	Normal	5	5	0.0	0.0	0.0	0
42	-1	Normal	5		0.0	0.0	0.0	0
43	-1	Disc	2	2	0.0	0.0	0.0	0
44	-1	Normal	2	2	0.0	0.0	0.0	0
45	-1	Normal	2	2	0.0	0.0	0.0	0
46								
47	-1	Normal	2		0.0	0.0	0.0	0
48	-1	Disc	2	2	8.0	0.0	0.0	0
49	-1	Normal	3	3	0.0	0.0	0.0	0
50	-1	Normal	3		0.0	0.0	0.0	0
51	-1	Disc	8	8	0.0	0.0	0.0	0
52								
53								
54								
55	-1	Normal	8		0.0	0.0	0.0	0
56	-1	Disc	8	8	10.0	0.0	0.0	0
57	-1	Normal	7	7	0.0	0.0	0.0	0
58	-1	Normal	7		0.0	0.0	0.0	0
59	-1	Disc	4	4	0.0	0.0	0.0	0
60	-1	Normal	4	4	0.0	0.0	0.0	0

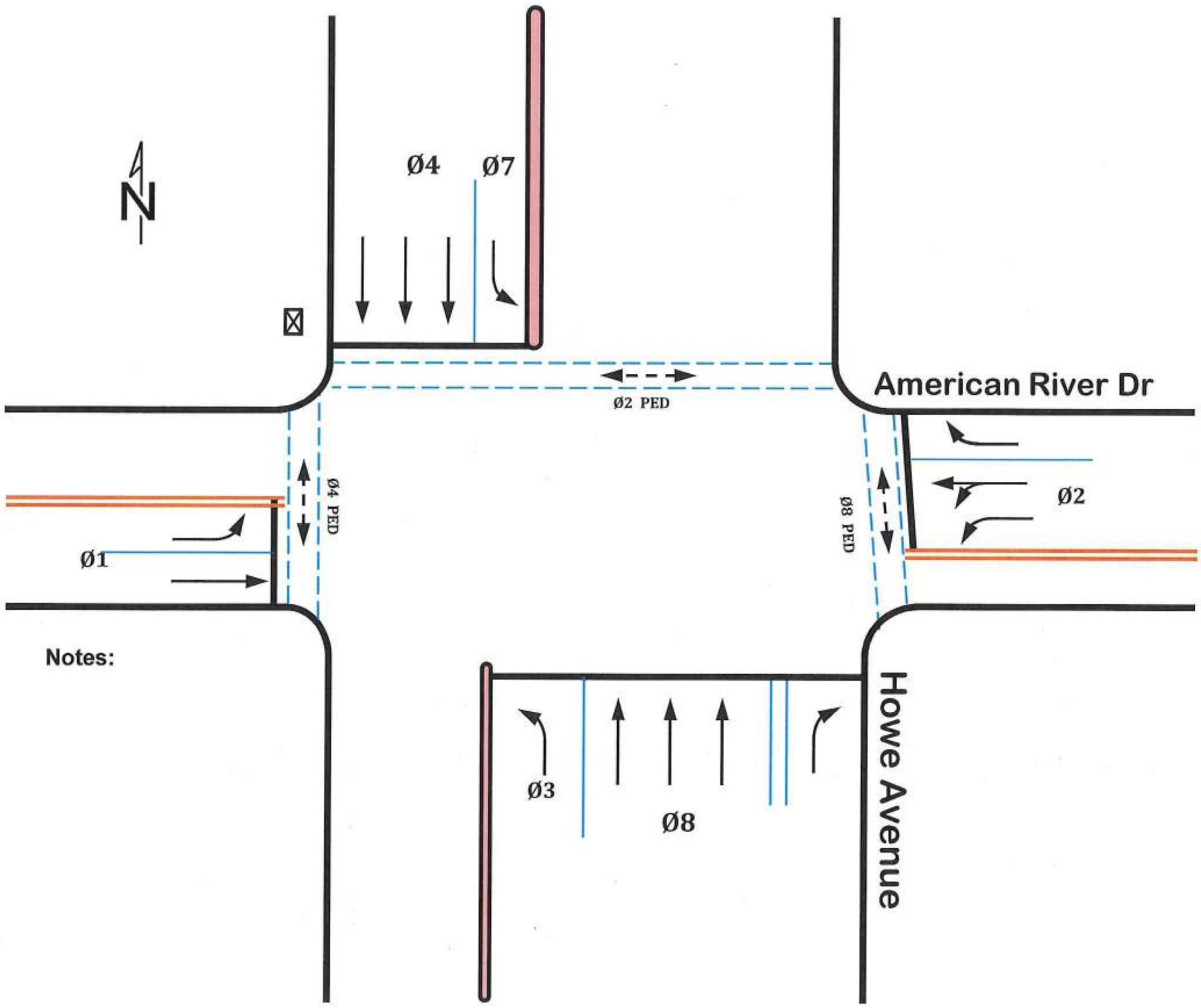
59	-1	Disc	4	4	0.0	0.0	0.0	0
60	-1	Normal	4	4	0.0	0.0	0.0	0
61	[redacted]							
62								
63	-1	Normal	4		0.0	0.0	0.0	0
64	-1	Normal	4	4	0.0	0.0	0.0	0

ECONOLITE ASC3 TS2

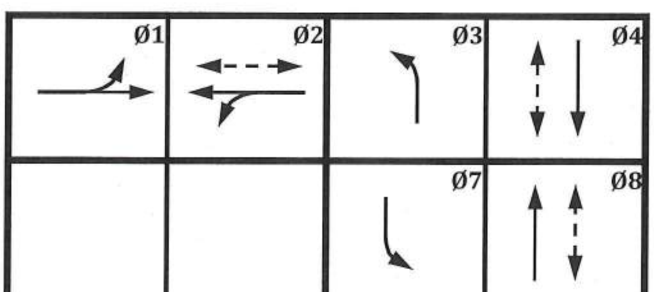
TRAFFIC SIGNAL CONTROLLER PROGRAM CHART

N/S **Howe Avenue** **E/W** **American River Drive**

Intersection #: 345 System IP Address: 172.31.14.13



Notes:



CITY OF SACRAMENTO

Econolite ASC/3 V2.49 and above

PHASE TIMING

Prepared by: ael Approved by: Date Implemented: 11-30-18

Controller Timing Data Key: 2-1

Phase	1	2	3	4	5	6	7	8
Min Green	11	11	9	8			11	8
Walk		7		7				7
Ped Clear		24		11				20
Yellow	3.9	3.9	3.5	4.3			3.5	5.0
Red Clearance	0.3	0.3	0.0	0.5			0.0	0.5
Red Rvt	2.0	2.0	2.0	2.0			2.0	2.0
Vehicle Ext	2.0	2.0	2.0	2.0			2.0	2.0
Max 1	40	40	35	60			35	60
Max 2								
Max 3								
Act B4								
Sec/Act								
Max Ini								
Time B4								
Cars Wt								
Steps to Reduce								
Time to Reduce								
Min Gap								
Bike Green								
CndSrv Min Green								
Delay Green								
Walk 2								
Walk Max								
Ped Clear 2								
Ped Clear Max								
Ped CarryOver								
Vehicle Ext 2								
Dym Green								
Dym Step								
Red Max								

Guaranteed Min Time Data Key: 2-4

Phase	1	2	3	4	5	6	7	8
Min Green	5	5	5	5	5	5	5	5
Walk	0	7	0	7	0	0	0	7
Ped Clear	0	10	0	10	0	0	0	10
Yellow Clear	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overlap	A	B	C	D	E	F	G	H
Overlap Green	5	5	5	5	5	5	5	5

SET SCREEN FORMAT TO BASIC Key: 1-7-2

Controller Start/Flash Data Key: 2-5

Phase	1	2	3	4	5	6	7	8
Phase (Color)				Y				Y
Overlap	X	X	X	X				
Flash/Mon	No			Start Flash Time				0 sec
PWR Start Seq	1			All Red				6 sec

Note: Startup phase can be Y, R, G or W

Automatic Flash

Phase	1	2	3	4	5	6	7	8
Entry				4				8
Exit				4				8
Overlap	A	B	C	D	E	F	G	H
Exit	X	X	X	X				
Flash/Mon	No			Exit Flash				W
Min Flash	0 sec			Min Recall				Yes
Cycle Thru Phase	Yes							

Phase Recall Data Key: 2-8

Phase	1	2	3	4	5	6	7	8
Lock Det								
Vehicle Recall				4				8
Ped Recall								
Max Recall								
Soft Recall								
No Rest								
Added Initial Calc								

Controller Options KEY: 2-6-1

Ped Protect	.	Unit Red Revert			2.0	sec		
Phase	1	2	3	4	5	6	7	8
Flashing Green Phase								
Guar Pass								
Non Act I								
Non Act II								
Dual Entry								
Cond Service			3				7	
Cond Reservice								
Ped Reservice								
Rest in Walk								
Flashing Walk								
PED Clear > yellow								
PED Clear > RED								
IG + VEH EXT								

CITY OF SACRAMENTO

CONFIGURATION

Phase Ring Seq and Assignment — Key: 1-1-1

Controller Sequence	1
Hardware Alternate Sequance Enable	No

Barrier	B		B		B		B	
Ring 1	1	2	3	4	9	10	13	14
Ring 2	5	6	7	8	11	12	15	16
Ring 3								
Ring 4								

Phase in Use/Exclusive Peds — Key: 1-2

Phase	1	2	3	4	5	6	7	8
Phases in Use	1	2	3	4			7	8
Exclusive Ped								

Load Switch Assign (MMU Chan) — Key: 1-3

CH	PHASE/ OVLP	type	DIMMING R	DIMMING Y	DIMMING G	DIMMING D	FLASH P	FLASH A	TGR
1	1	V				+	A	R	
2	2	V				+	A	R	X
3	3	V				+	A	R	
4	4	V				+	A	R	X
5	5	V				-	A	R	
6	6	V				-	A	R	X
7	7	V				-	A	R	
8	8	V				-	A	R	X
9	2	P				+	A		
10	4	P				+	A		
11	6	P				-	A		
12	8	P				-	A		
13	1	O				+	A	R	
14	2	O				-	A	R	X
15	3	O				+	A	R	
16	4	O				-	A	R	X

Display Options — Key: 1-7-2

Key Click Enabled	YES
BackLight Enable	YES
LED Mode	Auto
Main Status Display Mode	Basic
Screen Format	Basic

Ethernet Port Configuration — Key: 1-5-1

IP ADDRESS	172.31.14.13
ADDRESS MASK	255.255.254
DEFAULT GATEWAY ADD	172.31.14.254
SEVER IP ADDRESS	
LINK SPEED/DUPLEX	AUTO
DROP-OUT TIME	300

Port 1 (SDLC Options) — Key: 1-4-1

BIU	1	2	3	4	5	6	7	8
TERM & FACILITY	X	X	.	.	.	.	.	.
DETECTOR	X	X	.	.	.	.	.	.

ENABLE TS2/MMU TYPE CABINET	YES
ENABLE MMU EXTENDED STATUS	YES
ENABLE SDLC START TIME	YES
ENABLE 3 CRITICAL RFE'S LOCKUP	YES
MMU TO CU SDLC EXTERNAL START	enabled

Ped Detector Input — Key: 6-3

PED DET ASSIGNMENT MODE	NTCIP							
PHASE	1	2	3	4	5	6	7	8
DETECTOR	1	2	3	4	5	6	7	8
PHASE	9	10	11	12	13	14	15	16
DETECTOR	9	10	11	12	13	14	15	16

Econolite ASC/3 V2.49 above

CITY OF SACRAMENTO

CONFIGURATION

MMU Program **Key: 1-4-2**

CHANNEL CAN SERVE WITH

	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	X	.	.	.	.	.	.	
3	.	.	.	.	X	.	.	.	X	X	.	.	.		
4	.	.	.	.	X	.	X	.	X	X	.	.			
5	.	.	.	.	.	.	.	.	.	.	.				
6	.	.	.	.	.	.	.	.	.	.					
7	.	.	.	.	.	.	X	.	.						
8	.	.	.	.	X	.	X	.							
9	.	.	.	.	.	.	.								
10	.	.	.	.	X	.									
11	.	.	.	.	.										
12	.	.	.	.											
13	.	.	.												
14	.	.													

Simultaneous Gap Phases **Key: 1-1-4**

CHANNEL CAN SERVE WITH

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
D	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

CITY OF SACRAMENTO

COORDINATION

Coordinator Options KEY: 3-1

Manual Pattern	**Auto**	ECPI Coord	**Yes**
System Source	**TBC**	System Format	**Std**
Splits In	**sec**	Offset In	**sec**
Transition	**Smooth**	Max Select	**Max Inh**
Dwell/Add Time	**0**	Enable Man Sync	**No**
Dly Coord Wk-Lz	**No**	Force Off	**Float**
Offset Ref	**Lag**	Cal Use Ped Time	**Yes**
Ped Recall	**No**	Ped Reserve	**No**
Local Zero Ovrd	**No**	FO Add Ini Green	**No**
Re-Sync Count	**0**	Multisync	**No**

Coordination Patterns KEY: 3-2

Coordinator Pattern 1

Use Split Pattern	**1**		
Ts2 (Pat Off)	**0-1**		
Cycle	**120**	Split Sum	**120**
Offset Value	**0**	Std cycle off split	**111**
Actuated Coord	**YES**	Dwl/Add	**0**
Act Walk Rest	**NO**	Phase Reservice	**YES**

Split Reference Phases

Phase	1	2	3	4	5	6	7	8
Split (1)	17	38	13	52			15	S0
Preference Phase 1								
Preference Phase 2								
Split Extension	20	20						
Vehicle Permissive								
Ring Displacement								

Split Demand Pattern 1

Phase	1	2	3	4	5	6	7	8
Coordination				4				8
Vehicle Recall								
Ped Recall								
Max Recall								
Omit								

Coordinator Pattern 2

Use Split Pattern	**2**		
Ts2 (Pat Off)	**0-2**		
Cycle	**130**	Split Sum	**130**
Offset Value	**121**	Std cycle off split	**121**
Actuated Coord	**YES**	Dwl/Add	**0**
Act Walk Rest	**NO**	Phase Reservice	**YES**

Split Reference Phases

Phase	1	2	3	4	5	6	7	8
Split (1)	18	36	1S	61			15	61
Preference Phase 1								
Preference Phase 2								
Split Extension	20	20						
Vehicle Permissive								
Ring Displacement								

Split Demand Pattern 2

Phase	1	2	3	4	5	6	7	8
Coordination				4				8
Vehicle Recall								
Ped Recall								
Max Recall								
Omit								

Coordinator Pattern 3

Use Split Pattern	**3**		
Ts2 (Pat Off)	**0-3**		
Cycle	**130**	Split Sum	**130**
Offset Value	**20**	Std cycle off split	**131**
Actuated Coord	**YES**	Dwl/Add	**0**
Act Walk Rest	**NO**	Phase Reservice	**YES**

Split Reference Phases

Phase	1	2	3	4	5	6	7	8
Split (1)	17	36	14	63			15	62
Preference Phase 1								
Preference Phase 2								
Split Extension	30	30						
Vehicle Permissive								
Ring Displacement								

Split Demand Pattern 3

Phase	1	2	3	4	5	6	7	8
Coordination				4				8
Vehicle Recall								
Ped Recall								
Max Recall								
Omit								

Econolite ASC/3

CITY OF SACRAMENTO

TIME BASE SUBMENU

Clock/Calendar — Key: 5-1

DATE		DOW	TIME	
Ena Action Plan		0		
Sync Reference time			Sync Ref	
Time from GMT			Daylight Sav	
time Reset Input Set				

Schedule Number — Key: 5-4

Schedule Number							1					
Day Plan No					1		Clear all Fields					.
Select All Months					X		DOW		X	DOM		X
MON	J	F	M	A	M	J	J	A	S	O	N	D
DAY (DOW)			SU	MO	TU	WE	TH	FR	SA			
DOM	1	2	3	4	5	6	7	8	9	10	11	
	12	13	14	15	16	17	18	19	20	21	22	
	23	24	25	26	27	28	29	30	31			

Schedule Number							2					
Day Plan No							Clear all Fields					.
Select All Months							DOW		.	DOM		.
MON	J	F	M	A	M	J	J	A	S	O	N	D
DAY (DOW)			SU	MO	TU	WE	TH	FR	SA			
DOM	1	2	3	4	5	6	7	8	9	10	11	
	12	13	14	15	16	17	18	19	20	21	22	
	23	24	25	26	27	28	29	30	31			

Day/Plan Event — Key: 5-3

Day Plan in Effect		1
Day Plan		1
Event	Action Plan	Start Time
1	1	7:00
2	2	9:30
3	3	14:00
4	4	19:00
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		

CITY OF SACRAMENTO

ACTION PLAN

Action Plan 1 **KEY: 5-2**

Pattern	1	Sys Override	NO
Timing Plan	1	Sequence	0
Veh Det Plan	1	Det Log	NONE
Flash	--	Red Rest	NO
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	NO		
Action Plan Phases		Max 2	
Ped Recall		Max 3	
Walk 2		CS Inh	
Veh Ext		Omit	
Veh Rcl		Spc Funct	
Max Rcl		Aux Funct	
Logic Statement Control			

Action Plan 2

Pattern	2	Sys Override	NO
Timing Plan	1	Sequence	0
Veh Det Plan	1	Det Log	NONE
Flash	--	Red Rest	NO
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	NO		
Action Plan Phases		Max 2	
Ped Recall		Max 3	
Walk 2		CS Inh	
Veh Ext		Omit	
Veh Rcl		Spc Funct	
Max Rcl		Aux Funct	
Logic Statement Control			

Action Plan 3

Pattern	3	Sys Override	NO
Timing Plan	0	Sequence	2
Veh Det Plan	0	Det Log	NONE
Flash	--	Red Rest	NO
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	NO		
Action Plan Phases		Max 2	
Ped Recall		Max 3	
Walk 2		CS Inh	
Veh Ext		Omit	
Veh Rcl		Spc Funct	
Max Rcl		Aux Funct	
Logic Statement Control			

Action Plan 4

Pattern	FREE	Sys Override	NO
Timing Plan	.	Sequence	0
Veh Det Plan	0	Det Log	NONE
Flash	--	Red Rest	NO
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	NO		
Action Plan Phases		Max 2	
Ped Recall		Max 3	
Walk 2		CS Inh	
Veh Ext		Omit	
Veh Rcl		Spc Funct	
Max Rcl		Aux Funct	
Logic Statement Control			

CITY OF SACRAMENTO

EV PREEMPT/SCP SUBMENU

Preempt Plan 2 KEY: 4-1

Phase	1	2	3	4	5	6	7	8
Track Clr V								
Track Clr O								
Ena Trl								
Dwell Veh								
Dwell Ped								
Dwell OL								
Cycle Veh								
Cycle Ped								
Cycle OL								
Exit Phase								
Exit Calls								
Sp Function								
Entrance Times		Walk		Ped Cl		Grn	Yel	Red
		255		255		255	25.5	25.5
Track Clear		Min Gn		Ext Grn		Max Gi	Yel	Red
		0		0		0	0	0
Dwl/Cyc exit		Min Dwell		Pmt Ext		Mx Trr	Yel	Red
		6		3		55	0	0
Free Dur Prmt	R1	NO	R2	NO	R3	NO	R4	NO
Enable		Yes		Pmt Ovrid			X	
Det Lock		X		Delay			0	
Override Flash		.		Duration			0	
Term Ovlp		NO		PC>Yel			NO	
Ped Dark		NO		TC Reserv			NO	
Link Pmt		0		Exit Fl Color			GRN	
Exit Tm Pln		0		Re-Serv			0	
Interlock		NO		Term Ph			NO	
Inhibt		0		Dwell Fl			OFF	
Clr>Grn		NO		Pmt>Crd			YES	
Inhibt Ext Time		0		FLT Type			Hard	
Pmt Active Out			OFF	Pmt Active Dwell				OFF
Other-Pri Pmt			OFF	Non-Pri Pmt				OFF

Preempt Plan 3

Phase	1	2	3	4	5	6	7	8
Track Clr V								
Track Clr O								
Ena Trl								
Dwell Veh		X						
Dwell Ped								
Dwell OL								
Cycle Veh								
Cycle Ped								
Cycle OL								
Exit Phase		X						
Exit Calls								
Sp Function								
Entrance Times		Walk		Ped Cl		Grn	Yel	Red
		255		255		255	4	1
Track Clear		Min Gn		Ext Grn		Max Gi	Yel	Red
		0		0		0	0	0
Dwl/Cyc exit		Min Dwell		Pmt Ext		Mx Trr	Yel	Red
		6		3		55	0	0
Free Dur Prmt	R1	NO	R2	NO	R3	NO	R4	NO
Enable		Yes		Pmt Ovrid			X	
Det Lock		X		Delay			0	
Override Flash		.		Duration			0	
Term Ovlp		NO		PC>Yel			NO	
Ped Dark		NO		TC Reserv			NO	
Link Pmt		0		Exit Fl Color			GRN	
Exit Tm Pln		0		Re-Serv			0	
Interlock		NO		Term Ph			NO	
Inhibt		0		Dwell Fl			OFF	
Clr>Grn		NO		Pmt>Crd			YES	
Inhibt Ext Time		0		FLT Type			Hard	
Pmt Active Out			OFF	Pmt Active Dwell				OFF
Other-Pri Pmt			OFF	Non-Pri Pmt				OFF

Preempt Plan 4

Phase	1	2	3	4	5	6	7	8
Track Clr V								
Track Clr O								
Ena Trl								
Dwell Veh			X					X
Dwell Ped								
Dwell OL								
Cycle Veh								
Cycle Ped								
Cycle OL								
Exit Phase			X					X
Exit Calls								
Sp Function								
Entrance Times		Walk		Ped Cl		Grn	Yel	Red
		255		255		255	4	1
Track Clear		Min Gn		Ext Grn		Max Gi	Yel	Red
		0		0		0	0	0
Dwl/Cyc exit		Min Dwell		Pmt Ext		Mx Trr	Yel	Red
		6		3		55	0	0
Free Dur Prmt	R1	NO	R2	NO	R3	NO	R4	NO
Enable		Yes		Pmt Ovrid			X	
Det Lock		X		Delay			0	
Override Flash		.		Duration			0	
Term Ovlp		NO		PC>Yel			NO	
Ped Dark		NO		TC Reserv			NO	
Link Pmt		0		Exit Fl Color			GRN	
Exit Tm Pln		0		Re-Serv			0	
Interlock		NO		Term Ph			NO	
Inhibt		0		Dwell Fl			OFF	
Clr>Grn		NO		Pmt>Crd			YES	
Inhibt Ext Time		0		FLT Type			Hard	
Pmt Active Out			OFF	Pmt Active Dwell				OFF
Other-Pri Pmt			OFF	Non-Pri Pmt				OFF

Preempt Plan 5

Phase	1	2	3	4	5	6	7	8
Track Clr V								
Track Clr O								
Ena Trl								
Dwell Veh				X			X	
Dwell Ped								
Dwell OL								
Cycle Veh								
Cycle Ped								
Cycle OL								
Exit Phase				X			X	
Exit Calls								
Sp Function								
Entrance Times		Walk		Ped Cl		Grn	Yel	Red
		255		255		255	4	1
Track Clear		Min Gn		Ext Grn		Max Gi	Yel	Red
		0		0		0	0	0
Dwl/Cyc exit		Min Dwell		Pmt Ext		Mx Trr	Yel	Red
		6		3		55	0	0
Free Dur Prmt	R1	NO	R2	NO	R3	NO	R4	NO
Enable		Yes		Pmt Ovrid			X	
Det Lock		X		Delay			0	
Override Flash		.		Duration			0	
Term Ovlp		NO		PC>Yel			NO	
Ped Dark		NO		TC Reserv			NO	
Link Pmt		0		Exit Fl Color			GRN	
Exit Tm Pln		0		Re-Serv			0	
Interlock		NO		Term Ph			NO	
Inhibt		0		Dwell Fl			OFF	
Clr>Grn		NO		Pmt>Crd			YES	
Inhibt Ext Time		0		FLT Type			Hard	
Pmt Active Out			OFF	Pmt Active Dwell				OFF
Other-Pri Pmt			OFF	Non-Pri Pmt				OFF

ECONOLITE ASC/3

CITY OF SACRAMENTO

Version 2.49 and above

TS2 DETECTION SCHEDULE

Location: Howe Ave & American River Dr

					Controller / Detector Type / Function						
	Phase	Controller Det. Input	Location	Direction	Type	TS-2	Call Option	Passage Option	Extend Time	Delay Time	Notes
BIU1	Ø1	1	Door SW	EB	S	X					
	Ø1	1	Front 1	EB	S	X					D1
	Ø1	2	Front 2	EB	S	X					D2
	Ø1	3									
	Ø6	4									
	Ø6	5									
	Ø6	7									
	Ø6	8									
	Ø5	9									
	Ø5	10									
	Ø5	11									
	Ø5	12									
	Ø2	13	Door SW	WB	S	X					
	Ø2	13	Front 1	WB	S	X					D1
	Ø2	14	Front 2	WB	S	X					D2
	Ø2	16									
BIU2	Ø3	17	Door SW	N-W	S	X					
	Ø3	17	Rear	N-W	S	X					D1
	Ø3	18	Front	N-W	S	X					D2
	Ø8	21	Door SW	NB	S	X					
	Ø8	21	Rear	NB	S	X					D1
	Ø8	22	Mid 1	NB	S	X					D2
	Ø8	23	Mid 2	NB	S	X					D3
	Ø8	24	Mid 3	NB	S	X					D4
	Ø7	25	Door SW	S-E	S	X					
	Ø7	25	Rear	S-E	S	X					D1
	Ø7	26	Front	S-E	S	X					D2
	Ø4	29	Door SW	SB	S	X					
	Ø4	29	Rear	SB	S	X					D1
	Ø4	30	Mid 1	SB	S	X					D2
	Ø4	31	Mid 2	SB	S	X					D3
	Ø4	32	Mid 3	SB	S	X					D4
BIU 3	Ø1	33									
	Ø1	34									
	Ø6	35									
	Ø6	36									
	Ø6	37									
	Ø6	38									
	Ø6	39									
	Ø6	40									
	Ø5	41									
	Ø5	42									
	Ø2	43									
	Ø2	44									
	Ø2	45									
	Ø2	46									
	Ø2	47									
	Ø2	48									
BIU 4	Ø3	49									
	Ø3	50									
	Ø8	51									
	Ø8	52									
	Ø8	53									
	Ø8	54									
	Ø8	55									
	Ø8	56									
	Ø7	57									
	Ø7	58									
	Ø4	59									
	Ø4	60									
	Ø4	61									
	Ø4	62									
	Ø4	63									
	Ø4	64									

Type: N-NTCIP; 8-8ike; S-Standard; D-Disconnect; P-Passage; C-Calling; R-Red Extend; G-Green Extend

Ext Option: Passage; Queue; None

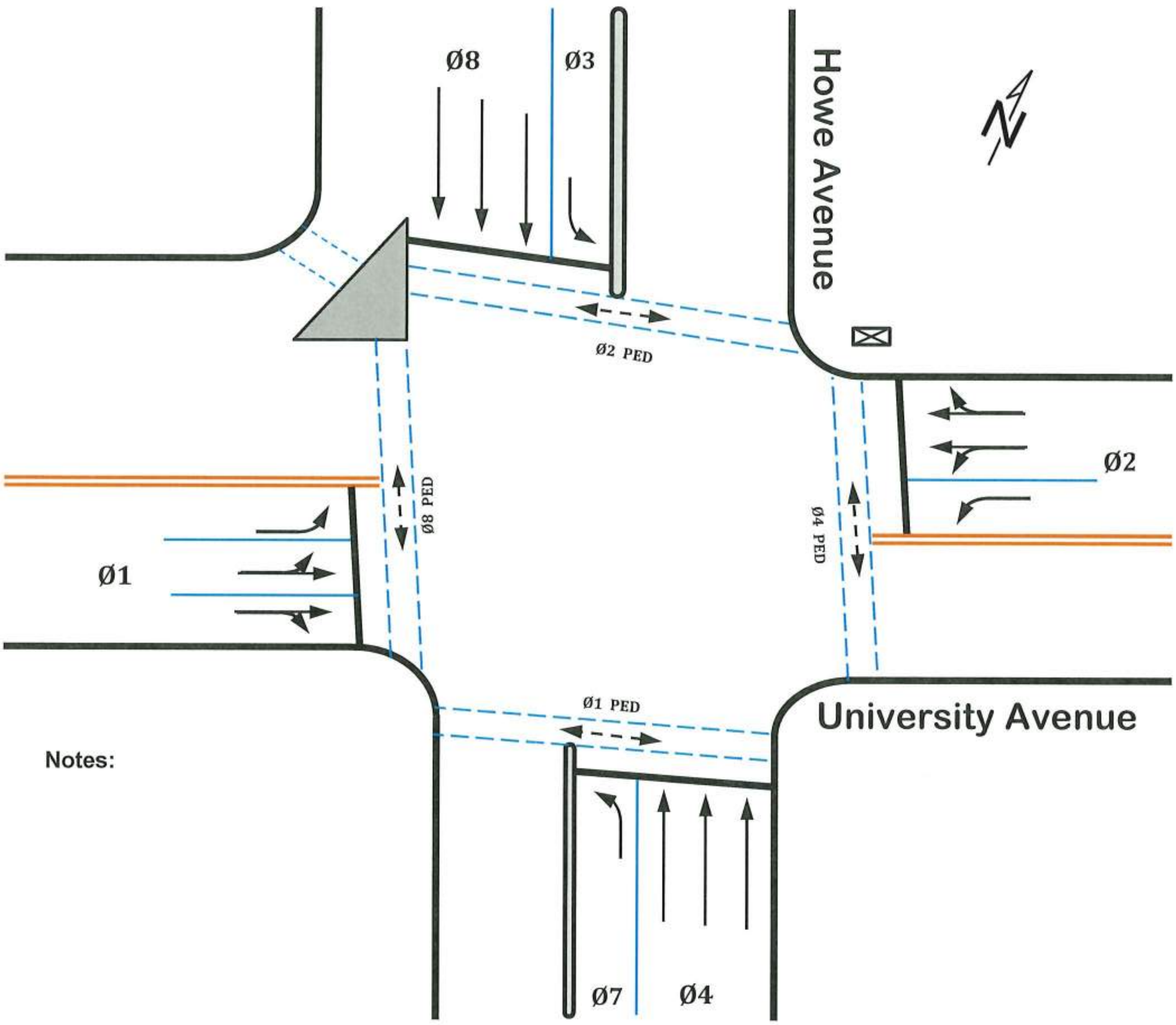
McCain ATCeX TS2 D4

TRAFFIC SIGNAL CONTROLLER PROGRAM CHART

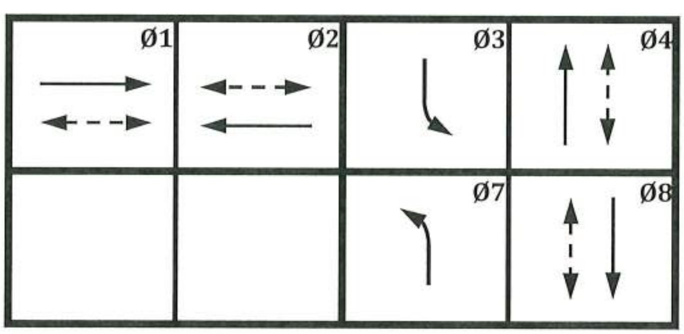
N/S Howe Avenue **E/W** University Avenue

Intersection #: 346 System ______ IP Address: ______

Prepared by: [signature] Approved by: [signature] Date Implemented: 12-7-20



Notes:



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Phase Timing

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Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Min Green	11	11	12	10	0	0	12	10	0	0	0	0	0	0	0	0
Veh Ext	2.0	2.5	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Green 1	40	40	30	64	0	0	30	64	0	0	0	0	0	0	0	0
Max Green 2	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Ext	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellow	3.7	3.7	3.5	5.0	0.0	0.0	3.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clr	0.6	0.6	1.3	0.7	0.0	0.0	1.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv Flash	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bike MG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	5	5	0	7	0	0	0	7	0	0	0	0	0	0	0	0
Ped Clr	24	24	0	17	0	0	0	17	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sol DW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Early Wlk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Wlk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce After	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TTReduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Max Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Revert	2.0	2.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Neg Ped	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AP Disc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pmt Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pmt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pmt Ped Clr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Phase Options

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Phases	1-8								9-16							
Min Recalls				4				8								
Max Recalls																
Ped Recalls																
Soft Recall																
Dual Entry																
Red Rest																
Walk Rest																
Walk Expand																
Ped Recycle																
Sim Ped Term																
PC Thru Clr																
Guar Passage																
No Simult Gap																
Yel Lock																
Red Lock																
PhaseNext Lock	1	2	3	4			7	8								
No Term Call																
Cond Serv																
CS Enable																
Cond Reserve																
Reserve																
Veh Omit																
Ped Omit																
Perm Phase																
Protect Calls																
Protect Calls 2																
Flash Entry																
Flash Exit																
Flash Exit Yel																
Flash Exit Red																
Ped Scramble																
No Min Yel																
No Min Red Rev																
Max Scramble Walk																
Flash Yellow																
Flash FYA																
CNA 1																
CNA 2																

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Phase Startup Options

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Startup Flash	0	Mode	Red->Yel
Startup All Red	6	Yellow	0.0

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Startup Phases				4				8								
Startup Yellow				4				8								
Startup Red																
Startup No Walk																
Startup Next	1															
Startup Yel Fls																
Startup FYA																
No Veh Call																
No Ped Call																

Phase Startup Timing

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Start Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Max Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Unit

Red Revert	0.0	Ped Protect	No	AdvFls in Flash	No

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Ring Sequence / Conflicting Phases

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Ringgroup 1

Ring 1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0
Ring 2	0	0	7	8	0	0	0	0	0	0	0	0	0	0	0	0

Ringgroup 2

Custom Sequences

Seq 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seq 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Conflicting Phases

	1-8								9-16							
Phase 1																
Phase 2																
Phase 3																
Phase 4																
Phase 5																
Phase 6																
Phase 7																
Phase 8																
Phase 9																
Phase 10																
Phase 11																
Phase 12																
Phase 13																
Phase 14																
Phase 15																
Phase 16																

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Coordination Options

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Sync Time	00:00	RTC Set Time	00:00
Transition Mode	Best 2	Ped Adjust	None
Trans Short %	25	Trans Long %	35
Offset Reference	Lag Grn	Short Cycles	0
Dual Entry	Strict	Overlap F/O	Disabled
Master Sync Mode	RTC	Master Sync Length	0
Adapt Thresh	3	Adapt Step	2
External Plan Max	0		
Hardwire No Match	Sched	Hardwire Sync Fail	0
Override Omit/Recall	No		

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
No Trans Recall																
Trans Ped Recall																
Trans Phases																

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Coordination Pattern 1

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Cycle	120	Ringgroup 1 - Offset 1	55	Offset 2	0	Offset 3	0
		Ringgroup 2 - Offset 1	0	Offset 2	0	Offset 3	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Splits	34	34	17	35	0	0	18	34	0	0	0	0	0	0	0	0
Split Ext	0	0	0	25	0	0	0	25	0	0	0	0	0	0	0	0
Float Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Perm Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Trans Split	9	9	9	9	0	0	9	9	0	0	0	0	0	0	0	0
Max Trans Split	45	45	25	55	0	0	30	50	0	0	0	0	0	0	0	0
Split 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PA Before	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PA After	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Permissive Mode	Reservice	Max Mode	Max Inh	Walk Rest	Yield
Ped Permissive	Yield				
Permissive Limit	0	Perm 2 Start	0	Perm 2 End	0
Alt Sequence		TOD Link	0		

Phases/Overlaps	1-8								9-16							
Coord Phases				4				8								
No Extend																
Float Enable																
Veh = Ped Perm																
Walk Rest																
Ped Recall																
Cond Ped Call																
Olap Ped Recall																
Ped Recycle																
Min Recall																
Max Recall																
Cond Serv																
Reservice																
Veh Omit																
Ped Omit																
Olap Omit																
Perm Reserve																
Perm 1 Phases																
Max Inhibit																
FYA Omit																
Adapt Phases																

Trans Mode	Default
Offset Ref	Default
Adaptive Mode	Disabled
Disable Priority	
Progression Phases	
Priority Alt Seq	
Reserve Extend	

Priority Timing-Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Priority Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Coordination Pattern 2

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Cycle	130	Ringgroup 1 - Offset 1	30	Offset 2	0	Offset 3	0
		Ringgroup 2 - Offset 1	0	Offset 2	0	Offset 3	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Splits	36	36	17	41	0	0	17	41	0	0	0	0	0	0	0	0
Split Ext	0	0	0	35	0	0	0	35	0	0	0	0	0	0	0	0
Float Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Perm Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Trans Split	21	21	7	21	0	0	7	21	0	0	0	0	0	0	0	0
Max Trans Split	51	51	27	61	0	0	27	61	0	0	0	0	0	0	0	0
Split 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PA Before	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PA After	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Permissive Mode	Reservice	Max Mode	Max Inh	Walk Rest	Yield
Ped Permissive	Yield				
Permissive Limit	0	Perm 2 Start	0	Perm 2 End	0
Alt Sequence		TOD Link	0		

Phases/Overlaps	1-8								9-16							
Coord Phases				4				8								
No Extend																
Float Enable																
Veh = Ped Perm																
Walk Rest																
Ped Recall																
Cond Ped Call																
Olap Ped Recall																
Ped Recycle																
Min Recall																
Max Recall																
Cond Serv																
Reservice																
Veh Omit																
Ped Omit																
Olap Omit																
Perm Reserve																
Perm 1 Phases																
Max Inhibit																
FYA Omit																
Adapt Phases																

Trans Mode	Default
Offset Ref	Default
Adaptive Mode	Disabled

Disable Priority	
Progression Phases	
Priority Alt Seq	
Reserve Extend	

Priority Timing-Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Priority Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Coordination Pattern 3

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Cycle	130	Ringgroup 1 - Offset 1	100	Offset 2	0	Offset 3	0
		Ringgroup 2 - Offset 1	0	Offset 2	0	Offset 3	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Splits	36	36	17	41	0	0	17	41	0	0	0	0	0	0	0	0
Split Ext	0	0	0	10	0	0	0	10	0	0	0	0	0	0	0	0
Float Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Perm Min Green	12	12	8	12	0	0	8	12	0	0	0	0	0	0	0	0
Min Trans Split	9	9	9	6	0	0	9	9	0	0	0	0	0	0	0	0
Max Trans Split	45	45	35	65	0	0	35	65	0	0	0	0	0	0	0	0
Split 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PA Before	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PA After	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Permissive Mode	Reservice	Max Mode	Max Inh	Walk Rest	Yield
Ped Permissive	Yield				
Permissive Limit	0	Perm 2 Start	0	Perm 2 End	0
Alt Sequence		TOD Link	0		

Phases/Overlaps	1-8	9-16
Coord Phases	4, 8	
No Extend		
Float Enable		
Veh = Ped Perm		
Walk Rest		
Ped Recall		
Cond Ped Call		
Olap Ped Recall		
Ped Recycle		
Min Recall		
Max Recall		
Cond Serv		
Reservice		
Veh Omit		
Ped Omit		
Olap Omit		
Perm Reserve		
Perm 1 Phases		
Max Inhibit		
FYA Omit		
Adapt Phases		

Trans Mode	Default
Offset Ref	Default
Adaptive Mode	Disabled

Disable Priority	
Progression Phases	
Priority Alt Seq	
Reserve Extend	

Priority Timing-Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Priority Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Preempt Inputs

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Preempt Input	1	2	3	4	5	6	7	8	9	10
Delay	0	0	0	0	0	0	0	0	0	0
Checkout Limit	0	0	0	0	0	0	0	0	0	0
Locked	No	No	No	No	No	No	No	No	No	No
Interlock	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Input Number	0	0	3	4	5	6	0	0	0	0
Input Priority	All	All	All	All	All	All	All	All	All	All
Delay Mode	Inp	Inp	Inp	Inp	Inp	Inp	Inp	Inp	Inp	Inp

Preempt Priority

Preempt	1	2	3	4	5	6	7	8	9	10
Priority	0	0	0	0	0	0	0	0	0	0

Remote Preemption

Remote Preempt	RM 1	RM 2	RM 3	RM 4	RM 5	RM 6	RM 7	RM 8
Int Number	0	0	0	0	0	0	0	0
PE Number	0	0	0	0	0	0	0	0
Mode	Dis	Dis	Dis	Dis	Dis	Dis	Dis	Dis
Slack	0	0	0	0	0	0	0	0
Travel Time	0	0	0	0	0	0	0	0
Alt TT 1	0	0	0	0	0	0	0	0
Alt TT 2	0	0	0	0	0	0	0	0
Alt TT 3	0	0	0	0	0	0	0	0
Alt TT 4	0	0	0	0	0	0	0	0
Alt TT 5	0	0	0	0	0	0	0	0
Alt TT 6	0	0	0	0	0	0	0	0
Alt TT 7	0	0	0	0	0	0	0	0

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Preempt 3 (Configuration)

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Enabled	Yes	Dwell Mode	Normal	Output Mode	All
Output2 Mode	All	Fail Action	Preempt Off	Exit Mode	Normal
Override Flash	No	Change Phasenext	Yes		

	1-8								9-16							
Enable Phases																
Preempt Inputs			3													

	1-8									
LRV Disable									Max	0
LRV Dwell Flash										
LRV Omit									Delay	0
LRV No Yel										

Preempt 3 (Timing/Phases/Overlaps)

Phases/Overlaps	1-8								9-16							
Omit Olap Grn Clr																
Phs EWlk to Grn																
TClr 1 Veh Phases																
TClr 1 Ped Phases																
TClr 1 Olap																
TClr 1 Olap Ped																
TClr 2 Veh Phases																
TClr 2 Ped Phases																
TClr 2 Olap																
TClr 2 Olap Ped																
Init Dwell Phases																
Dwell Veh Phases	1															
Dwell Ped Phases																
Dwell Olap																
Dwell Olap Ped																
Exit Veh Phases	1															
Exit Ped Phases																
Exit Olap																
Exit Olap Ped																
Zero Phase Walk		2		4		6		8								
Zero Phase Ped Clr																
Zero Phase Green																
Zero Olap Walk																
Zero Olap Ped Clr																
Zero Olap Green																
Dwell-Phase Red																
Dwell-Phase Red Flash																
Dwell-Phase Yel Flash																
Dwell-Olap Red Flash																
Dwell-Olap Yel Flash																
Dwell-Ped Dark																
Dwell-Olap Ped Dark																

Start Green	0	Start Walk	0
		Start Ped Clr	0
Track Clear 1	0	Track Clear 2	0
TC1 Extend	0	TC1 Max	0
Exit Ped Clr	0	Exit Yellow	0.0
Exit Red	0.0		
Min Dwell	6	Min Duration	0
Dwell Extend	3		
Max Dwell	55	Max Call	0
Reserve Inh Same	0		
Reserve Inh All	0		
Delay	0		

Phases/Overlaps	1-8								9-16							
TClr 1 FR Olap																
TClr 2 FR Olap																
Dwell FR Olap																
TClr 1 FYA																
TClr 2 FYA																
Dwell FYA																

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Preempt 4 (Configuration)

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Enabled	Yes	Dwell Mode	Normal	Output Mode	All
Output2 Mode	All	Fail Action	Preempt Off	Exit Mode	Normal
Override Flash	No	Change Phasenext	Yes		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Phases																
Preempt Inputs				4												

1-8	1	2	3	4	5	6	7	8		
LRV Disable									Max	0
LRV Dwell Flash										
LRV Omit									Delay	0
LRV No Yel										

Preempt 4 (Timing/Phases/Overlaps)

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Omit Olap Grn Clr																
Phs EWlk to Grn																
TClr 1 Veh Phases																
TClr 1 Ped Phases																
TClr 1 Olap																
TClr 1 Olap Ped																
TClr 2 Veh Phases																
TClr 2 Ped Phases																
TClr 2 Olap																
TClr 2 Olap Ped																
Init Dwell Phases																
Dwell Veh Phases		2														
Dwell Ped Phases																
Dwell Olap																
Dwell Olap Ped																
Exit Veh Phases		2														
Exit Ped Phases																
Exit Olap																
Exit Olap Ped																
Zero Phase Walk		2		4		6		8								
Zero Phase Ped Clr																
Zero Phase Green																
Zero Olap Walk																
Zero Olap Ped Clr																
Zero Olap Green																
Dwell-Phase Red																
Dwell-Phase Red Flash																
Dwell-Phase Yel Flash																
Dwell-Olap Red Flash																
Dwell-Olap Yel Flash																
Dwell-Ped Dark																
Dwell-Olap Ped Dark																

Start Green	0	Start Walk	0
		Start Ped Clr	0
Track Clear 1	0	Track Clear 2	0
TC1 Extend	0	TC1 Max	0
Exit Ped Clr	0	Exit Yellow	0.0
Exit Red	0.0		
Min Dwell	6	Min Duration	0
Dwell Extend	3		
Max Dwell	55	Max Call	0
Reserve Inh Same	0		
Reserve Inh All	0		
Delay	0		

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
TClr 1 FR Olap																
TClr 2 FR Olap																
Dwell FR Olap																
TClr 1 FYA																
TClr 2 FYA																
Dwell FYA																

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Preempt 5 (Configuration)

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Enabled	Yes	Dwell Mode	Normal	Output Mode	All
Output2 Mode	All	Fail Action	Preempt Off	Exit Mode	Normal
Override Flash	No	Change Phasenext	Yes		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Phases																
Preempt Inputs					5											

1-8	1	2	3	4	5	6	7	8		
LRV Disable									Max	0
LRV Dwell Flash										
LRV Omit									Delay	0
LRV No Yel										

Preempt 5 (Timing/Phases/Overlaps)

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Omit Olap Grn Clr																
Phs EWlk to Grn																
TClr 1 Veh Phases																
TClr 1 Ped Phases																
TClr 1 Olap																
TClr 1 Olap Ped																
TClr 2 Veh Phases																
TClr 2 Ped Phases																
TClr 2 Olap																
TClr 2 Olap Ped																
Init Dwell Phases																
Dwell Veh Phases			3					8								
Dwell Ped Phases																
Dwell Olap																
Dwell Olap Ped																
Exit Veh Phases			3					8								
Exit Ped Phases																
Exit Olap																
Exit Olap Ped																
Zero Phase Walk		2		4		6		8								
Zero Phase Ped Clr																
Zero Phase Green																
Zero Olap Walk																
Zero Olap Ped Clr																
Zero Olap Green																
Dwell-Phase Red																
Dwell-Phase Red Flash																
Dwell-Phase Yel Flash																
Dwell-Olap Red Flash																
Dwell-Olap Yel Flash																
Dwell-Ped Dark																
Dwell-Olap Ped Dark																

Start Green	0	Start Walk	0
		Start Ped Clr	0
Track Clear 1	0	Track Clear 2	0
TC1 Extend	0	TC1 Max	0
Exit Ped Clr	0	Exit Yellow	0.0
Exit Red	0.0		
Min Dwell	6	Min Duration	0
Dwell Extend	3		
Max Dwell	55	Max Call	0
Reserve Inh Same	0		
Reserve Inh All	0		
Delay	0		

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
TClr 1 FR Olap																
TClr 2 FR Olap																
Dwell FR Olap																
TClr 1 FYA																
TClr 2 FYA																
Dwell FYA																

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Preempt 6 (Configuration)

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Enabled	Yes	Dwell Mode	Normal	Output Mode	All
Output2 Mode	All	Fail Action	Preempt Off	Exit Mode	Normal
Override Flash	No	Change Phasenext	Yes		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Phases																
Preempt Inputs						6										

	1	2	3	4	5	6	7	8		
LRV Disable									Max	0
LRV Dwell Flash										
LRV Omit									Delay	0
LRV No Yel										

Preempt 6 (Timing/Phases/Overlaps)

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Omit Olap Grn Clr																
Phs EWlk to Grn																
TClr 1 Veh Phases																
TClr 1 Ped Phases																
TClr 1 Olap																
TClr 1 Olap Ped																
TClr 2 Veh Phases																
TClr 2 Ped Phases																
TClr 2 Olap																
TClr 2 Olap Ped																
Init Dwell Phases																
Dwell Veh Phases				4			7									
Dwell Ped Phases																
Dwell Olap																
Dwell Olap Ped																
Exit Veh Phases				4			7									
Exit Ped Phases																
Exit Olap																
Exit Olap Ped																
Zero Phase Walk																
Zero Phase Ped Clr																
Zero Phase Green																
Zero Olap Walk																
Zero Olap Ped Clr																
Zero Olap Green																
Dwell-Phase Red																
Dwell-Phase Red Flash																
Dwell-Phase Yel Flash																
Dwell-Olap Red Flash																
Dwell-Olap Yel Flash																
Dwell-Ped Dark																
Dwell-Olap Ped Dark																

Start Green	0	Start Walk	0
		Start Ped Clr	0
Track Clear 1	0	Track Clear 2	0
TC1 Extend	0	TC1 Max	0
Exit Ped Clr	0	Exit Yellow	0.0
Exit Red	0.0		
Min Dwell	6	Min Duration	0
Dwell Extend	3		
Max Dwell	55	Max Call	0
Reserve Inh Same	0		
Reserve Inh All	0		
Delay	0		

Phases/Overlaps	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
TClr 1 FR Olap																
TClr 2 FR Olap																
Dwell FR Olap																
TClr 1 FYA																
TClr 2 FYA																
Dwell FYA																

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TOD Pattern Events

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	Time	DOW							Holidays								Mode	Pattern	Offset
Event 1	07:00		M	T	W	T	F										Sched	1	1
Event 2	09:30	S	M	T	W	T	F	S									Sched	2	1
Event 3	14:00	S	M	T	W	T	F	S									Sched	3	1
Event 4	19:00	S	M	T	W	T	F	S									Free	0	0
Event 5	00:00																Sched	0	0
Event 6	00:00																Sched	0	0
Event 7	00:00																Sched	0	0
Event 8	00:00																Sched	0	0
Event 9	00:00																Sched	0	0
Event 10	00:00																Sched	0	0
Event 11	00:00																Sched	0	0
Event 12	00:00																Sched	0	0
Event 13	00:00																Sched	0	0
Event 14	00:00																Sched	0	0
Event 15	00:00																Sched	0	0
Event 16	00:00																Sched	0	0
Event 17	00:00																Sched	0	0
Event 18	00:00																Sched	0	0
Event 19	00:00																Sched	0	0
Event 20	00:00																Sched	0	0
Event 21	00:00																Sched	0	0
Event 22	00:00																Sched	0	0
Event 23	00:00																Sched	0	0
Event 24	00:00																Sched	0	0
Event 25	00:00																Sched	0	0
Event 26	00:00																Sched	0	0
Event 27	00:00																Sched	0	0
Event 28	00:00																Sched	0	0
Event 29	00:00																Sched	0	0
Event 30	00:00																Sched	0	0
Event 31	00:00																Sched	0	0
Event 32	00:00																Sched	0	0

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Load Switch Outputs (BIU 1)

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	LS 1	LS 2	LS 3	LS 4	LS 5	LS 6	LS 7	LS 8
Red Function	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed
Red Index	1	2	3	4	5	6	7	8
Yellow Function	VehYel	VehYel	VehYel	VehYel	VehYel	VehYel	VehYel	VehYel
Yellow Index	1	2	3	4	5	6	7	8
Green Function	VehGrn	VehGrn	VehGrn	VehGrn	VehGrn	VehGrn	VehGrn	VehGrn
Green Index	1	2	3	4	5	6	7	8

Load Switch Outputs (BIU 2)

	LS 9	LS 10	LS 11	LS 12	LS 13	LS 14	LS 15	LS 16
Red Function	DntWlk	DntWlk	DntWlk	DntWlk	VehRed	VehRed	VehRed	VehRed
Red Index	2	4	1	8	0	0	0	0
Yellow Function	PedClr	PedClr	PedClr	PedClr	VehRed	VehRed	VehRed	VehRed
Yellow Index	0	0	0	0	0	0	0	0
Green Function	Walk	Walk	Walk	Walk	VehRed	VehRed	VehRed	VehRed
Green Index	2	4	1	8	0	0	0	0

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T/F Outputs (BIU 1)

	I/O 10	I/O 11	I/O 12	I/O 13
Output	VehRed	VehRed	VehRed	VehRed
Index	0	0	0	0

T/F Outputs (BIU 2)

	I/O 10	I/O 11	I/O 12	I/O 13	I/O 14	I/O 15
Output	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed
Index	0	0	0	0	0	0

T/F Outputs (BIU 3)

	OUT 1	OUT 2	OUT 3	OUT 4	OUT 5	OUT 6	OUT 7	OUT 8
Output	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed
Index	0	0	0	0	0	0	0	0

	OUT 9	OUT 10	OUT 11	OUT 12	OUT 13	OUT 14	OUT 15	I/O 1
Output	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed
Index	0	0	0	0	0	0	0	0

	I/O 2	I/O 3	I/O 4	I/O 5	I/O 6
Output	VehRed	VehRed	VehRed	VehRed	VehRed
Index	0	0	0	0	0

T/F Outputs (BIU 4)

	OUT 1	OUT 2	OUT 3	OUT 4	OUT 5	OUT 6	OUT 7	OUT 8
Output	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed
Index	0	0	0	0	0	0	0	0

	OUT 9	OUT 10	OUT 11	OUT 12	OUT 13	OUT 14	OUT 15	I/O 1
Output	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed
Index	0	0	0	0	0	0	0	0

	I/O 2	I/O 3	I/O 4	I/O 5	I/O 6	I/O 7	I/O 8	I/O 9
Output	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed	VehRed
Index	0	0	0	0	0	0	0	0

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Detector Inputs (BIU 9)

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	Det 1	Det 2	Det 3	Det 4	Det 5	Det 6	Det 7	Det 8
Function	VehDet	VehDet	VehDet	VehDet	None	None	None	None
Index	1	2	3	4	0	0	0	0

	Det 9	Det 10	Det 11	Det 12	Det 13	Det 14	Det 15	Det 16
Function	None	None	None	None	None	None	None	None
Index	0	0	0	0	13	14	15	0

Detector Inputs (BIU 10)

	Det 17	Det 18	Det 19	Det 20	Det 21	Det 22	Det 23	Det 24
Function	None	None	None	None	VehDet	VehDet	VehDet	None
Index	17	18	0	0	21	22	23	0

	Det 25	Det 26	Det 27	Det 28	Det 29	Det 30	Det 31	Det 32
Function	None	None	None	None	VehDet	VehDet	None	None
Index	25	26	0	0	29	30	0	0

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Detector Inputs (BIU 11)

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	Det 33	Det 34	Det 35	Det 36	Det 37	Det 38	Det 39	Det 40
Function	VehDet	VehDet	None	None	None	None	None	None
Index	33	34	0	0	0	0	0	0

	Det 41	Det 42	Det 43	Det 44	Det 45	Det 46	Det 47	Det 48
Function	None	None	VehDet	VehDet	None	None	None	VehDet
Index	0	0	43	44	0	0	0	48

Detector Inputs (BIU 12)

	Det 49	Det 50	Det 51	Det 52	Det 53	Det 54	Det 55	Det 56
Function	VehDet	None	VehDet	None	None	None	None	None
Index	49	0	51	0	0	0	0	0

	Det 57	Det 58	Det 59	Det 60	Det 61	Det 62	Det 63	Det 64
Function	VehDet	None	VehDet	None	None	None	VehDet	None
Index	57	0	59	0	0	0	63	0

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T/F Inputs (BIU 1)

	I/O 14	I/O 15	I/O 16	I/O 17	I/O 18	I/O 19	I/O 20	I/O 21
Input	None	None	VehDet	VehDet	AutoFlash	None	None	None
Index	0	0	57	51	1	0	0	0

	I/O 22	I/O 23	I/O 24	IN 1	IN 2	IN 3	IN 4	IN 5
Input	None	ExtStr	None	StopTm	StopTm	VehDet	VehDet	VehDet
Index	0	5	0	5	5	33	43	49

	IN 6	IN 7	IN 8	OPTO 1	OPTO 2	OPTO 3	OPTO 4
Input	VehDet	VehDet	None	None	PedDet	PedDet	PedDet
Index	59	41	0	0	2	0	4

T/F Inputs (BIU 2)

	I/O 16	I/O 17	I/O 18	I/O 19	I/O 20	I/O 21	I/O 22	I/O 23
Input	Preempt	Preempt	Preempt	Preempt	VehDet	None	None	None
Index	3	4	5	6	35	0	0	0

	I/O 24	IN 1	IN 2	IN 3	IN 4	IN 5	IN 6	IN 7
Input	None	None	None	LocFlash	MMUFlash	None	None	None
Index	0	0	0	1	1	0	0	0

	IN 8	OPTO 1	OPTO 2	OPTO 3	OPTO 4
Input	None	None	PedDet	PedDet	PedDet
Index	0	0	6	0	8

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T/F Inputs (BIU 3)

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	I/O 7	I/O 8	I/O 9	I/O 10	I/O 11	I/O 12	I/O 13	I/O 14
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0

	I/O 15	I/O 16	I/O 17	I/O 18	I/O 19	I/O 20	I/O 21	I/O 22
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0

	I/O 23	I/O 24	IN 1	IN 2	IN 3	IN 4	IN 5	IN 6
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0

	IN 7	IN 8	OPTO 1	OPTO 2	OPTO 3	OPTO 4
Input	None	None	None	None	None	None
Index	0	0	0	0	0	0

T/F Inputs (BIU 4)

	I/O 10	I/O 11	I/O 12	I/O 13	I/O 14	I/O 15	I/O 16	I/O 17
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0

	I/O 18	I/O 19	I/O 20	I/O 21	I/O 22	I/O 23	I/O 24	IN 1
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0

	IN 2	IN 3	IN 4	IN 5	IN 6	IN 7	IN 8	OPTO 1
Input	None	None	None	None	None	None	None	None
Index	0	0	0	0	0	0	0	0

	OPTO 2	OPTO 3	OPTO 4
Input	None	None	None
Index	0	0	0

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Cabinet / MMU Configuration

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Cabinet Type	TS2-2N
MMU Disable	No

	1-8								9-16							
MMU Channel Ignore																
Det BIU 1-No Fail Call																
Det BIU 2-No Fail Call																
Alt LS Flash																
Alt Phase Flash		2		4		6		8								
Alt Overlap Flash																
Alt LRV Flash																

	1-8								9-16							
CMU Channel Ignore	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
	17-24								**25-32**							
	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2

	1-8								9-16							
Det IASM1-Det Diag																
	17-24															

	1-8								9-16							
Det IASM2-Det Diag																
	17-24															

Phase / Overlap Outputs

	Phase	Overlap
1	Normal	Normal
2	Normal	Normal
3	Normal	Normal
4	Normal	Normal
5	Normal	Normal
6	Normal	Normal
7	Normal	Normal
8	Normal	Normal
9	Normal	Normal
10	Normal	Normal
11	Normal	Normal
12	Normal	Normal
13	Normal	Normal
14	Normal	Normal
15	Normal	Normal
16	Normal	Normal

LRV Outputs

	LRV
1	2 Head
2	2 Head
3	2 Head
4	2 Head
5	2 Head
6	2 Head
7	2 Head
8	2 Head

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Vehicle Detector 1

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases	1															
Yellow Lock Phases																
Red Lock Phases																
Extend Phases	1															
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 2

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases	1															
Yellow Lock Phases																
Red Lock Phases																
Extend Phases	1															
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 3

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases	1															
Yellow Lock Phases																
Red Lock Phases																
Extend Phases	1															
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 4

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases	1															
Yellow Lock Phases																
Red Lock Phases																
Extend Phases	1															
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 21

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases								8								
Yellow Lock Phases																
Red Lock Phases																
Extend Phases								8								
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 22

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases								8								
Yellow Lock Phases																
Red Lock Phases																
Extend Phases								8								
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 23

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases								8								
Yellow Lock Phases																
Red Lock Phases																
Extend Phases								8								
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 29

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases				4												
Yellow Lock Phases																
Red Lock Phases																
Extend Phases				4												
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 30

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases				4												
Yellow Lock Phases																
Red Lock Phases																
Extend Phases				4												
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 33

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases	1															
Yellow Lock Phases																
Red Lock Phases																
Extend Phases	1															
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 34

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Delay 0.0 Extend 0.0 Carryover 0.0 Queue Limit 0

Mode No Disc Added Disabled System Disabled

Fail Mode None Max Pres 0 No Act 0 Erratic 0 Fail Time 0

Delay 2 0.0

Phases	1-8								9-16							
Call Phases	1															
Yellow Lock Phases																
Red Lock Phases																
Extend Phases	1															
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 43

Delay 0.0 Extend 0.0 Carryover 0.0 Queue Limit 0

Mode No Disc Added Disabled System Disabled

Fail Mode None Max Pres 0 No Act 0 Erratic 0 Fail Time 0

Delay 2 0.0

Phases	1-8								9-16							
Call Phases		2														
Yellow Lock Phases																
Red Lock Phases																
Extend Phases		2														
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 44

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases		2														
Yellow Lock Phases																
Red Lock Phases																
Extend Phases		2														
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 48

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases		2														
Yellow Lock Phases																
Red Lock Phases																
Extend Phases		2														
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 49

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases			3													
Yellow Lock Phases																
Red Lock Phases																
Extend Phases			3													
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 51

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phases								8								
Yellow Lock Phases																
Red Lock Phases																
Extend Phases								8								
XSwitch Phases																
Bike Call Phases																

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Vehicle Detector 57

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Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases							7									
Yellow Lock Phases																
Red Lock Phases																
Extend Phases							7									
XSwitch Phases																
Bike Call Phases																

Vehicle Detector 59

Delay	0.0	Extend	0.0	Carryover	0.0	Queue Limit	0		
Mode	No Disc	Added	Disabled	System	Disabled				
Fail Mode	None	Max Pres	0	No Act	0	Erratic	0	Fail Time	0
Delay 2	0.0								

Phases	1-8								9-16							
Call Phases				4												
Yellow Lock Phases																
Red Lock Phases																
Extend Phases				4												
XSwitch Phases																
Bike Call Phases																

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Pedestrian Detector 2

No Act: 0 | Max Pres: 0 | Erratic: 0 | Fail Mode: None

Phases/Overlaps	1-8								9-16							
Call Ped Phases		2														
Call Ped Olaps																
Call Phases																
Locked Call Phases																
Ped Entry Phases																
Olap Ped Entry Phases																
Ped Cascade Phases																
Call Walk2																

Pedestrian Detector 4

No Act: 0 | Max Pres: 0 | Erratic: 0 | Fail Mode: None

Phases/Overlaps	1-8								9-16							
Call Ped Phases				4												
Call Ped Olaps																
Call Phases																
Locked Call Phases																
Ped Entry Phases																
Olap Ped Entry Phases																
Ped Cascade Phases																
Call Walk2																

Pedestrian Detector 6

No Act: 0 | Max Pres: 0 | Erratic: 0 | Fail Mode: None

Phases/Overlaps	1-8								9-16							
Call Ped Phases	1															
Call Ped Olaps																
Call Phases																
Locked Call Phases																
Ped Entry Phases																
Olap Ped Entry Phases																
Ped Cascade Phases																
Call Walk2																

Pedestrian Detector 8

No Act: 0 | Max Pres: 0 | Erratic: 0 | Fail Mode: None

Phases/Overlaps	1-8								9-16							
Call Ped Phases								8								
Call Ped Olaps																
Call Phases																
Locked Call Phases																
Ped Entry Phases																
Olap Ped Entry Phases																

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Control / Config

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Pattern Mode: Sched

Manual Pattern: 0 Manual Offset: 0

Stop Time Input: Enabled

Aux Switch: StopTm 5

DLS Mode: D4 Time Zone: Pac (UTC-8) GPS Thresh: 0

Password Timeout: 5

	1-8								9-16							
Maint Phs Recalls																
Maint Ped Recalls																

Serial 1 Port Configuration

Broadcast Plan/Sync: Disabled Broadcast Time: 00:00

Serial Rebroadcast: Disabled Response: None

Serial 2 Port Configuration

Broadcast Plan/Sync: Disabled Broadcast Time: 00:00

Ethernet Port Configuration

Broadcast Plan/Sync: Disabled Broadcast Time: 00:00

Serial Rebroadcast: Disabled

Peer Configuration

Peer 1: 0

Peer 2: 0

Peer 3: 0

Peer 4: 0

Peer 5: 0

Peer 6: 0

Peer 7: 0

Peer 8: 0

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Restricted Data

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(Serial Ports)

Serial Port 1	4					
Baud Rate	9600	8N1	RTS On	0	RTS Off	0
Serial Port 2	0					
Baud Rate	9600	8N1	RTS On	0	RTS Off	0

(Ethernet)

IP Address	172. 31. 54. 155
Netmask	255. 255. 254. 0
Broadcast Address	0. 0. 0. 0
Gateway	172. 31. 54. 254
Gateway 2	0. 0. 0. 0
Gateway 3	0. 0. 0. 0
Gateway 4	0. 0. 0. 0

Admin IP	100. 0. 0. 0	Leases	0
Admin Netmask	0. 0. 0. 0		

Port	161	Reply Mode	Host
Broadcast Port	0	Response	Time/Plan
Time Port	0		

(General)

Controller Address	1	Timeout	0
Peer Address	0	Timeout	0

Remote Calls	Disabled		
Remote Preempt	Disabled		
Remote Soft Preempt	Disabled		
Remote Priority	Disabled		
Remote MCE	Disabled	MCE Max	0

CITY OF SACRAMENTO
DETECTION SCHEDULE

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	Phase	Controller Det. Input	Location	Direction	Controller / Detector Type / Function			
					Extend	Delay	Passage	Notes
BIU 2	Ø1	1						
	Ø1	2						
	Ø1	3	Mid	WB	x		x	
	Ø1	4						
	Ø6	5						
	Ø6	6						
	Ø6	7						
	Ø6	8						
	Ø5	9						
	Ø5	10						
	Ø5	11						
	Ø5	12						
	Ø2	13						
	Ø2	14						
	Ø2	15						
	Ø2	16						
	Ø3	17						
	Ø3	18						
	Ø3	19						
	Ø3	20						
	Ø8	21						
	Ø8	22	Mid	SB	x		x	
	Ø8	23	Mid	SB	x		x	
	Ø8	24						
	Ø7	25						
	Ø7	26						
	Ø7	27						
	Ø7	28						
	Ø4	29	Rear	NB	x		x	
	Ø4	30						
	Ø4	31						
	Ø4	32						
BIU 3	Ø1	33	Front	EB	x		x	
	Ø1	34	Right	EB	x		x	
	Ø6	35						
	Ø6	36						
	Ø6	37						
	Ø6	38						
	Ø6	39						
	Ø6	40						
	Ø5	41						
	Ø5	42						
	Ø2	43	Front	WB	x		x	
	Ø2	44	Front	WB	x		x	
	Ø2	45						
	Ø2	46						
	Ø2	47						
	Ø2	48	Right	WB	x		x	
BIU 4	Ø3	49	Left	SB	x		x	
	Ø3	50						
	Ø8	51	Front	SB	x		x	
	Ø8	52						
	Ø8	53						
	Ø8	54						
	Ø8	55						
	Ø8	56						
	Ø7	57	Left	NB	x		x	
	Ø7	58						
	Ø4	59	Front	NB	x		x	
	Ø4	60						
	Ø4	61						
	Ø4	62						
	Ø4	63						
	Ø4	64						

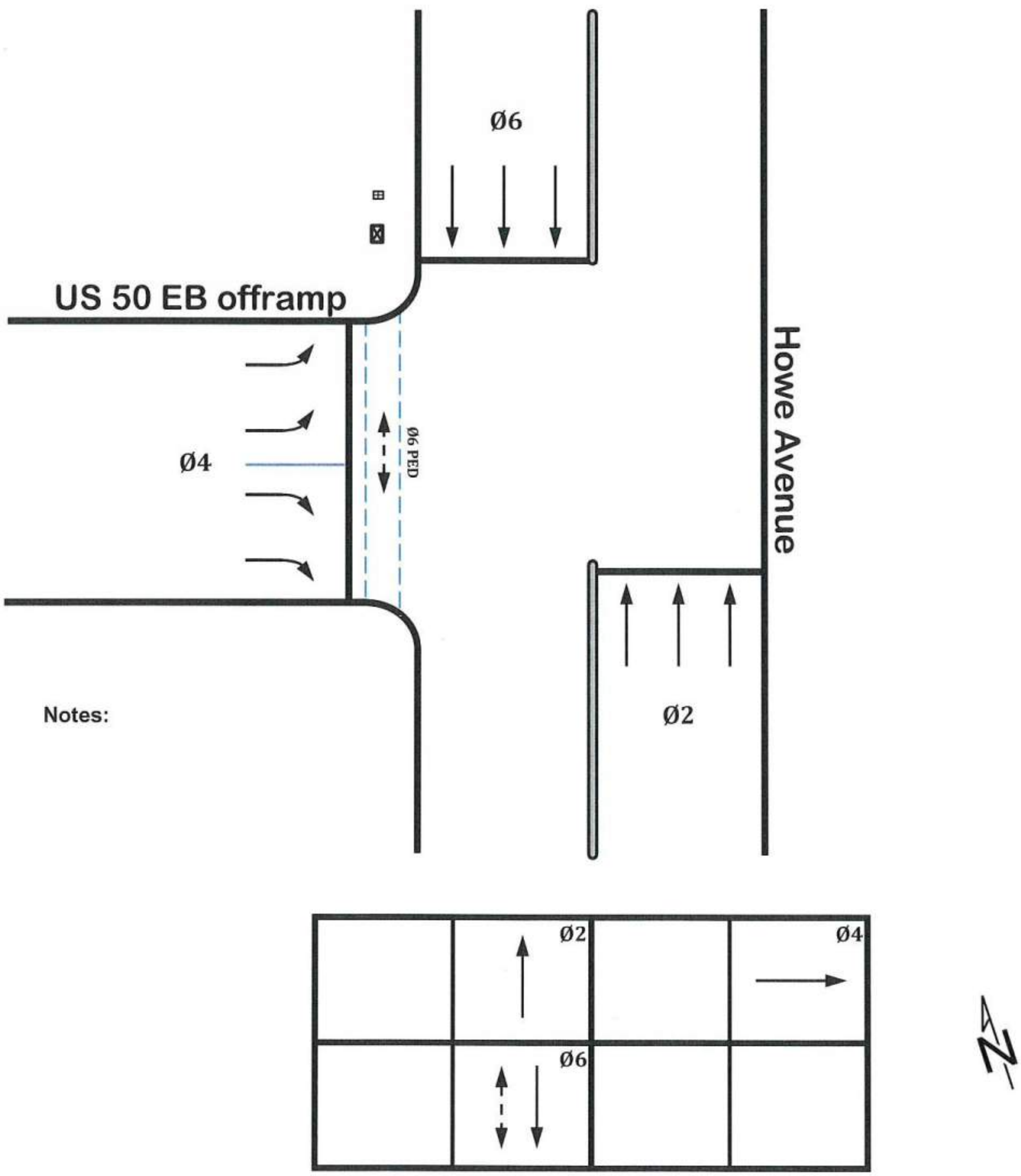
ECONOLITE ASC/2

TRAFFIC SIGNAL CONTROLLER PROGRAM CHART

N/S **Howe Avenue** **E/W** **US 50 EB offramp**

Intersection #: 350 System: IP Address:

Device ID: Channel: Drop #:



Notes:

CITY OF SACRAMENTO

PHASE TIMING

Prepared by: ael Approved by: [signature] Date Implemented: 3-9-20

Controller Timing Data

Key: (F1)-2-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12
Min Green		7		11		9						
Bike Green												
CndSrv MinGrn												
Walk						7						
Ped Clr						17						
Veh Ext		2.0		2.0		2.0						
Veh Ext 2												
Max Ext												
Max1		30		30		30						
Max2												
Max3												
Det Max												
Yellow		4.3		3.5		4.3						
Red Clr		1.0		1.0		1.0						
Red Rvt		2.0		2.0		2.0						
Act B4 Init												
Sec/Actuation												
Max Initial												
Time B4 Reduct												
Cars Wt												
Time To Reduce												
Min Gap												

Controller Recall Data

Key: (F1)-2-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12
Locking Memory												
Vehicle Recall												
Ped Recall												
Recall to Max												
Soft Recall												
Don't Rest Here												
Ped Dark N/Call												

Controller Start/Flash Data

Key: (F1)-2-6

Phase	1	2	3	4	5	6	7	8	9	10	11	12
ø's Startup		2				6						
Entry Rem Flash		2				6						
Exit Rem Flash		2				6						
Rem Flash Yello												
Flsh Together ø		2		4		6		8		10		12
Flsh Tgther OV	A:		B:		C:		D:					

Startup Intvl Rng1	Yellow
Startup Intvl Rng2	Yellow
Power Start All Red	6 sec
Power Start Flash	

Remote Flash Options

Out of Flash Yellow	Yes
Out of Flash All Red	No
Minimum Recall	Yes
Spare	No
Flash Thru Ld Switch	No
Cycle Thru Phases	No

Controller Option Data

Key: (F1)-2-9

Phase	1	2	3	4	5	6	7	8	9	10	11	12
Guar Passage												
NonActuated I												
NonActuated II												
Dual Entry		2				6						
Cond Service												
Cond Reservice												
Rest in Walk												
Flashing Walk												

Five Section Left Turn Heads						
	5-2:		7-4:		1-6:	
	3-8:		11-10:		9-12:	

Dual Entry	ON	Backup Protection Grp 1	OFF
Cond Service Enable	OFF	Backup Protection Grp 2	OFF
Cond Service Det X Switch	OFF	Backup Protection Grp 3	OFF
Ped Clr Protect	ON	Simul Gap Grp 1	OFF
Spec Pre OVL Flash	OFF	Simul Gap Grp 2	OFF
Lock Det in Red	OFF	Simul Gap Grp 3	OFF
Reserved	OFF	unitBackup Time	OFF
Reserved	OFF	unitRed Revert	OFF

CONFIGURATION

Controller Sequence

Key: (F1)-1-1

Priority	1	2	3	4	5	6	7	8	9	10	11	12
Ring 1	1	2 |	3	4 |	9	10 |	0	0	0	0	0	0
Ring 2	5	6 |	7	8 |	11	12 |	0	0	0	0	0	0
CG Barrier		^		^		^						

Phases in Use

Key: (F1)-1-2

Phase	1	2	3	4	5	6	7	8	9	10	11	12
Phases in Use		2		4		6						
Exclusive Ped												

SDLC Options

Key: (F1)-1-4

BIU Number	1	2	3	4	5	6	7	8
Term & Facil								
Detector Rack								

Type 2 Runs as Type 1	
MMU Disable	X
Diagnostic Enable	
Peer to Peer Enable	

Peer to Peer Addresses

1)	255	2)	255	3)	255	4)	255	5)	255
6)	255	7)	255	8)	255	9)	255	10)	255

NEW CONTROLLER SHOULD BE DEFAULTED BEFORE INSTALLATION

To Default Controller: (F1)-8-2 Select All Press ENTER
(F1)-8-1-3 Select All Press ENTER

Ped Timing Carryover

Key: (F1)-2-3

Phase	Carryover
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0

Port 2

Key: (F1)-1-5

Port 2 Protocol	TERMNL
Port 2 Enable	NO
Data Rate (bps)	9600
Data, Parity, Stop	8, N, 1
NTCIP Address	0
NTCIP Grp Address	0
NTCIP Resp Delay	0
NTCIP Sgl Flg Enal	NO
NTCIP BackUp Tim	0
NTCIP Drop-Out Time	0
Port2 Drop-Out Tim	0
NTCIP RTS Timing	NO
NTCIP RTS to CTS Dlay	0
NTCIP RTS TurnOff Dla	0
NTCIP Early RTS	NO

Port 3

Key: (F1)-1-6

Port 3 Protocol	TELEM
Port 3 Enable	YES
Port 3 millisec Timing	NO
Port 3 RTS to CTS Delay	0
Port 3 RTS TurnOff Delay	0
Duplex -Half or Full	FULL
Modem Data Rate (bps)	1200
Data, Parity, Stop	8, N, 1
Telemetry Address	1
System Detector 9-16 Add	
Telemtry Response Delay	1
NTCIP Address	0
NTCIP Grp Address	0
NTCIP Resp Delay	0
NTCIP Single Flag Enable	NO
NTCIP BackUp Time	0
Port 3 Drop-Out Time	0
NTCIP Early RTS	NO

Options

Key: (F1)-1-8

Supervisor Access Code	0
Data Change Acces Code	0
Key Click Enable	NO
Backlight Enable	YES
Request Download	NO

CITY OF SACRAMENTO

COORDINATION PATTERN TABLES

Coordination Pattern Data **Key: (F1)-3-4**

PLAN FORMAT			
Cycle Length	60	Plan	1
Offset	21		

SPLITS: BY PHASE							
1)		2)	32	3)		4)	28
5)		6)	32	7)		8)	
9)		10)		11)		12)	

Veh Permissive	[1]		[2]	
Veh Perm 2 Disp				
Phase Reservice	.			
Split Extension/Ring	[1]		[2]	
Splt Demand Pattern	[1]		[2]	
Xartery Pattern				

PHASE	1	2	3	4	5	6	7	8	9	10	11	12
Coord Phases		2				6						
Veh Recall												
Veh Max Recall												
Ped Recall												
Phase Omit												
Spare												
Alt Sequence	A:		B:		C:		D:		E:		F:	

PLAN FORMAT			
Cycle Length	65	Plan	2
Offset	57		

SPLITS: BY PHASE							
1)		2)	39	3)		4)	26
5)		6)	39	7)		8)	
9)		10)		11)		12)	

Veh Permissive	[1]		[2]	
Veh Perm 2 Disp				
Phase Reservice	.			
Split Extension/Ring	[1]		[2]	
Splt Demand Pattern	[1]		[2]	
Xartery Pattern				

PHASE	1	2	3	4	5	6	7	8	9	10	11	12
Coord Phases		2				6						
Veh Recall												
Veh Max Recall												
Ped Recall												
Phase Omit												
Spare												
Alt Sequence	A:		B:		C:		D:		E:		F:	

PLAN FORMAT			
Cycle Length	65	Plan	3
Offset	58		

SPLITS: BY PHASE							
1)		2)	37	3)		4)	28
5)		6)	37	7)		8)	
9)		10)		11)		12)	

Veh Permissive	[1]		[2]	
Veh Perm 2 Disp				
Phase Reservice	.			
Split Extension/Ring	[1]		[2]	
Splt Demand Pattern	[1]		[2]	
Xartery Pattern				

PHASE	1	2	3	4	5	6	7	8	9	10	11	12
Coord Phases		2				6						
Veh Recall												
Veh Max Recall												
Ped Recall												
Phase Omit												
Spare												
Alt Sequence												

PLAN FORMAT			
Cycle Length		Plan	4
Offset			

SPLITS: BY PHASE							
1)		2)		3)		4)	
5)		6)		7)		8)	
9)		10)		11)		12)	

Veh Permissive	[1]		[2]	
Veh Perm 2 Disp				
Phase Reservice	.			
Split Extension/Ring	[1]		[2]	
Splt Demand Pattern	[1]		[2]	
Xartery Pattern				

PHASE	1	2	3	4	5	6	7	8	9	10	11	12
Coord Phases												
Veh Recall												
Veh Max Recall												
Ped Recall												
Phase Omit												
Spare												
Alt Sequence	A:		B:		C:		D:		E:		F:	

Alt Sequence: A=switch Ø1 & Ø2 C=switch Ø5 & Ø6 E=switch Ø9 & Ø10
B=switch Ø3 & Ø4 D=switch Ø7 & Ø8 F=switch Ø11 & Ø12

CITY OF SACRAMENTO

COORDINATION/TIME OF DAY DATA

Coordinator Options — Key: (F1)-3-1

Split Units	SEC	Actuated Coord ø						X
Offset Units	SEC	Actuated Rest In Wal						.
Interconnect Format	**PLAN**	Inhibit Max						X
Interconnect Source	**NIC**	Max 2 Select						.
Resync Count	**15**	Multisync						.
Transition	SMOOTH	Float Force Off						.
Dwell Period	0 sec	**A**	**B**	**C**	**D**	**E**	**F**	
	Free Alternate Sequence	.	.	.	.	.	.	

Coord Manual and Split Demand — Key: (F1)-3-2

Manual Enable	OFF	Manual Pattern										
Split Demand	**Demand 1**	**Demand 2**										
Demand Call Time	0	0										
Demand Cycle Count	0	0										
Demand ø	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Demand 1 ø's	.	.	.	.	.	.	.	.	.	.	.	.
Demand 2 ø's	.	.	.	.	.	.	.	.	.	.	.	.

Coord Auto Permissive Min Green — Key: (F1)-3-3

Phase	Perm Min Grn	
1	0	sec
2	0	sec
3	0	sec
4	0	sec
5	0	sec
6	0	sec
7	0	sec
8	0	sec
9	0	sec
10	0	sec
11	0	sec
12	0	sec

Clock/ Calendar Data — Key: (F1)-5-1

DATE SET:	0/0/00	**Enter Date/Time**
TIME SET:	**0:00:00**	**Then Press Enter**
Manual NIC Prgrm Step	0	
Manual TOD Prgrm Step	0	
Sync Reference Time	0:00	
Sync Reference	REFERENCE TIME	
Week 1 begins on 1st Sunday	.	
Disable Daylight Savings	.	
DST begins Last Sunday	.	

TOD Yearly Program — Key: (F1)-5-3

Week of Year	1	2	3	4	5	6	7	8
Weekly Program	1	1	1	1	1	1	1	1
Week of Year	9	10	11	12	13	14	15	16
Weekly Program	1	1	1	1	1	1	1	1
Week of Year	17	18	19	20	21	22	23	24
Weekly Program	1	1	1	1	1	1	1	1
Week of Year	25	26	27	28	29	30	31	32
Weekly Program	1	1	1	1	1	1	1	1
Week of Year	33	34	35	36	37	38	39	40
Weekly Program	1	1	1	1	1	1	1	1
Week of Year	41	42	43	44	45	46	47	48
Weekly Program	1	1	1	1	1	1	1	1
Week of Year				49	50	51	52	53
Weekly Program				1	1	1	1	1

TOD Weekly Programs Key: (F1)-5-2

Week	SU	MO	TU	WE	TH	FR	SA
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1

CITY OF SACRAMENTO

COORDINATION/TIME OF DAY DATA

Coordinator Options — Key: (F1)-3-1

Split Units	SEC	Actuated Coord ø	X
Offset Units	SEC	Actuated Rest In Wal	
Interconnect Format	PLAN	Inhibit Max	X
Interconnect Source	NIC	Max 2 Select	
Resync Count	15	Multisync	
Transition	SMOOTH	Float Force Off	
Dwell Period	0 sec		

	A	B	C	D	E	F
Free Alternate Sequence						

Coord Manual and Split Demand — Key: (F1)-3-2

Manual Enable	OFF	Manual Pattern	

Split Demand	Demand 1	Demand 2
Demand Call Time	0	0
Demand Cycle Count	0	0

Demand ø	1	2	3	4	5	6	7	8	9	10	11	12
Demand 1 ø's												
Demand 2 ø's												

Coord Auto Permissive Min Green — Key: (F1)-3-3

Phase	Perm Min Grn
1	0 sec
2	0 sec
3	0 sec
4	0 sec
5	0 sec
6	0 sec
7	0 sec
8	0 sec
9	0 sec
10	0 sec
11	0 sec
12	0 sec

Clock/ Calendar Data — Key: (F1)-5-1

DATE SET:	0/0/00	Enter Date/Time Then Press Enter
TIME SET:	0:00:00	
Manual NIC Prgrm Step	0	
Manual TOD Prgrm Step	0	
Sync Reference Time	0:00	
Sync Reference	REFERENCE TIME	
Week 1 begins on 1st Sunday		
Disable Daylight Savings		
DST begins Last Sunday		

TOD Yearly Program — Key: (F1)-5-3

Week of Year	1	2	3	4	5	6	7	8
Weekly Program	1	1	1	1	1	1	1	1
Week of Year	9	10	11	12	13	14	15	16
Weekly Program	1	1	1	1	1	1	1	1
Week of Year	17	18	19	20	21	22	23	24
Weekly Program	1	1	1	1	1	1	1	1
Week of Year	25	26	27	28	29	30	31	32
Weekly Program	1	1	1	1	1	1	1	1
Week of Year	33	34	35	36	37	38	39	40
Weekly Program	1	1	1	1	1	1	1	1
Week of Year	41	42	43	44	45	46	47	48
Weekly Program	1	1	1	1	1	1	1	1
Week of Year				49	50	51	52	53
Weekly Program				1	1	1	1	1

TOD Weekly Programs — Key: (F1)-5-2

Week	SU	MO	TU	WE	TH	FR	SA
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1

CITY OF SACRAMENTO
PREEMPTION TABLES

Priority Preemptor 2
Key: (F1)-4-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12
Term Phase Ovlp												
Trk Clr Phase												
Hold Phases						6						
Exit Phases												
Exit Calls												
Spare												
Term Overlaps	A:	.		B:	.		C:	.		D:	.	

Active	YES	Ped Dark	
Priority		Ped Active	
Det Lock		Zero PC Time	
Hold Flash		PC Thru Yellow	
Term Ovlp ASAP		Term Phases	

Don't Override Flash	X
Flash all Outputs	
Yellow-Red goes Green	
Enable Max Preempt Time	
Active only During Hold	
No CVM in Flash	
Fast Flash GRN on Hold	
Out of Flash	GREEN

					GRN	YEL	RED
Max Time	55	Duration Time					
Min Hold Time	6	Delay Time		Minimum			
Min Ped Clear		Inhibit Time		Track Clear			
Exit Max		Hld Delay Tim		Hold			

Priority Preemptor 3
Key: (F1)-4-2

Phase	1	2	3	4	5	6	7	8	9	10	11	12
Term Phase Ovlp												
Trk Clr Phase												
Hold Phases		2										
Exit Phases												
Exit Calls												
Spare												
Term Overlaps	A:	.		B:	.		C:	.		D:	.	

Active	YES	Ped Dark	
Priority		Ped Active	
Det Lock		Zero PC Time	
Hold Flash		PC Thru Yellow	
Term Ovlp ASAP		Term Phases	

Don't Override Flash	X
Flash all Outputs	
Yellow-Red goes Green	
Enable Max Preempt Time	
Active only During Hold	
No CVM in Flash	
Fast Flash GRN on Hold	
Out of Flash	

					GRN	YEL	RED
Max Time	55	Duration Time					
Min Hold Time	6	Delay Time		Minimum			
Min Ped Clear		Inhibit Time		Track Clear			
Exit Max		Hld Delay Tim		Hold			

Priority Preemptor 4
Key: (F1)-4-3

Phase	1	2	3	4	5	6	7	8	9	10	11	12
Term Phase Ovlp												
Trk Clr Phase												
Hold Phases												
Exit Phases												
Exit Calls												
Spare												
Term Overlaps	A:			B:			C:			D:		

Active	YES	Ped Dark	
Priority		Ped Active	
Det Lock		Zero PC Time	
Hold Flash		PC Thru Yellow	
Term Ovlp ASAP		Term Phases	

Don't Override Flash	X
Flash all Outputs	
Yellow-Red goes Green	
Enable Max Preempt Time	
Active only During Hold	
No CVM in Flash	
Fast Flash GRN on Hold	
Out of Flash	GREEN

					GRN	YEL	RED
Max Time	55	Duration Time					
Min Hold Time	6	Delay Time		Minimum			
Min Ped Clear		Inhibit Time		Track Clear			
Exit Max		Hld Delay Tim		Hold			

Priority Preemptor 5
Key: (F1)-4-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12
Term Phase Ovlp												
Trk Clr Phase												
Hold Phases				4								
Exit Phases												
Exit Calls												
Spare												
Term Overlaps	A:			B:			C:			D:		

Active	YES	Ped Dark	
Priority		Ped Active	
Det Lock		Zero PC Time	
Hold Flash		PC Thru Yellow	
Term Ovlp ASAP		Term Phases	

Don't Override Flash	X
Flash all Outputs	
Yellow-Red goes Green	
Enable Max Preempt Time	
Active only During Hold	
No CVM in Flash	
Fast Flash GRN on Hold	
Out of Flash	GREEN

					GRN	YEL	RED
Max Time	55	Duration Time					
Min Hold Time	6	Delay Time		Minimum			
Min Ped Clear		Inhibit Time		Track Clear			
Exit Max		Hld Delay Tim		Hold			

CITY OF SACRAMENTO

DETECTION SCHEDULE

Howe Avenue at US 50 WB offramp

	Phase	Controller Det. Input	Location	Direction	Controller / Detector Type / Function			
					Extend	Delay	Passage	Notes
	Loops or Retrofit Video							
BIU 1	Ø1	1						
BIU 1	Ø2	2	Front	NB			x	
BIU 1	Ø3	3						
BIU 1	Ø4	4	Front	WB			x	
BIU 1	Ø5	5						
BIU 1	Ø6	6	Front	SB			x	
BIU 1	Ø7							
BIU 1	Ø8							
	Loops							
BIU 1	Ø1	9						
BIU 1	Ø2	10						
BIU 1	Ø3	11						
BIU 1	Ø4	12						
BIU 1	Ø5	13						
BIU 1	Ø6	14						
BIU 1	Ø7	15						
BIU 1	Ø8	16						
	New Video Detection		BIU 2 (RESERVED) 17-32					
BIU 3	Ø1	33						
BIU 3	Ø1	34						
BIU 3	Ø6	35						
BIU 3	Ø6	36						
BIU 3	Ø6	37						
BIU 3	Ø6	38						
BIU 3	Ø6	39						
BIU 3	Ø6	40						
BIU 3	Ø5	41						
BIU 3	Ø5	42						
BIU 3	Ø2	43						
BIU 3	Ø2	44						
BIU 3	Ø2	45						
BIU 3	Ø2	46						
BIU 3	Ø2	47						
BIU 3	Ø2	48						
BIU 4	Ø3	49						
BIU 4	Ø3	50						
BIU 4	Ø8	51						
BIU 4	Ø8	52						
BIU 4	Ø8	53						
BIU 4	Ø8	54						
BIU 4	Ø8	55						
BIU 4	Ø8	56						
BIU 4	Ø7	57						
BIU 4	Ø7	58						
BIU 4	Ø4	59						
BIU 4	Ø4	60						
BIU 4	Ø4	61						
BIU 4	Ø4	62						
BIU 4	Ø4	63						
BIU 4	Ø4	64						

ECONOLITE ASC/3

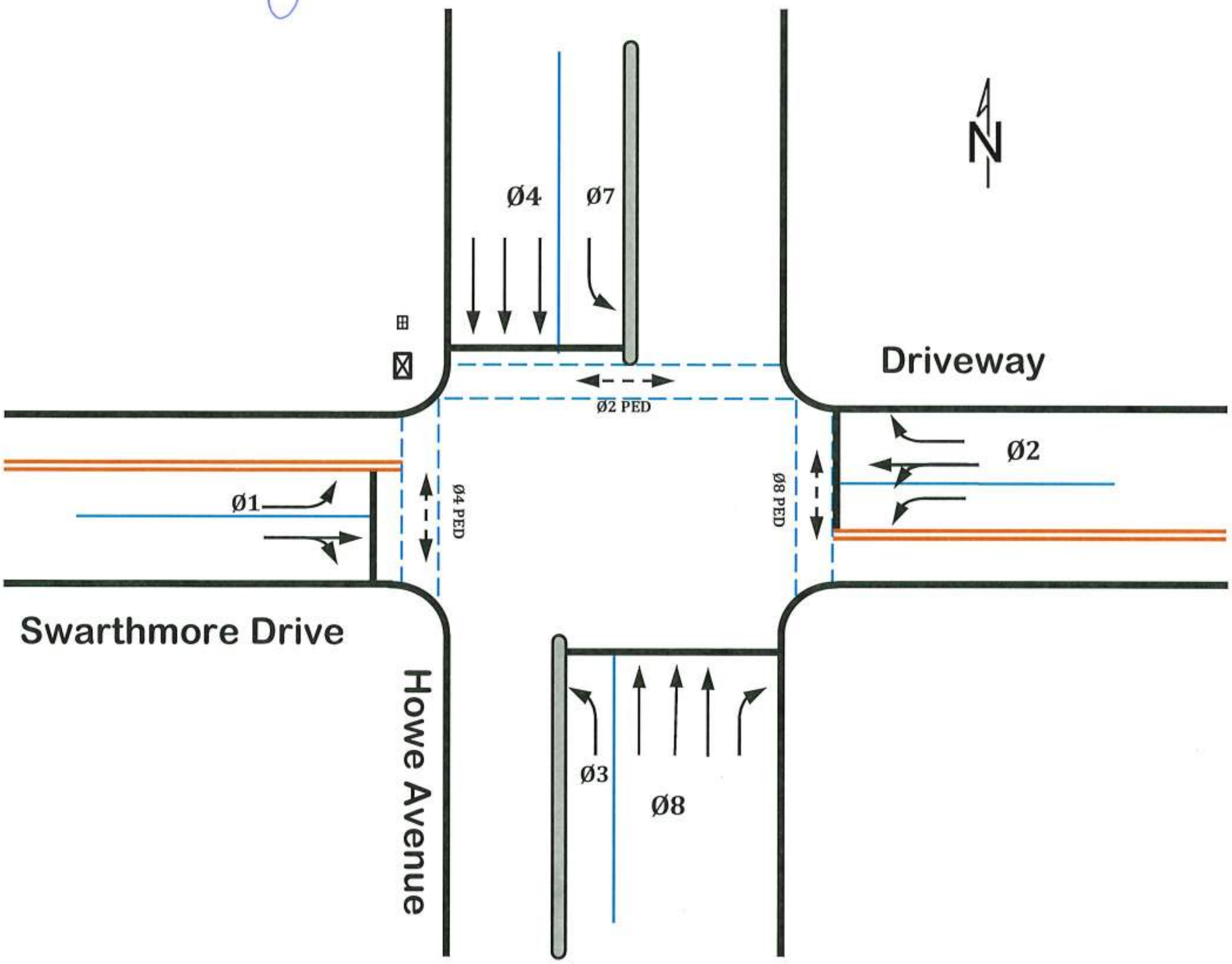
TRAFFIC SIGNAL CONTROLLER PROGRAM CHART

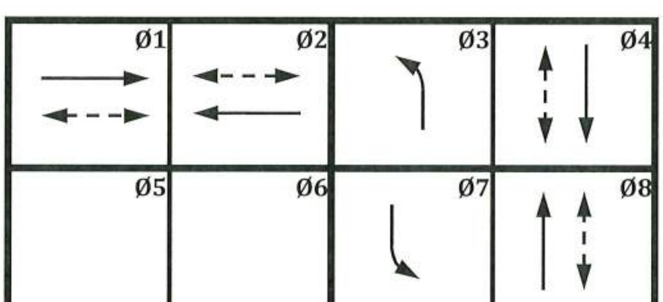
N/S **Howe Avenue** **E/W** **Swarthmore Drive**

Intersection #: 454 System: IP Address: 172.31.54.90

CCS: 3 Channel: 306 Drop #: 35

Prepared by: [signature] Approved by: [signature] Date Implemented: 3-6-20





City of Sacramento

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

454 - Howe Avenue & Swarthmore Drive - Econolite Type - ASC/3

Controller **Timing Plan (MM) 2-1**

Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction																
Min Green	11	11	10	8	0	0	11	8	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	4	0	7	0	0	0	7	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	26	0	12	0	0	0	17	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	2.0	2.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	30	30	35	60	0	0	35	60	0	0	0	0	0	0	0	0
Max2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.5	3.5	3.5	5.0	0.0	0.0	3.5	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	0.6	0.4	0.1	1.0	0.0	0.0	0.4	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

City of Sacramento

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

454 - Howe Avenue & Swarthmore Drive - Econolite Type - ASC/3

Configuration **Controller Sequence**

Phase Ring Sequence.......(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	B		B													
Sequence 1																
Ring 1	| 2	1 |	3	4	.	.	.	.	.	.	.	.	.	.	.	.
Ring 2	| .	. |	7	8	.	.	.	.	.	.	.	.	.	.	.	.

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Hardware Alternate Sequence Enable: No

City of Sacramento

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

454 - Howe Avenue & Swarthmore Drive - Econolite Type - ASC/3

Configuration Port 1 (SDLC)

Port 1 SDLC (MM) 1-4-1

BIU	1	2	3	4	5	6	7	8
Term & Facility								
Detector Rack								

Enable TS2/MMU Type Cabinet: No
Enable MMU Extended Status: No
Enable SDLC Stop Time: No
Enable 3 Critical RFE's Lockup: Yes

MMU Program (MM) 1-4-2

Channel Can Serve With Channel	
Channel 1	**Channel 2**

Color Check Enable (MM) 1-4-3

Enable Color Check: Yes

MMU/LS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Green																
Yellow																
Red																

Secondary Stations/Tests (MM) 1-4-4

ID	1	2	3	4	5	6	7	8	MMU
Term & Facility									

ID	1	2	3	4	5	6	7	8	Diag
Detector Rack									

Enable SDLC Diagnostic Test: No

City of Sacramento

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

454 - Howe Avenue & Swarthmore Drive - Econolite Type - ASC/3

Controller Start / Flash Data (MM) 2-5

Start Up

Phase	Phase Setting
1	.
2	.
3	.
4	Y
5	.
6	.
7	.
8	Y
9	.
10	.
11	.
12	.
13	.
14	.
15	.
16	.

Overlap
A
B
C
D

Flash Thru Mon: No
Flash Time: 6
All Red: 6
Power Start Seq: 1
MUTCD Enabled: No
Y->G: n/a

Automatic Flash

Entry
4
8

Exit
4
8

Overlap Exit
A
B
C
D

Flash Thru Mon: No
Exit Flash: W
Minimum Flash: 8
Mimimum Recall: No
Cycle Through Phase: No

City of Sacramento

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

454 - Howe Avenue & Swarthmore Drive - Econolite Type - ASC/3

Controller Options

Controller Options (MM) 2-6-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Grn Ph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Guar Passage																
Non-Act I																
Non-Act II																
Dual Entry																
Cond Service																
Cond Reservice																
Ped Re-Service																
Rest In Walk																
Flashing Walk																
Ped Clr-Yel																
Ped Clr-Red																
IGRN + Veh Ext																

Ped Clear Protect: Off

Unit Red Revert: 2.0

MUTCD 3 Seconds Don't Walk: No

Pre-Timed Mode (MM) 2-7

Enable Pre-Timed Mode: No

Free Input Disables Pre-Timed: No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pre-Timed																

Phase Recall Options (MM) 2-8

Plan # 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector			X				X									
Vehicle Recall				X				X								
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
AI Calc																

City of Sacramento

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

454 - Howe Avenue & Swarthmore Drive - Econolite Type - ASC/3

Coordination Options

Options (MM) 3-1

Manual Pattern	Auto	ECPI Coord	Yes
System Source	TBC	System Format	STD
Splits In	Seconds	Offsets In	Seconds
Transition	Smooth	Max Select	MAXINH
Dwell / Add Time	0		
Delay Coord Wk-LZ	No	Force Off	Float
Offset Reference	Lag	Use Ped Time	Yes
Ped Recall	No	Ped Reservice	No
Local Zero Override	No	FO Added Ini Green	No
Re-sync Count	0	Multisync	No

Auto Perm Minimum Green (Seconds) (MM) 3-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Split Demand (MM) 3-5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Demand 1																
Demand 2																

Demand	1	2
Detector	0	0
Call Time (Sec)	0	0
Cycle Count	0	0

City of Sacramento

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

454 - Howe Avenue & Swarthmore Drive - Econolite Type - ASC/3

Coordination Pattern Data
Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Seconds
Cycle	120	Std (COS)	9	Offsets In	Seconds
Offset Value	94s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	Yes	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description																
Splits (Split Pat 1)	16	34	20	50	0	0	20	50	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	20	20	0	0
Ring Displacement	-	0	0	0
Split Sum	120s	70s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase				X				X								
Vehicle Recall				X				X								
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																
Special Funciton Outputs																

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Seconds
Cycle	130	Std (COS)	17	Offsets In	Seconds
Offset Value	10s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	Yes	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description																
Splits (Split Pat 2)	16	34	15	65	0	0	15	65	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	20	20	0	0
Ring Displacement	-	0	0	0
Split Sum	130s	80s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase				X				X								
Vehicle Recall				X				X								
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																
Special Funciton Outputs																

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Seconds
Cycle	130	Std (COS)	25	Offsets In	Seconds
Offset Value	47s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	Yes	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description																
Splits (Split Pat 3)	16	34	15	65	0	0	15	65	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	20	20	0	0
Ring Displacement	-	0	0	0
Split Sum	130s	80s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase				X				X								
Vehicle Recall				X				X								
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																
Special Funciton Outputs																

City of Sacramento

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

454 - Howe Avenue & Swarthmore Drive - Econolite Type - ASC/3

Coordination Split Pattern
Split Pattern Data (MM) 3-3

Split Pattern # 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description																
Split (seconds)	16	34	20	50	0	0	20	50	0	0	0	0	0	0	0	0
Coord Phase				X				X								
Vehicle Recall				X				X								
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																

Ring	1	2	3	4
Split Sum	120s	70s	0s	0s

Split Pattern # 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description																
Split (seconds)	16	34	15	65	0	0	15	65	0	0	0	0	0	0	0	0
Coord Phase				X				X								
Vehicle Recall				X				X								
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																

Ring	1	2	3	4
Split Sum	130s	80s	0s	0s

Split Pattern # 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description																
Split (seconds)	16	34	15	65	0	0	15	65	0	0	0	0	0	0	0	0
Coord Phase				X				X								
Vehicle Recall				X				X								
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																

Ring	1	2	3	4
Split Sum	130s	80s	0s	0s

City of Sacramento

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

454 - Howe Avenue & Swarthmore Drive - Econolite Type - ASC/3

Time Base Clock/Calendar
Clock/Calendar Data (MM) 5-1

Manual Action Plan:	0
SYNC Reference Time:	00:00
SYNC Reference:	Reference Time
Day Light Savings:	No
Time Reset Input Set Time:	3:30:00
Standard Time From GMT:	0

City of Sacramento

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

454 - Howe Avenue & Swarthmore Drive - Econolite Type - ASC/3

Time Base **Day Plan/Schedule**
Day Plan (MM) 5-3

Day Plan #1

Event	Action Plan	Start Time
1	1	07:00
2	2	09:30
3	3	14:00
4	4	19:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	X	X	X	X	X	X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

City of Sacramento

ECONOLITE CONTROL PRODUCTS, INC.

Solutions that Move the World™

454 - Howe Avenue & Swarthmore Drive - Econolite Type - ASC/3

Detectors

Detectors - Pg 1

Veh Det Phase Assignment (MM) 6-1

Vehicle Detector Plan Number - 1

Veh Detector	Called Phase	Type

Vehicle Detector Plan Number - 2

Veh Detector	Called Phase	Type

Vehicle Detector Setup (MM) 6-2

Veh Detector	Type	TS2 Detector	Description
1	S-STANDARD	No	
2	S-STANDARD	No	
3	S-STANDARD	No	
4	S-STANDARD	No	
5	S-STANDARD	Yes	
6	S-STANDARD	No	
7	S-STANDARD	No	
8	S-STANDARD	No	
9	S-STANDARD	Yes	
10	S-STANDARD	Yes	
11	S-STANDARD	Yes	
12	S-STANDARD	Yes	
13	S-STANDARD	Yes	
14	S-STANDARD	Yes	
15	S-STANDARD	Yes	
16	S-STANDARD	Yes	
17	S-STANDARD	Yes	
18	S-STANDARD	Yes	
19	S-STANDARD	Yes	
20	S-STANDARD	Yes	
21	S-STANDARD	Yes	
22	S-STANDARD	Yes	
23	S-STANDARD	Yes	
24	S-STANDARD	Yes	
25	S-STANDARD	Yes	
26	S-STANDARD	Yes	
27	S-STANDARD	Yes	
28	S-STANDARD	Yes	
29	S-STANDARD	Yes	
30	S-STANDARD	Yes	
31	S-STANDARD	Yes	
32	S-STANDARD	Yes	
33	S-STANDARD	Yes	
34	S-STANDARD	Yes	
35	S-STANDARD	Yes	
36	S-STANDARD	Yes	
37	S-STANDARD	Yes	
38	S-STANDARD	Yes	
39	S-STANDARD	Yes	
40	S-STANDARD	Yes	
41	S-STANDARD	Yes	
42	S-STANDARD	Yes	
43	S-STANDARD	Yes	
44	S-STANDARD	Yes	
45	S-STANDARD	Yes	

46	S-STANDARD	Yes	
47	S-STANDARD	Yes	
48	S-STANDARD	Yes	
49	S-STANDARD	Yes	
50	S-STANDARD	Yes	
51	S-STANDARD	Yes	
52	S-STANDARD	Yes	
53	S-STANDARD	Yes	
54	S-STANDARD	Yes	
55	S-STANDARD	Yes	
56	S-STANDARD	Yes	
57	S-STANDARD	Yes	
58	S-STANDARD	Yes	
59	S-STANDARD	Yes	
60	S-STANDARD	Yes	
61	S-STANDARD	Yes	
62	S-STANDARD	Yes	
63	S-STANDARD	Yes	
64	S-STANDARD	Yes	

Vehicle Detector Plan Number - 1

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	No	Yes	2.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	7	No	Yes	2.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	9	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	10	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	11	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	12	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	13	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	14	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	15	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	16	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 2

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	9	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	10	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	11	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	12	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	13	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	14	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	15	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	16	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Ped Detector Phase Assignment (MM) 6-3

Mode: NTCIP

Called Phase	Detector
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16

CITY OF SACRAMENTO

DETECTION SCHEDULE

Howe Avenue and Swarthmore Drive

	Phase	Controller Det. Input	Location	Direction	Controller / Detector Type / Function			
					Extend	Delay	Passage	Notes
BIU 1	Loops or Retrofit Video							
	Ø1	1	Front, Mid	EB			x	D1/D3 front, D2/D4 mid
	Ø2	2	Front, Mid	WB			x	D1/D4 front, D2 mid
	Ø3	3	Front	N-W			x	D1
	Ø4	4	Front, Rear	SB			x	D1 front, D2 mid & rear
	Ø5	5						
	Ø6	6						
	Ø7	7	Front	S-E			x	D1
	Ø8	8	Front, Rear	NB			x	D1 front, D2 mid, D3 rear
	Loops							
	Ø1	9						
	Ø2	10						
	Ø3	11						
	Ø4	12						
	Ø5	13						
	Ø6	14						
	Ø7	15						
	Ø8	16						
	New Video Detection	BIU 2 (RESERVED) 17-32						
BIU 3	Ø1	33						
	Ø1	34						
	Ø6	35						
	Ø6	36						
	Ø6	37						
	Ø6	38						
	Ø6	39						
	Ø6	40						
	Ø5	41						
	Ø5	42						
	Ø2	43						
	Ø2	44						
	Ø2	45						
	Ø2	46						
	Ø2	47						
	Ø2	48						
BIU 4	Ø3	49						
	Ø3	50						
	Ø8	51						
	Ø8	52						
	Ø8	53						
	Ø8	54						
	Ø8	55						
	Ø8	56						
	Ø7	57						
	Ø7	58						
	Ø4	59						
	Ø4	60						
	Ø4	61						
	Ø4	62						
	Ø4	63						
	Ø4	64						

APPENDIX D: SYNCHRO REPORTS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	37	106	146	150	43	191	1043	226	31	762	110
Future Volume (veh/h)	29	37	106	146	150	43	191	1043	226	31	762	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	37	106	113	196	43	191	1043	226	31	762	110
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	163	171	143	165	276	59	200	2489	539	115	2467	353
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.04	0.20	0.20	0.06	0.55	0.55
Sat Flow, veh/h	1781	1870	1562	1781	2985	640	1781	4201	909	1781	4512	646
Grp Volume(v), veh/h	29	37	106	113	121	118	191	845	424	31	573	299
Grp Sat Flow(s),veh/h/ln	1781	1870	1562	1781	1870	1755	1781	1702	1707	1781	1702	1754
Q Serve(g_s), s	1.8	2.2	7.9	7.4	7.5	7.8	12.8	26.1	26.1	2.0	11.0	11.2
Cycle Q Clear(g_c), s	1.8	2.2	7.9	7.4	7.5	7.8	12.8	26.1	26.1	2.0	11.0	11.2
Prop In Lane	1.00		1.00	1.00		0.36	1.00		0.53	1.00		0.37
Lane Grp Cap(c), veh/h	163	171	143	165	173	162	200	2017	1011	115	1862	959
V/C Ratio(X)	0.18	0.22	0.74	0.69	0.70	0.73	0.95	0.42	0.42	0.27	0.31	0.31
Avail Cap(c_a), veh/h	441	463	387	441	463	434	200	2017	1011	181	1862	959
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.84	0.84	0.84
Uniform Delay (d), s/veh	50.4	50.5	53.1	52.8	52.8	53.0	57.5	30.2	30.2	53.4	14.8	14.8
Incr Delay (d2), s/veh	0.4	0.5	5.6	3.7	3.8	4.5	49.7	0.6	1.3	0.4	0.4	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.1	3.3	3.5	3.7	3.7	8.9	12.0	12.3	0.9	4.1	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.7	51.0	58.7	56.5	56.6	57.5	107.2	30.8	31.5	53.8	15.2	15.6
LnGrp LOS	D	D	E	E	E	E	F	C	C	D	B	B
Approach Vol, veh/h		172			352			1460			903	
Approach Delay, s/veh		55.7			56.9			41.0			16.6	
Approach LOS		E			E			D			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.3	12.5	76.8		15.4	18.0	71.3				
Change Period (Y+Rc), s		4.3	4.8	5.7		4.3	4.5	5.7				
Max Green Setting (Gmax), s		29.7	12.2	29.3		29.7	13.5	28.3				
Max Q Clear Time (g_c+I1), s		9.9	4.0	28.1		9.8	14.8	13.2				
Green Ext Time (p_c), s		0.7	0.0	0.7		1.3	0.0	3.2				

Intersection Summary			
HCM 7th Control Delay, s/veh			36.2
HCM 7th LOS			D

Notes
User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	267	140	203	764	422	257	1074	255	373	1234	204
Future Volume (veh/h)	108	267	140	203	764	422	257	1074	255	373	1234	204
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	267	140	203	764	422	257	1074	0	373	1234	204
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	576	293	278	960	1201	334	1513		554	1828	567
Arrive On Green	0.06	0.25	0.25	0.08	0.27	0.27	0.10	0.30	0.00	0.16	0.36	0.36
Sat Flow, veh/h	3456	2279	1160	3456	3554	2790	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	108	206	201	203	764	422	257	1074	0	373	1234	204
Grp Sat Flow(s),veh/h/ln	1728	1777	1662	1728	1777	1395	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	2.8	9.2	9.6	5.4	18.8	1.8	6.8	17.6	0.0	9.5	19.2	8.9
Cycle Q Clear(g_c), s	2.8	9.2	9.6	5.4	18.8	1.8	6.8	17.6	0.0	9.5	19.2	8.9
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	449	420	278	960	1201	334	1513		554	1828	567
V/C Ratio(X)	0.52	0.46	0.48	0.73	0.80	0.35	0.77	0.71		0.67	0.68	0.36
Avail Cap(c_a), veh/h	1130	649	607	1141	1303	1470	1101	2454		2022	3003	932
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	29.6	29.8	42.1	31.9	7.3	41.4	29.4	0.0	37.1	25.5	22.2
Incr Delay (d2), s/veh	0.7	0.8	0.9	1.4	2.2	0.1	1.4	0.7	0.0	0.5	0.5	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	3.8	3.7	2.2	7.8	1.4	2.8	6.8	0.0	3.9	7.3	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.5	30.4	30.7	43.5	34.0	7.5	42.8	30.1	0.0	37.6	26.0	22.6
LnGrp LOS	D	C	C	D	C	A	D	C		D	C	C
Approach Vol, veh/h		515			1389			1331			1811	
Approach Delay, s/veh		33.3			27.4			32.6			28.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	31.0	20.2	32.7	11.6	29.4	14.2	38.7
Change Period (Y+Rc), s	4.3	* 5.7	5.1	4.9	4.0	5.7	5.1	* 5.1
Max Green Setting (Gmax), s	30.7	* 34	54.9	45.1	31.0	34.3	29.9	* 55
Max Q Clear Time (g_c+I1), s	4.8	20.8	11.5	19.6	7.4	11.6	8.8	21.2
Green Ext Time (p_c), s	0.1	4.6	0.4	8.2	0.2	2.3	0.3	12.4

Intersection Summary	
HCM 7th Control Delay, s/veh	29.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	305	534	53	43	920	175	250	839	24	226	946	629
Future Volume (vph)	305	534	53	43	920	175	250	839	24	226	946	629
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	5.5	5.5	4.5	5.0	5.0	4.0	5.0		4.0	5.0	4.5
Lane Util. Factor	0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.91		0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	1770	3539	1583	3433	5064		3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	1770	3539	1583	3433	5064		3433	5085	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	305	534	53	43	920	175	250	839	24	226	946	629
RTOR Reduction (vph)	0	0	36	0	0	119	0	2	0	0	0	0
Lane Group Flow (vph)	305	534	17	43	920	56	250	861	0	226	946	629
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	1	6		5	2		3!	8		7	4	14!
Permitted Phases			6			2						1
Actuated Green, G (s)	14.2	39.1	39.1	9.6	35.0	35.0	13.2	39.5		12.8	39.1	67.0
Effective Green, g (s)	14.2	39.1	39.1	9.6	35.0	35.0	13.2	39.5		12.8	39.1	67.0
Actuated g/C Ratio	0.12	0.33	0.33	0.08	0.29	0.29	0.11	0.33		0.11	0.33	0.56
Clearance Time (s)	4.5	5.5	5.5	4.5	5.0	5.0	4.0	5.0		4.0	5.0	4.5
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lane Grp Cap (vph)	406	1656	515	141	1032	461	377	1666		366	1656	943
v/s Ratio Prot	c0.09	0.11		0.02	c0.26		c0.07	0.17		0.07	0.19	c0.29
v/s Ratio Perm			0.01			0.04						0.10
v/c Ratio	0.75	0.32	0.03	0.30	0.89	0.12	0.66	0.52		0.62	0.57	0.67
Uniform Delay, d1	51.2	30.5	27.6	52.1	40.7	31.2	51.3	32.5		51.3	33.5	18.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	0.60		1.00	1.00	1.00
Incremental Delay, d2	6.8	0.0	0.0	0.4	9.6	0.0	3.1	1.0		2.2	1.4	1.4
Delay (s)	58.0	30.5	27.6	52.5	50.3	31.3	56.2	20.6		53.4	34.9	20.0
Level of Service	E	C	C	D	D	C	E	C		D	C	C
Approach Delay (s/veh)		39.7			47.4			28.6			32.1	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	36.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	305	534	53	43	920	175	250	863	226	946	629
v/c Ratio	0.75	0.32	0.09	0.24	0.92	0.31	0.66	0.51	0.62	0.56	0.65
Control Delay (s/veh)	63.2	31.5	0.3	53.7	55.8	6.9	60.9	20.6	58.8	35.2	19.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.2	31.5	0.3	53.7	55.8	6.9	60.9	20.6	58.8	35.2	19.9
Queue Length 50th (ft)	118	115	0	31	355	4	61	203	88	225	285
Queue Length 95th (ft)	167	148	0	69	#473	57	151	68	126	282	526
Internal Link Dist (ft)		794			572			911		448	
Turn Bay Length (ft)	530		100	300			260		205		270
Base Capacity (vph)	443	1657	593	228	1037	582	457	1708	457	1692	975
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.32	0.09	0.19	0.89	0.30	0.55	0.51	0.49	0.56	0.65

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	26	146	112	227	191	1269	31	872
v/c Ratio	0.13	0.32	0.53	0.50	0.73	0.47	0.18	0.40
Control Delay (s/veh)	45.4	16.3	55.8	46.4	65.4	21.1	50.9	37.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.4	16.3	55.8	46.4	65.4	21.1	50.9	37.3
Queue Length 50th (ft)	20	15	92	84	140	206	25	160
Queue Length 95th (ft)	43	41	136	109	#281	#453	m47	242
Internal Link Dist (ft)		594		409		1494		911
Turn Bay Length (ft)	90		140		230		100	
Base Capacity (vph)	398	819	398	825	263	2700	179	2206
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.18	0.28	0.28	0.73	0.47	0.17	0.40

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	108	407	203	764	422	257	1074	255	373	1234	204
v/c Ratio	0.46	0.43	0.60	0.72	0.28	0.65	0.72	0.16	0.64	0.70	0.32
Control Delay (s/veh)	62.5	35.4	61.3	43.7	2.6	60.4	41.3	0.2	52.3	35.8	11.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	62.5	35.4	61.3	43.7	2.6	60.4	41.3	0.2	52.3	35.8	11.8
Queue Length 50th (ft)	41	119	76	273	9	96	264	0	136	290	36
Queue Length 95th (ft)	82	208	137	430	34	165	372	0	216	391	103
Internal Link Dist (ft)		499		869			545			781	
Turn Bay Length (ft)	230		225		320	155		130	720		210
Base Capacity (vph)	900	1015	909	1061	1873	877	1960	1583	1611	3051	1003
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.40	0.22	0.72	0.23	0.29	0.55	0.16	0.23	0.40	0.20

Intersection Summary

Lane Group
Lane Group Flow (vph)
v/c Ratio
Control Delay (s/veh)
Queue Delay
Total Delay (s/veh)
Queue Length 50th (ft)
Queue Length 95th (ft)
Internal Link Dist (ft)
Turn Bay Length (ft)
Base Capacity (vph)
Starvation Cap Reductn
Spillback Cap Reductn
Storage Cap Reductn
Reduced v/c Ratio

Intersection Summary

Lane Group
Lane Group Flow (vph)
v/c Ratio
Control Delay (s/veh)
Queue Delay
Total Delay (s/veh)
Queue Length 50th (ft)
Queue Length 95th (ft)
Internal Link Dist (ft)
Turn Bay Length (ft)
Base Capacity (vph)
Starvation Cap Reductn
Spillback Cap Reductn
Storage Cap Reductn
Reduced v/c Ratio

Intersection Summary

Lane Group
Lane Group Flow (vph)
v/c Ratio
Control Delay (s/veh)
Queue Delay
Total Delay (s/veh)
Queue Length 50th (ft)
Queue Length 95th (ft)
Internal Link Dist (ft)
Turn Bay Length (ft)
Base Capacity (vph)
Starvation Cap Reductn
Spillback Cap Reductn
Storage Cap Reductn
Reduced v/c Ratio

Intersection Summary

Lane Group
Lane Group Flow (vph)
v/c Ratio
Control Delay (s/veh)
Queue Delay
Total Delay (s/veh)
Queue Length 50th (ft)
Queue Length 95th (ft)
Internal Link Dist (ft)
Turn Bay Length (ft)
Base Capacity (vph)
Starvation Cap Reductn
Spillback Cap Reductn
Storage Cap Reductn
Reduced v/c Ratio

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	137	273	278	49	104	43	1245	254	46	1126	39
Future Volume (veh/h)	148	137	273	278	49	104	43	1245	254	46	1126	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	148	137	273	278	49	104	43	1245	254	46	1126	39
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	348	365	309	412	62	131	130	1982	404	133	2391	83
Arrive On Green	0.20	0.20	0.20	0.12	0.12	0.12	0.07	0.47	0.47	0.07	0.47	0.47
Sat Flow, veh/h	1781	1870	1585	3563	534	1133	1781	4240	865	1781	5067	175
Grp Volume(v), veh/h	148	137	273	278	0	153	43	999	500	46	756	409
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1666	1781	1702	1701	1781	1702	1839
Q Serve(g_s), s	9.5	8.3	21.8	9.7	0.0	11.6	3.0	28.8	28.8	3.2	19.6	19.6
Cycle Q Clear(g_c), s	9.5	8.3	21.8	9.7	0.0	11.6	3.0	28.8	28.8	3.2	19.6	19.6
Prop In Lane	1.00		1.00	1.00		0.68	1.00		0.51	1.00		0.10
Lane Grp Cap(c), veh/h	348	365	309	412	0	193	130	1591	795	133	1606	867
V/C Ratio(X)	0.43	0.38	0.88	0.67	0.00	0.79	0.33	0.63	0.63	0.35	0.47	0.47
Avail Cap(c_a), veh/h	434	456	387	869	0	406	185	1591	795	167	1606	867
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.76	0.76	0.76
Uniform Delay (d), s/veh	45.9	45.4	50.9	55.1	0.0	56.0	57.3	26.1	26.1	57.1	23.3	23.3
Incr Delay (d2), s/veh	0.6	0.5	16.8	1.4	0.0	5.5	0.6	1.9	3.7	0.4	0.8	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	3.9	10.1	4.5	0.0	5.2	1.3	11.7	12.1	1.4	7.8	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.5	45.9	67.7	56.6	0.0	61.4	57.8	28.0	29.8	57.6	24.1	24.7
LnGrp LOS	D	D	E	E		E	E	C	C	E	C	C
Approach Vol, veh/h		558			431			1542			1211	
Approach Delay, s/veh		56.7			58.3			29.4			25.6	
Approach LOS		E			E			C			C	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		29.7	14.5	66.5		19.3	14.0	67.0				
Change Period (Y+Rc), s		4.3	4.8	5.7		4.3	4.5	5.7				
Max Green Setting (Gmax), s		31.7	12.2	35.3		31.7	13.5	28.3				
Max Q Clear Time (g_c+I1), s		23.8	5.2	30.8		13.6	5.0	21.6				
Green Ext Time (p_c), s		1.6	0.0	2.7		1.4	0.0	2.8				

Intersection Summary		
HCM 7th Control Delay, s/veh		35.6
HCM 7th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	452	232	300	591	507	191	1331	239	495	1513	139
Future Volume (veh/h)	92	452	232	300	591	507	191	1331	239	495	1513	139
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	452	232	300	591	507	191	1331	0	495	1513	139
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	535	273	363	1024	1257	253	1667		561	2114	656
Arrive On Green	0.05	0.23	0.23	0.11	0.29	0.29	0.07	0.33	0.00	0.16	0.41	0.41
Sat Flow, veh/h	3456	2278	1160	3456	3554	2790	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	92	352	332	300	591	507	191	1331	0	495	1513	139
Grp Sat Flow(s),veh/h/ln	1728	1777	1662	1728	1777	1395	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	3.0	21.8	22.0	9.8	16.4	2.2	6.2	27.4	0.0	16.1	28.4	6.5
Cycle Q Clear(g_c), s	3.0	21.8	22.0	9.8	16.4	2.2	6.2	27.4	0.0	16.1	28.4	6.5
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	170	417	390	363	1024	1257	253	1667		561	2114	656
V/C Ratio(X)	0.54	0.84	0.85	0.83	0.58	0.40	0.76	0.80		0.88	0.72	0.21
Avail Cap(c_a), veh/h	921	529	495	930	1061	1286	897	1999		1647	2446	759
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	42.0	42.1	50.5	35.0	10.1	52.4	35.3	0.0	47.2	28.1	21.7
Incr Delay (d2), s/veh	1.0	9.9	11.2	1.8	0.6	0.2	1.7	2.0	0.0	1.9	0.9	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	10.3	9.9	4.2	6.9	2.7	2.7	11.1	0.0	6.9	11.2	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.5	51.9	53.4	52.3	35.6	10.3	54.1	37.4	0.0	49.0	29.0	21.9
LnGrp LOS	D	D	D	D	D	B	D	D		D	C	C
Approach Vol, veh/h		776			1398			1522			2147	
Approach Delay, s/veh		52.8			30.0			39.5			33.1	
Approach LOS		D			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	38.9	23.8	42.5	16.1	32.8	13.5	52.8
Change Period (Y+Rc), s	4.3	* 5.7	5.1	4.9	4.0	5.7	5.1	* 5.1
Max Green Setting (Gmax), s	30.7	* 34	54.9	45.1	31.0	34.3	29.9	* 55
Max Q Clear Time (g_c+I1), s	5.0	18.4	18.1	29.4	11.8	24.0	8.2	30.4
Green Ext Time (p_c), s	0.1	4.3	0.6	8.3	0.3	3.0	0.2	13.3

Intersection Summary	
HCM 7th Control Delay, s/veh	36.7
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	651	999	110	74	754	136	242	1279	61	272	1097	565
Future Volume (vph)	651	999	110	74	754	136	242	1279	61	272	1097	565
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	5.5	5.5	4.5	5.0	5.0	4.0	5.0		4.0	5.0	4.5
Lane Util. Factor	0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.91		0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	1770	3539	1583	3433	5051		3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	1770	3539	1583	3433	5051		3433	5085	1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	651	999	110	74	754	136	242	1279	61	272	1097	565
RTOR Reduction (vph)	0	0	68	0	0	107	0	4	0	0	0	0
Lane Group Flow (vph)	651	999	42	74	754	29	242	1336	0	272	1097	565
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	1	6		5	2		3!	8		7	4	14!
Permitted Phases			6			2						1
Actuated Green, G (s)	29.0	46.4	46.4	10.0	27.9	27.9	13.5	40.5		14.1	41.1	84.1
Effective Green, g (s)	29.0	46.4	46.4	10.0	27.9	27.9	13.5	40.5		14.1	41.1	84.1
Actuated g/C Ratio	0.22	0.36	0.36	0.08	0.21	0.21	0.10	0.31		0.11	0.32	0.65
Clearance Time (s)	4.5	5.5	5.5	4.5	5.0	5.0	4.0	5.0		4.0	5.0	4.5
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lane Grp Cap (vph)	765	1814	565	136	759	339	356	1573		372	1607	1078
v/s Ratio Prot	c0.19	0.20		0.04	c0.21		0.07	c0.26		c0.08	0.22	c0.22
v/s Ratio Perm			0.03			0.02						0.13
v/c Ratio	0.85	0.55	0.08	0.54	0.99	0.09	0.68	0.85		0.73	0.68	0.52
Uniform Delay, d1	48.4	33.5	27.6	57.8	51.0	40.8	56.2	41.9		56.1	38.8	12.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.13	0.70		1.00	1.00	1.00
Incremental Delay, d2	8.7	0.2	0.0	2.4	30.8	0.0	3.5	5.2		6.3	2.4	0.2
Delay (s)	57.1	33.7	27.6	60.2	81.8	40.9	67.1	34.5		62.4	41.1	12.5
Level of Service	E	C	C	E	F	D	E	C		E	D	B
Approach Delay (s/veh)		42.0			74.3			39.4			35.7	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	44.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	90.1%	ICU Level of Service	E
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	651	999	110	74	754	136	242	1340	272	1097	565
v/c Ratio	0.85	0.55	0.17	0.44	1.03	0.31	0.68	0.83	0.73	0.67	0.51
Control Delay (s/veh)	59.4	36.6	7.6	64.0	90.4	9.0	72.2	33.1	68.0	40.1	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.4	36.6	7.6	64.0	90.4	9.0	72.2	33.1	68.0	40.1	10.7
Queue Length 50th (ft)	273	259	3	60	~376	0	82	392	115	286	176
Queue Length 95th (ft)	323	323	48	110	#605	54	156	196	162	340	282
Internal Link Dist (ft)		794			572			911		448	
Turn Bay Length (ft)	530		100	300			260		205		270
Base Capacity (vph)	937	1814	632	211	734	441	422	1674	422	1692	1109
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.55	0.17	0.35	1.03	0.31	0.57	0.80	0.64	0.65	0.51

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	133	425	147	284	43	1499	46	1165
v/c Ratio	0.61	0.65	0.66	0.57	0.26	0.59	0.28	0.45
Control Delay (s/veh)	63.3	22.9	66.0	42.1	59.4	26.2	53.2	44.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.3	22.9	66.0	42.1	59.4	26.2	53.2	44.4
Queue Length 50th (ft)	118	66	132	92	34	311	41	270
Queue Length 95th (ft)	174	112	191	128	74	#545	m66	363
Internal Link Dist (ft)		594		409		1494		911
Turn Bay Length (ft)	90		140		230		100	
Base Capacity (vph)	392	950	392	818	183	2546	166	2599
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.45	0.38	0.35	0.23	0.59	0.28	0.45

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	92	684	300	591	507	191	1331	239	495	1513	139
v/c Ratio	0.47	0.80	0.76	0.55	0.33	0.66	0.81	0.15	0.83	0.72	0.20
Control Delay (s/veh)	73.7	55.1	73.1	43.7	3.2	74.1	49.0	0.2	68.8	37.3	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	73.7	55.1	73.1	43.7	3.2	74.1	49.0	0.2	68.8	37.3	14.0
Queue Length 50th (ft)	42	291	138	236	19	88	406	0	226	415	36
Queue Length 95th (ft)	77	#426	198	326	43	137	528	0	302	527	90
Internal Link Dist (ft)		499		869			545			781	
Turn Bay Length (ft)	230		225		320	155		130	720		210
Base Capacity (vph)	755	858	762	1074	1847	735	1643	1583	1351	2559	833
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.80	0.39	0.55	0.27	0.26	0.81	0.15	0.37	0.59	0.17

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group
Lane Group Flow (vph)
v/c Ratio
Control Delay (s/veh)
Queue Delay
Total Delay (s/veh)
Queue Length 50th (ft)
Queue Length 95th (ft)
Internal Link Dist (ft)
Turn Bay Length (ft)
Base Capacity (vph)
Starvation Cap Reductn
Spillback Cap Reductn
Storage Cap Reductn
Reduced v/c Ratio

Intersection Summary

Lane Group
Lane Group Flow (vph)
v/c Ratio
Control Delay (s/veh)
Queue Delay
Total Delay (s/veh)
Queue Length 50th (ft)
Queue Length 95th (ft)
Internal Link Dist (ft)
Turn Bay Length (ft)
Base Capacity (vph)
Starvation Cap Reductn
Spillback Cap Reductn
Storage Cap Reductn
Reduced v/c Ratio

Intersection Summary

Lane Group
Lane Group Flow (vph)
v/c Ratio
Control Delay (s/veh)
Queue Delay
Total Delay (s/veh)
Queue Length 50th (ft)
Queue Length 95th (ft)
Internal Link Dist (ft)
Turn Bay Length (ft)
Base Capacity (vph)
Starvation Cap Reductn
Spillback Cap Reductn
Storage Cap Reductn
Reduced v/c Ratio

Intersection Summary

Lane Group
Lane Group Flow (vph)
v/c Ratio
Control Delay (s/veh)
Queue Delay
Total Delay (s/veh)
Queue Length 50th (ft)
Queue Length 95th (ft)
Internal Link Dist (ft)
Turn Bay Length (ft)
Base Capacity (vph)
Starvation Cap Reductn
Spillback Cap Reductn
Storage Cap Reductn
Reduced v/c Ratio

Intersection Summary

APPENDIX E: PUBLIC WORKSHOP MATERIALS

CONNECTING HOWE AVENUE
SAFETY & MOBILITY PLAN

Please take the following brief survey. Your input is extremely valuable, and it will help the project team select the preferred future options and potential physical changes to Howe Avenue.

1. What is your zip code?: ______________________

2. How often do you typically travel on Howe Avenue?

○ Daily ○ Some Days (e.g., work commute, shopping, and errands) ○ Weekly
○ Every Couple of Weeks ○ Monthly ○ Rarely

3. How do you typically travel on Howe Avenue? Select all that apply.

☐ Driving in a Personal Vehicle ☐ Riding in a Personal Vehicle (being driven by someone) ☐ Public Transit ☐ Paratransit
☐ Walking/Rolling ☐ Bicycling (including using e-bikes) ☐ Scooting ☐ Ride-Sharing (Uber, Lyft), Taxi
☐ Other (please specify): ______________________

For the following questions, please rate your interest in each potential change to Howe Avenue on a scale from 1 (least interested) to 5 (most interested).

4. Improved public transit stop conditions and access
1 = least interested, 5 = most interested

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

5. Improved walking conditions such as wider sidewalks and street trees
1 = least interested, 5 = most interested

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

6. Improved walking and bicycling crossing of Howe Avenue
1 = least interested, 5 = most interested

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

7. Improved parking
1 = least interested, 5 = most interested

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

8. Improved bikeways on Howe Avenue (buffer bike lanes or separated bikeways with a post or curb)
1 = least interested, 5 = most interested

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

9. Reduced driver speed
1 = least interested, 5 = most interested

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

10. Improved driving safety
1 = least interested, 5 = most interested

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

11. Other transportation safety-related improvements
(please specify): ______________________
1 = least interested, 5 = most interested

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

The following optional three demographic questions help us determine if we are getting a broad and representative range of community perspectives. Please still submit this survey even if you decide to not answer these three optional questions.

12. What best describes your race or ethnicity? Select all that apply. *(optional)*

☐ Asian
☐ Black or African American
☐ Hispanic or Latino/a/x
☐ Middle Eastern or North African
☐ Native American or Alaska Native
☐ Native Hawaiian or other Pacific Islander
☐ White
☐ Prefer not to say
☐ Other (please specify): ______________________

13. What is your age? *(optional)*

○ Under 18 ○ 18 to 24 years ○ 25 to 34 years ○ 35 to 44 years
○ 45 to 64 years ○ 65 to 84 years ○ 85 to 99 years ○ 100 years and older

14. Do you identify as someone with a mobility or related disability that impacts how you travel? *(optional)*

○ Yes ○ No ○ Prefer not to say

15. Do you have any other comments related to mobility and transportation safety on Howe Avenue?

____

____

____

____

16. Please provide email address if you want to be added to our Howe email noticing list:

____

Thank you!

CONNECTING
HOWE AVENUE
SAFETY & MOBILITY PLAN

Por favor responda a la siguiente breve encuesta. Su opinión es extremadamente valiosa y ayudará al equipo del proyecto a tomar decisiones sobre las opciones y mejoras preferidas a futuro y los posibles cambios en Howe Avenue.

1. ¿Cuál es su código postal?: ______________________

2. ¿Viaja usted a menudo por Howe Avenue?

○ Diariamente ○ Aveces (por ejemplo, viajes diarios al trabajo, compras y recados) ○ Semanalmente
○ Cada par de semanas ○ Mensualmente ○ Raramente

3. Cómo viaja por Howe Avenue? Selecionne todo lo que aplica.

☐ Conduzco en mi auto ☐ Pasajero en auto ☐ Transporte público ☐ Paratransito
☐ Caminando/Rodando ☐ En bicicleta (incluyendo bicicletas eléctricas) ☐ Patinando ☐ Viaje compartido (Uber, Lyft), Taxi
☐ Otro (especifique): ____

Para las siguientes preguntas, califique su interés en cada posible cambio en Howe Avenue en una escala del 1 (menos interesado) al 5 (más interesado).

4. Mejores condiciones y acceso a las paradas de transporte público
1 = menos interesado, 5 = más interesado

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

5. Mejores condiciones para caminar, como aceras más anchas y árboles en las calles
1 = menos interesado, 5 = más interesado

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

6. Mejorar los cruces de peatones y bicicletas en Howe Ave
1 = menos interesado, 5 = más interesado

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

7. Mejorar el estacionamiento
1 = menos interesado, 5 = más interesado

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

8. Mejores carriles para bicicletas en Howe Ave (carriles para bicicletas protegidos o carriles para bicicletas separados con un poste o bordillo)
1 = menos interesado, 5 = más interesado

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

9. Reducciones de velocidad
1 = menos interesado, 5 = más interesado

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

10. Mejores condiciones de conducción
1 = menos interesado, 5 = más interesado

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

11. Otras mejoras relacionadas con la seguridad del transporte
(por favor especifique): ______________________________
1 = menos interesado, 5 = más interesado

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Las siguientes tres preguntas demográficas son opcionales y nos ayudan a saber si estamos obteniendo una gama amplia y representativa de perspectivas comunitarias. Entregue esta encuesta incluso si decide no responder estas tres preguntas.

12. ¿Cuál de estas opciones mejor describe su raza u origen étnico? Seleccione todo lo que aplica. *(opcional)*

☐ Asiático
☐ Negro o afroamericano
☐ Hispano o Latino/a/e
☐ Del Medio Oriente o Norte de África
☐ Nativo americano o nativo de Alaska
☐ Nativo de Hawái u otra isla del Pacífico
☐ Blanco
☐ Prefiero no decir
☐ Otro (especifique): ______________________________

13. ¿Cuál es su edad? *(opcional)*

○ Menor de 18 años ○ 18 a 24 años ○ 25 a 34 años ○ 35 a 44 años
○ 45 a 64 años ○ 65 a 84 años ○ 85 a 99 años ○ Mayor de 100 años

14. ¿Se identifica como alguien con una discapacidad de movilidad o discapacidad relacionada que afecta su forma de viajar? *(opcional)*

○ Sí ○ No ○ Prefiero no decir

15. ¿Tiene algún otro comentario relacionado con la accesibilidad y la seguridad en Howe Ave?

____

____

____

____

16. Por favor proporcione su correo electrónico si desea que lo agreguemos a nuestra lista de avisos sobre Howe:

____

¡Gracias!

CONNECTING HOWE AVENUE
SAFETY & MOBILITY PLAN

Workshop #1

Project Background and Existing Conditions

Project Team

City of Sacramento

Jennifer Donlon Wyant, Transportation Planning Manager

Ryan Dodge, Associate Planner

DKS Associates

Josh Pilachowski

Liz Aguilar

Sylinda Villado

Agenda

- Why Howe Avenue?
- Planning Area and Existing Conditions
- Community Needs
- YOUR Needs
- Next Steps

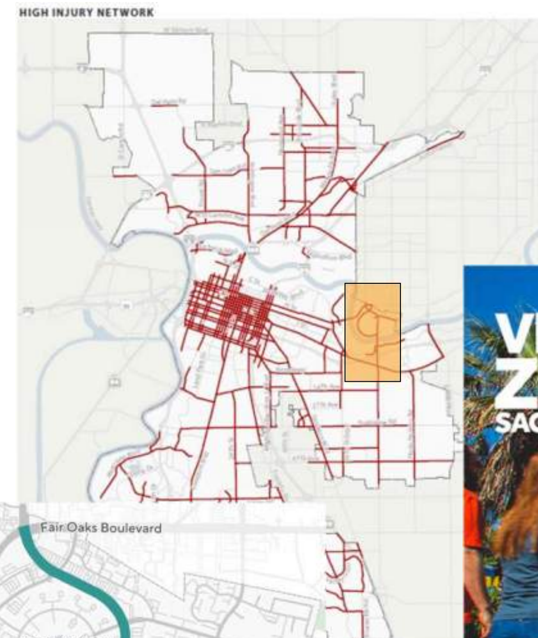
Why Howe Avenue?

Why?

Critical corridor serving:

- Sacramento State
- Students
- Businesses
- Residents and communities

TOP 10 CORRIDOR WITH THE HIGHEST NUMBER OF FATAL AND SEVERE INJURY CRASHES.



CONNECTING HOWE AVENUE
SAFETY & MOBILITY PLAN

Why? Planning Goals

The goal of the plan is to identify a data-driven, community-supported plan for a future Howe Avenue that will improve safety and mobility.

This Workshop will:

- Raise community awareness of the project
- Learn about *your* experiences and needs for the corridor
- Help us identify locations of need that don’t appear in our data collection

CONNECTING HOWE AVENUE
SAFETY & MOBILITY PLAN

Schedule

Engagement

Community Advisory

Community Open House

Community Workshop

Plan Townhall

Pop-In Events

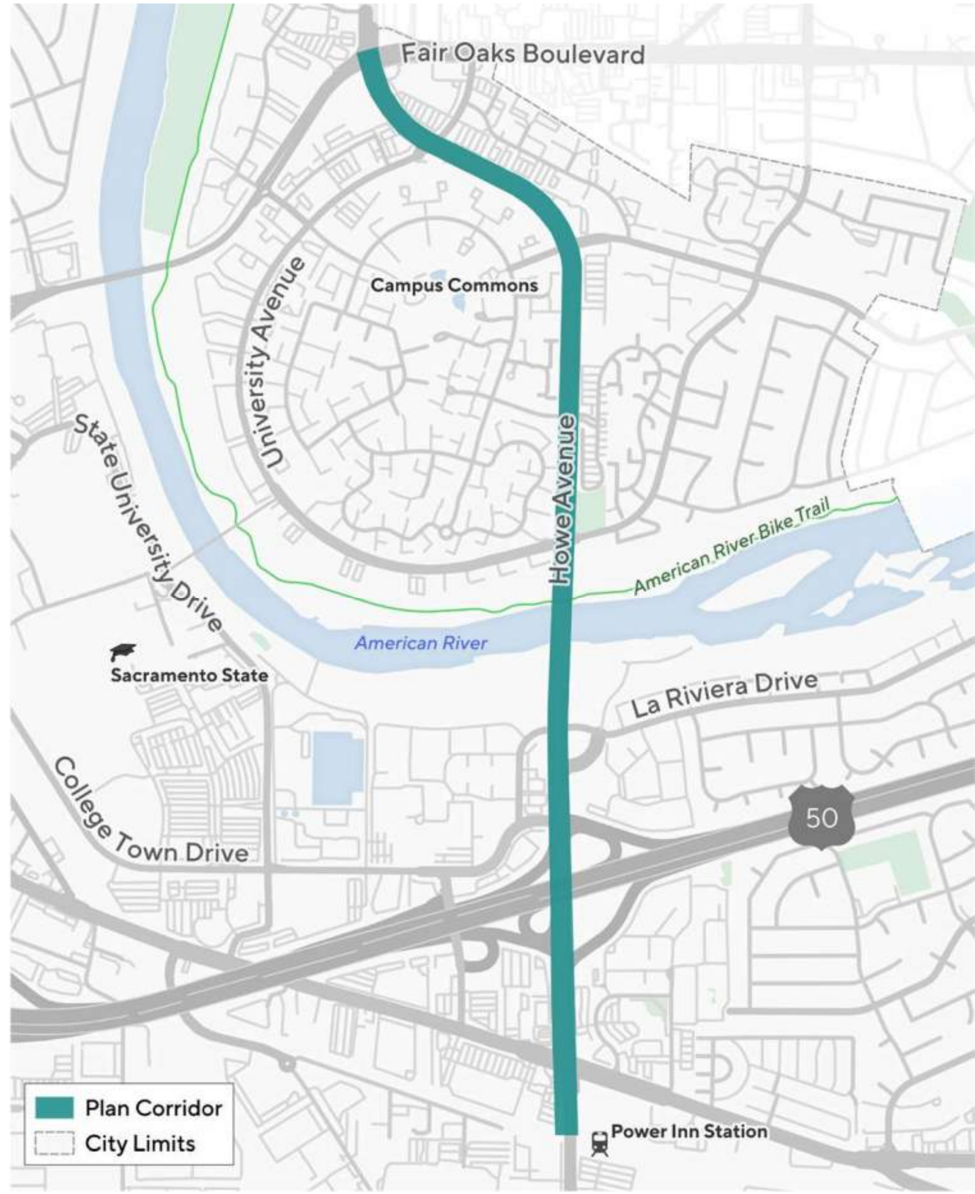
CONNECTING HOWE AVENUE
SAFETY & MOBILITY PLAN

Planning Area and Existing Conditions

Planning Area

HOWE AVENUE

- Fair Oaks Boulevard to Power Inn Light Rail Station
- Two miles

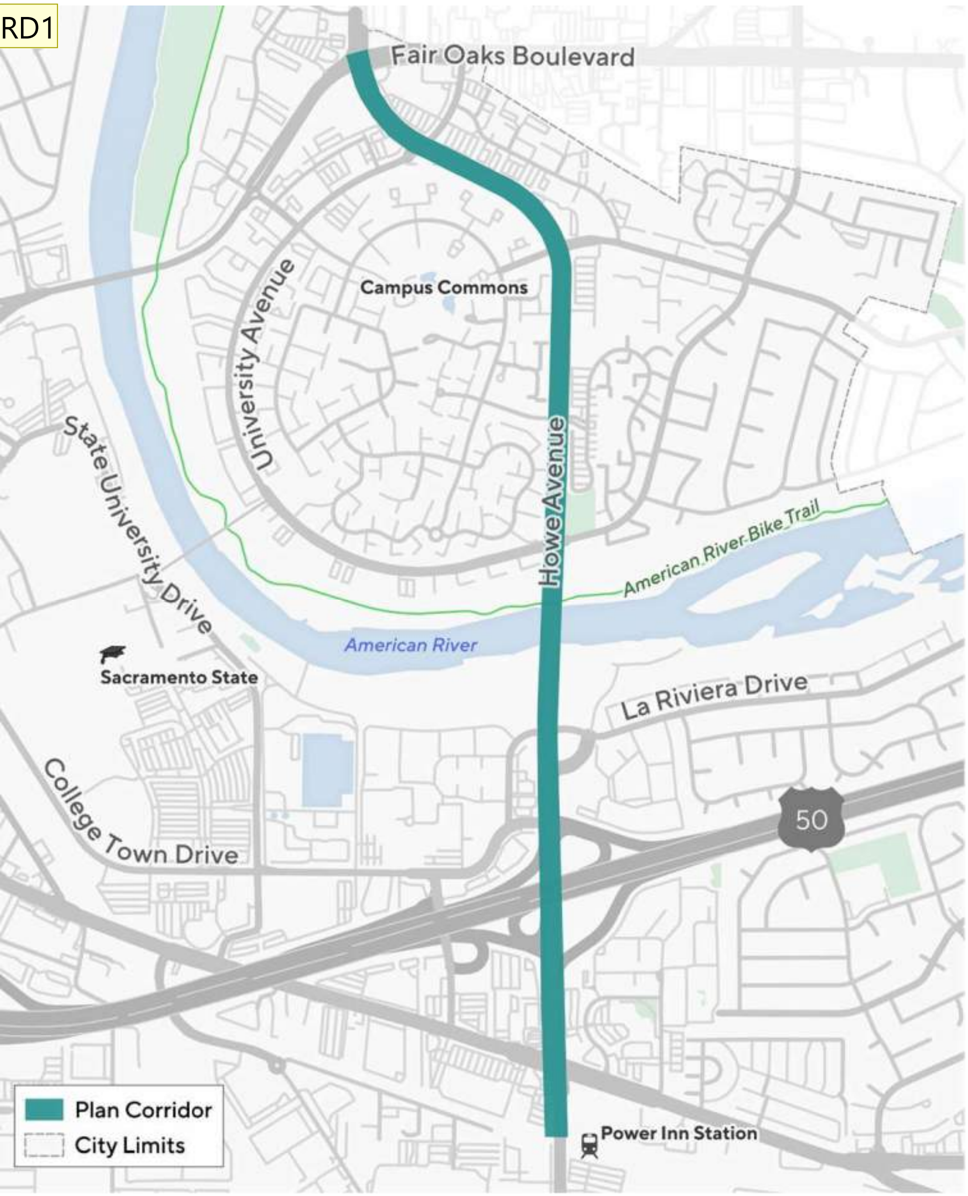


Existing Conditions:
Project Team Site Walk

The team walked and drove the entire corridor, focusing on multimodal conditions and behavior along key segments and intersections.

CONNECTING HOWE AVENUE
SAFETY & MOBILITY PLAN

RD1



Existing Conditions: Land Use

- Commercial and office
- Residential
- Regional parks and trails

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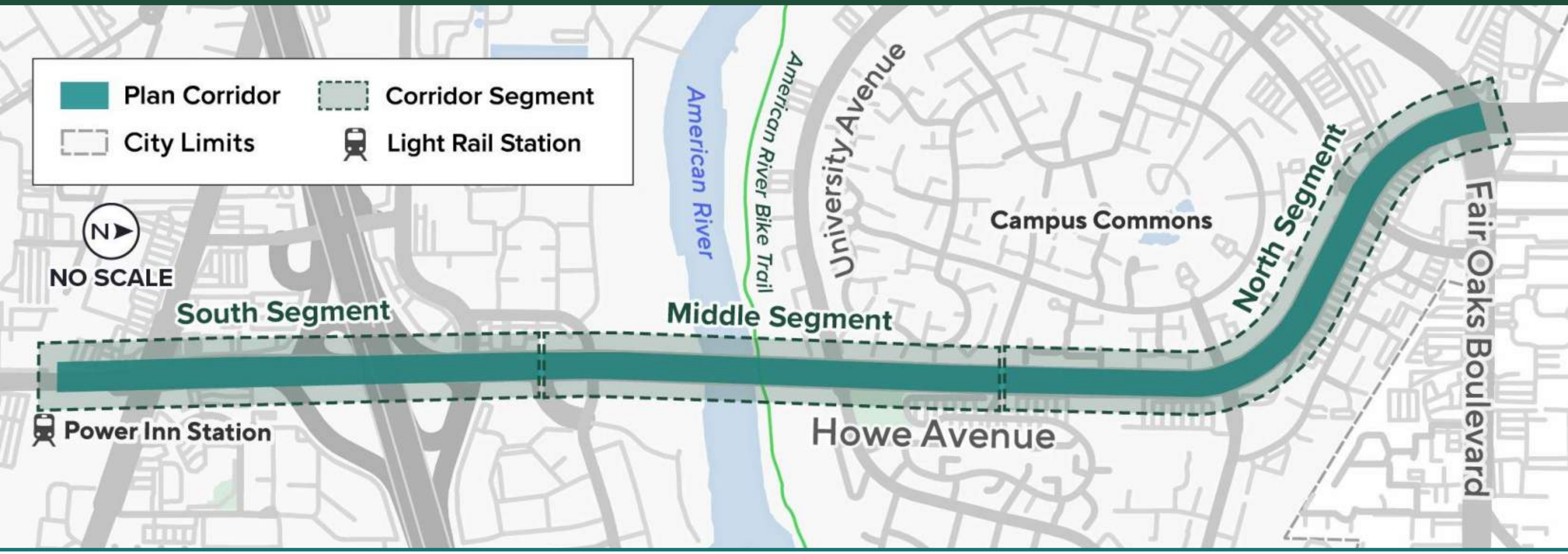
SAFETY & MOBILITY PLAN

Slide 10

RD0 Maybe move this to just after the agenda slide? If I knew nothing about the project then my first question would be about Howe from where to where.
Ryan Dodge, 2024-10-28T16:58:05.251

RD1 Please change Folsom Boulevard to Power Inn Light Rail Station (south of Folsom Boulevard).
Ryan Dodge, 2024-10-28T17:01:43.473

Existing Conditions: Street

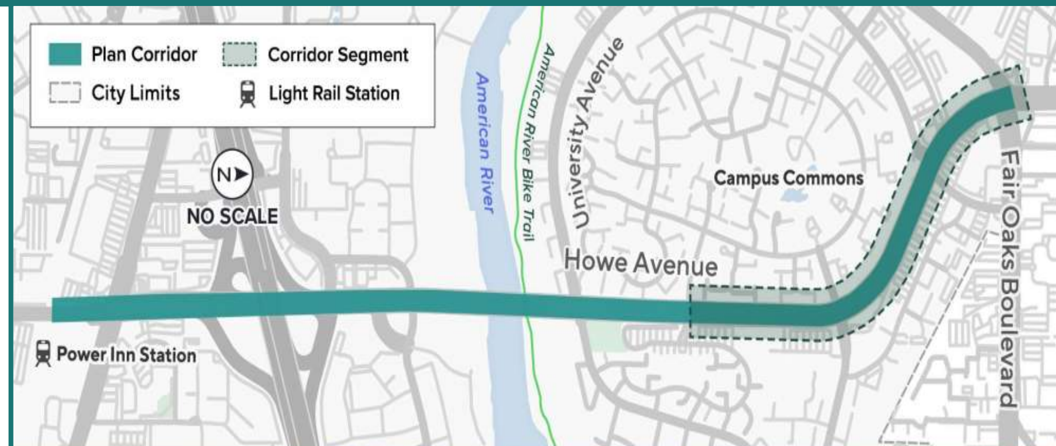


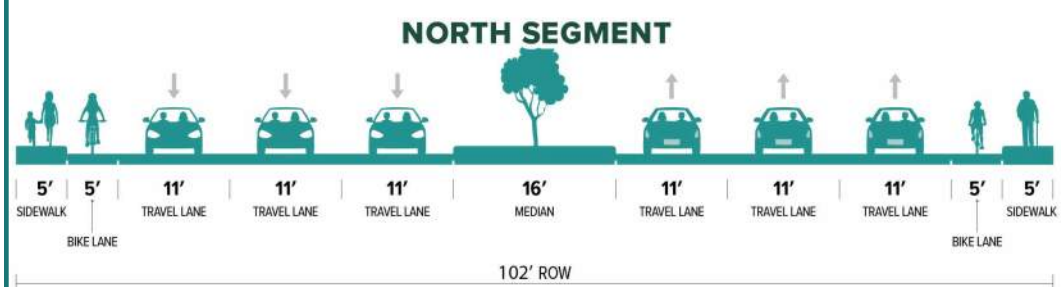
CONNECTING HOWE AVENUE
SAFETY & MOBILITY PLAN

North Segment: Fair Oaks Boulevard to Swarthmore Drive

The northern segment of the study corridor stretches from Fair Oaks Boulevard to Swarthmore/University Park Drive. The segment is adjacent but not directly accessible from residential to the west, and large parking lots associated with commercial and office uses to the east.

- **Number of Lanes:** Six (three in either direction) with a median
- **Sidewalks:** Consistent on the northbound (east) side and only present between Fair Oaks and American River Drive on the southbound (west) side
- **Bikeways:** Inconsistently unstriped and unsigned bicycle lane/shoulder on both sides, south of University Drive
- **Transit:** Yes (Line 26)

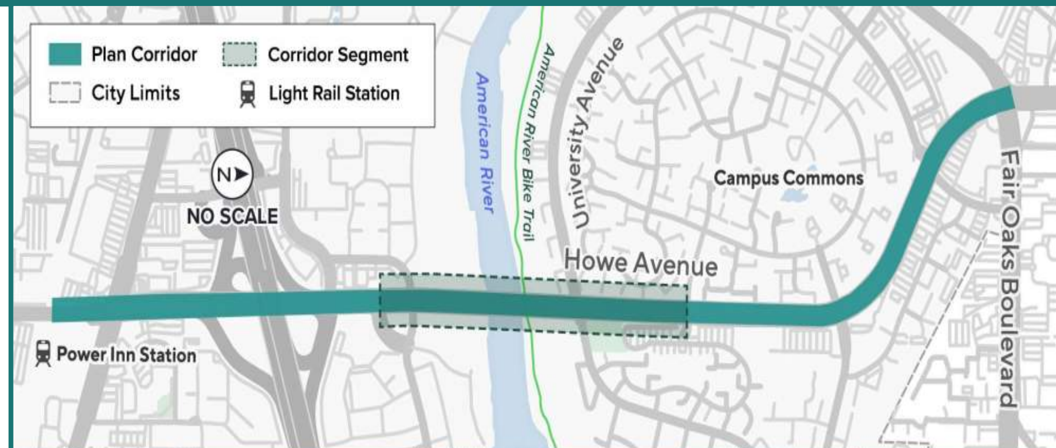


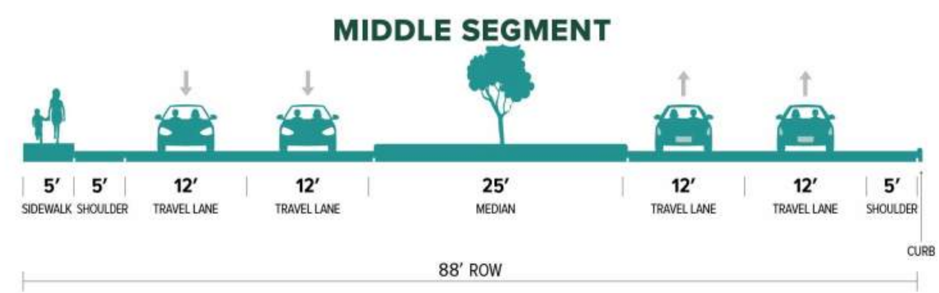


Middle Segment: Swarthmore to La Riviera

The middle segment begins at Swarthmore Drive and ends at the access road to La Riviera Drive to the northbound side of Howe Avenue, crossing the American River in between. Adjacent land uses include a business park at the segment's northern end, parks, the river, and some commercial uses.

- **Number of Lanes:** Four (two in either direction) with a divided roadway
- **Sidewalks:** Both sides, with gaps separating
- **Bikeways:** Unstriped and unsigned shoulder on both sides
- **Transit:** Yes (Line 26)

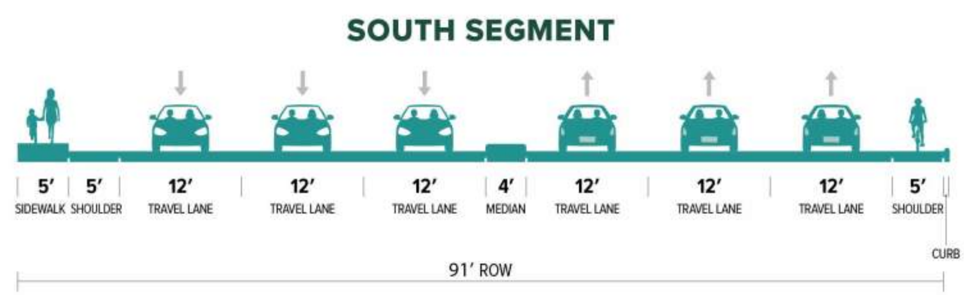




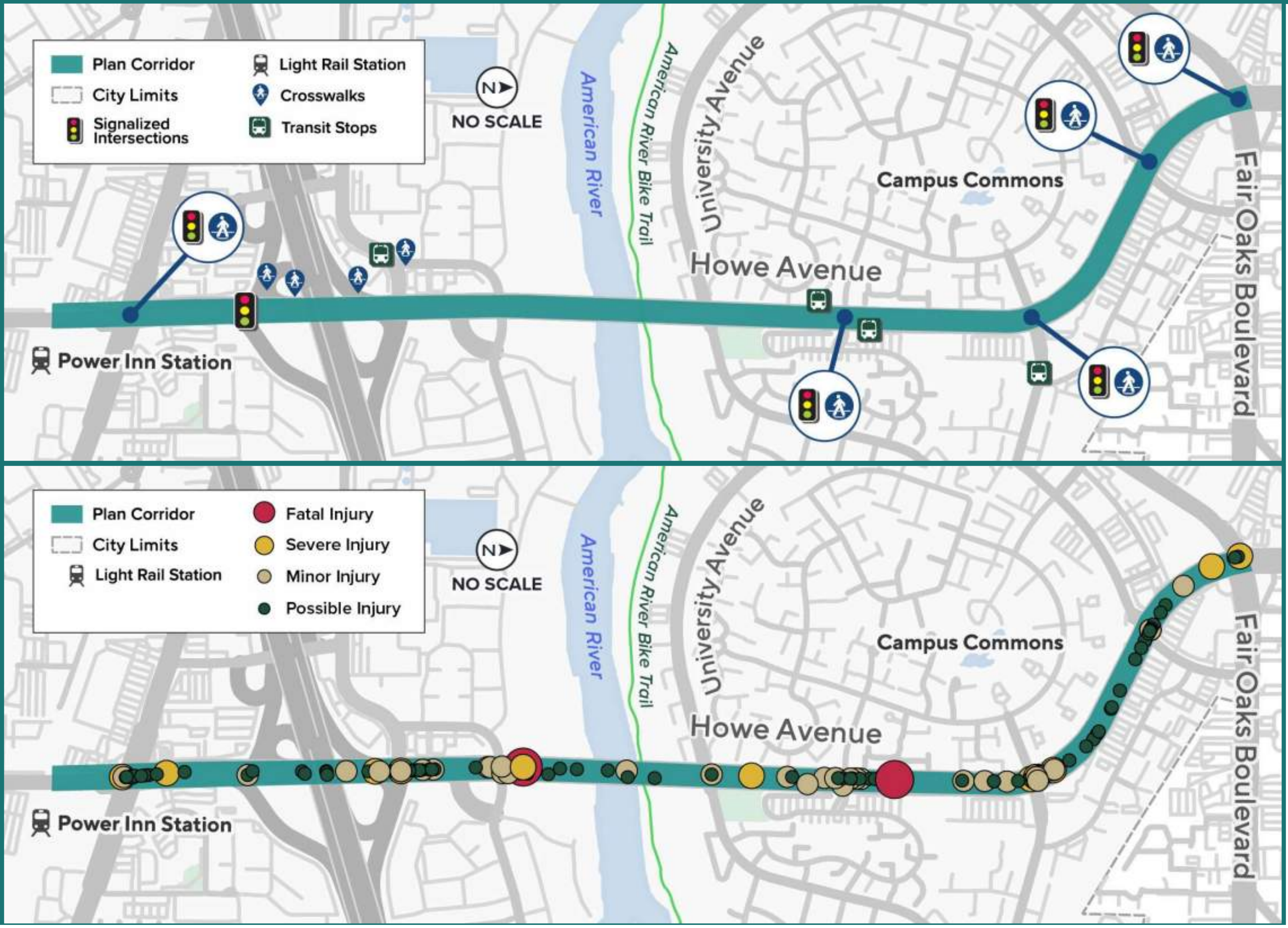
South Segment: La Riviera to Folsom

The south segment starts at the access road to La Riviera Drive and ends at Folsom Boulevard, including the freeway overpass. Adjacent uses aside from the freeway include mainly retail with some residential and commercial with parking fronting the road.

- **Number of Lanes:** Six (three in either direction) with a median
- **Sidewalks:** Southbound (west) side only
- **Bikeways:** unstriped and unsigned shoulder on both sides
- **Transit:** No



Existing Conditions



DATA COLLECTION

- Vehicular traffic and congestion
- Vehicle speeds
- Sidewalks and Crosswalks
- Bikeways
- Transit
- Safety

CONNECTING HOWE AVENUE
SAFETY & MOBILITY PLAN

Community Needs

Walking/Rolling Needs

SIDEWALKS

- Consistent and sufficient width
- Low stress and comfortable
- Access to homes, businesses, and education

INTERSECTIONS AND CROSSING OPPORTUNITIES

- Frequency of crossings
- Visibility and line of sight

SHARED USE PATH ACCESS

- Access to Jedediah Smith Memorial Trail

CONNECTING HOWE AVENUE
SAFETY & MOBILITY PLAN

RD0

Bicycling Needs

BIKEWAYS

- Bidirectional facilities without gaps
- Access to homes, businesses, and education
- Low stress and comfortable for all ages

INTERSECTION OPERATIONS

- Minimal zones of conflict
- Frequency of crossings
- Visibility and line of sight

SHARED USE PATH ACCESS

- Access to Jedediah Smith Memorial Trail

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SAFETY & MOBILITY PLAN

Slide 18

RD0 Please change Bicyclist to Bicycling Needs.

Ryan Dodge, 2024-10-28T17:11:15.667

Transit User Needs

TRANSIT STOP ACCESS

- Bidirectional access to bus stops for all users
- Access to Power Inn Light Rail Station
- Access to homes, businesses, and education

STOP AMENITIES

- Shade, seating, lighting, and maintenance

OPERATIONAL SUPPORT

- Considerations for transit operations for improved on-time performance

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HOWE AVENUE
SAFETY & MOBILITY PLAN

JD1

Driving Needs

RD0

ACCESS

- Access to homes, businesses, and education
- Consistent design

OPERATIONS

- Minimal conflict
- Frequency of crossings
- Visibility and line of sight

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SAFETY & MOBILITY PLAN

Slide 20

RD0 Please change Auto/Truck to Driving/Riding Needs or something similar, to match the survey.
Ryan Dodge, 2024-10-28T17:15:52.315

JD1 This slide is inconsistent with the other modes. It talks about crashes and discusses needs in a different manner. See my edits.
Jennifer Donlon Wyant, 2024-11-05T00:10:29.848

YOUR Needs

What are your needs for transportation changes on the corridor?

Let us know tonight!

- Take the survey
- Mark up a map
- Tell your friends, neighbors, businesses about the online survey and map
- Public comment is open until December 31

CONNECTING HOWE AVENUE
SAFETY & MOBILITY PLAN

JD0

Next Steps

December 2: Virtual community meeting →

Late Winter-Spring 2025: Community input on Alternatives Analysis

Summer 2025: Draft Plan

Winter 2025: Final Plan for Council approval

DECEMBER 2, 2024

6:30 PM – 7:30 PM

VIA ZOOM MEETING

Register at: **bit.ly/howe-register**

Meeting ID: **829 9985 3999**

Passcode: **Howe**

Registration is required to attend

JD1

CONNECTING HOWE AVENUE
SAFETY & MOBILITY PLAN

Slide 22

JD0	Please make this slide look better Jennifer Donlon Wyant, 2024-11-05T00:37:44.455
JD1	Please provide the detailed information and QR code for folks to register for the meeting Jennifer Donlon Wyant, 2024-11-05T00:38:12.741

CONNECTING
HOWE AVENUE
SAFETY & MOBILITY PLAN

Thank you!

RD0

PROJECT CONTACT:
Jennifer Donlon Wyant
JDonlonWyant@cityofsacramento.org

For more information, visit our website at:
Para más información visite nuestro sitio web en:

www.ConnectingHoweAve.org

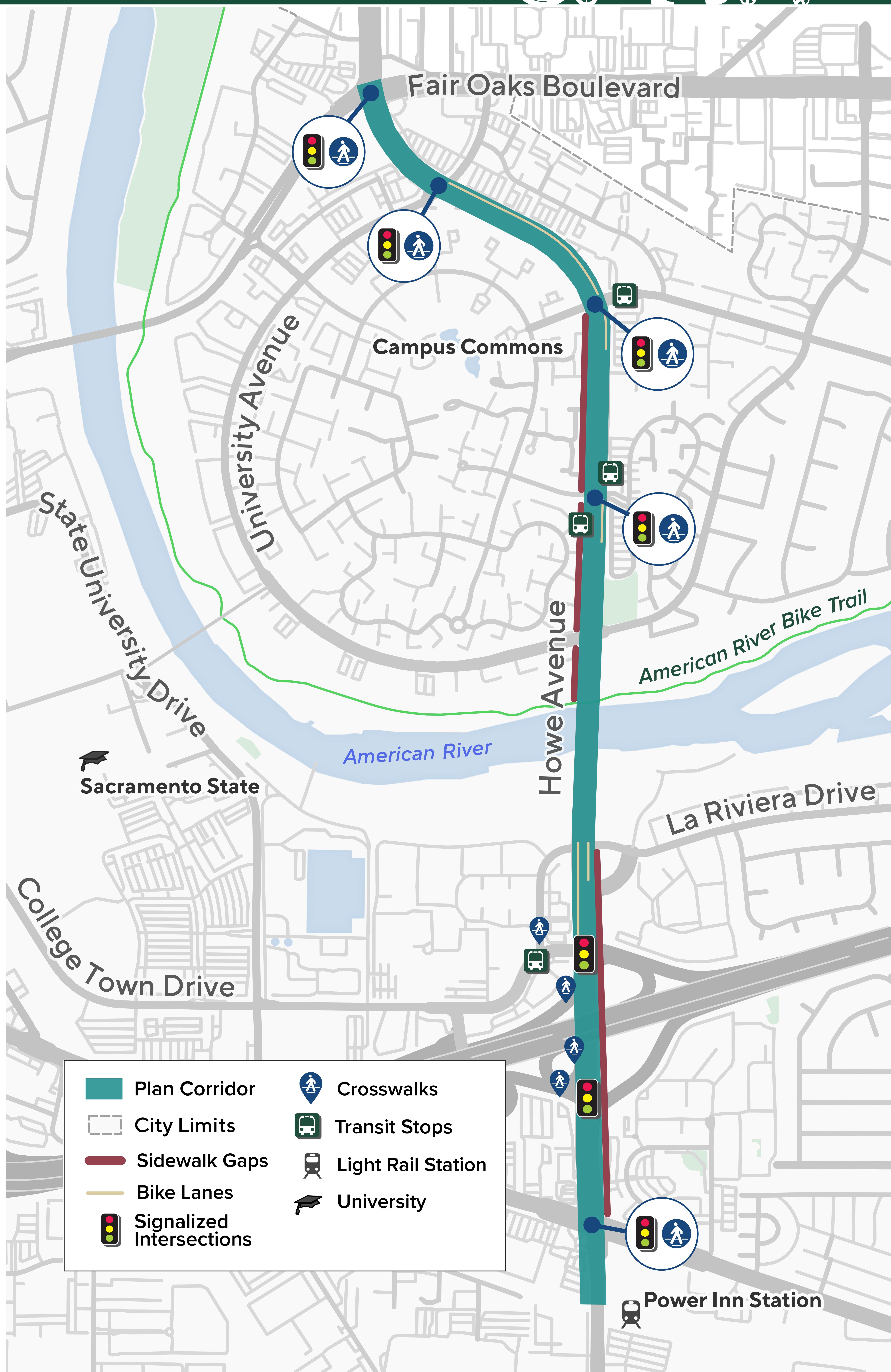
Slide 23

RD0 Are we going to list contact person at bottom, or webpage?

Ryan Dodge, 2024-10-28T17:16:39.917

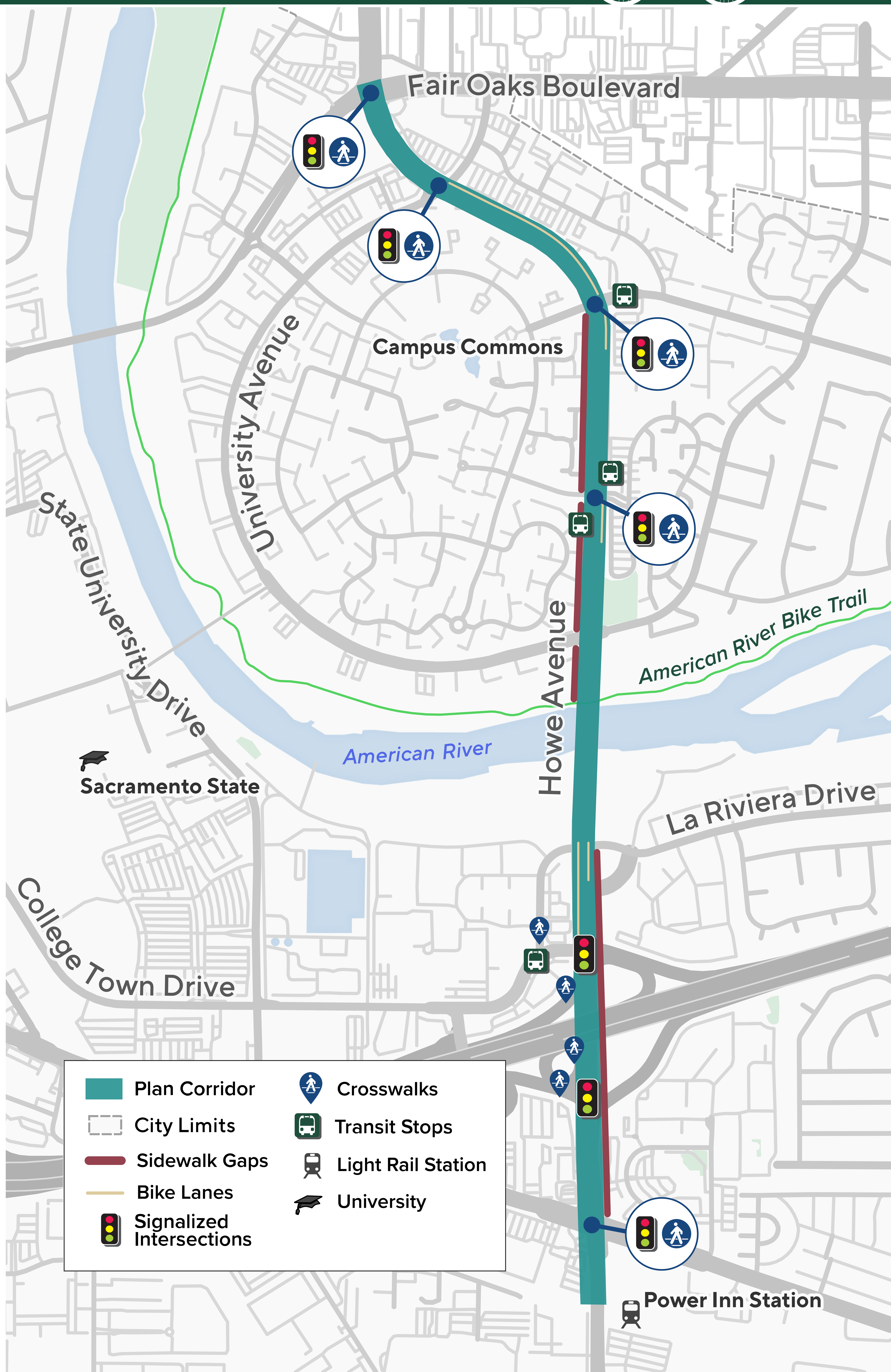
Walking & Rolling

PLEASE LEAVE YOUR COMMENTS ABOUT WALKING & ROLLING ALONG HOWE AVENUE.



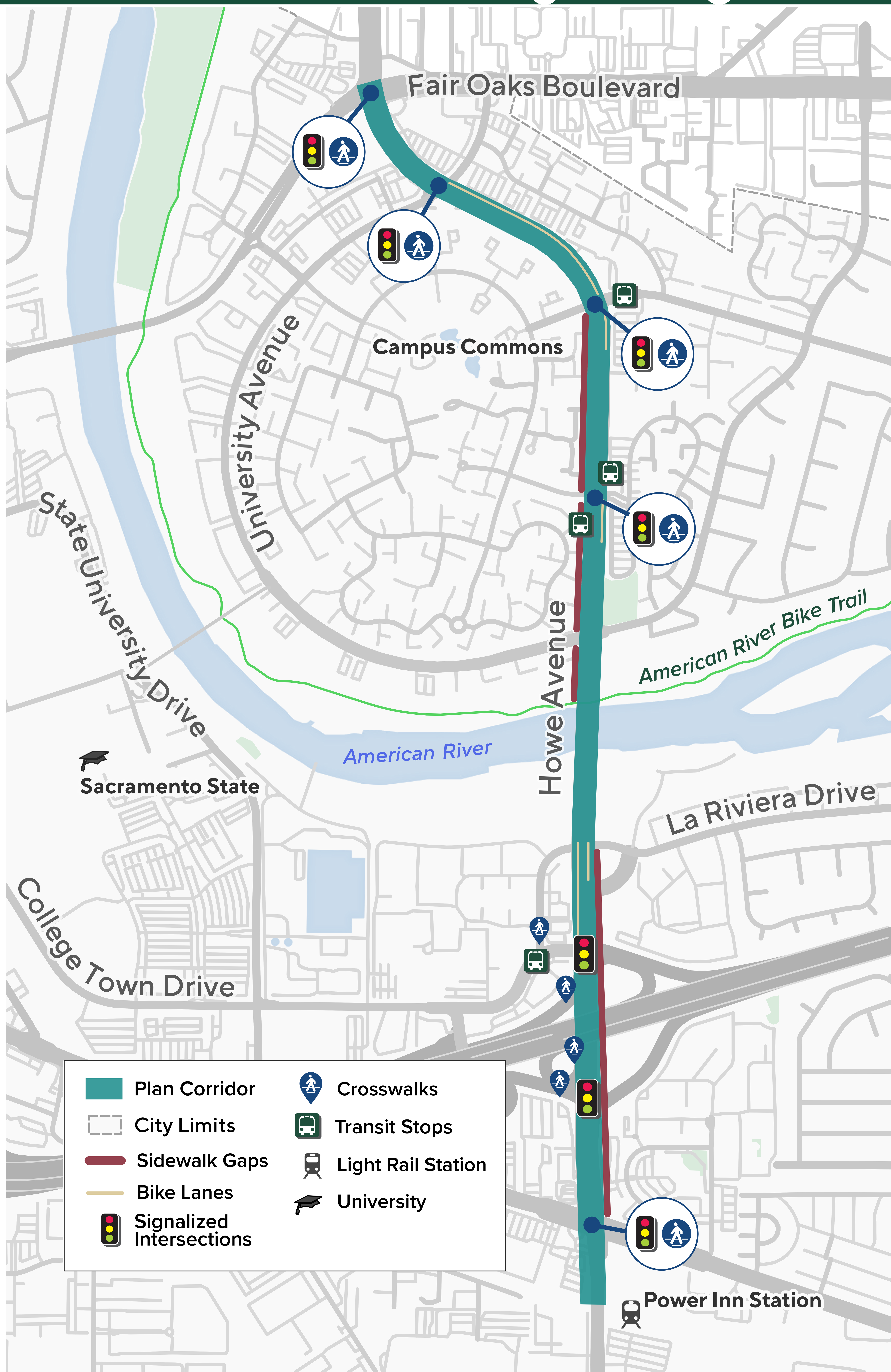
Biking

PLEASE LEAVE YOUR COMMENTS ABOUT BIKING ALONG HOWE AVENUE.



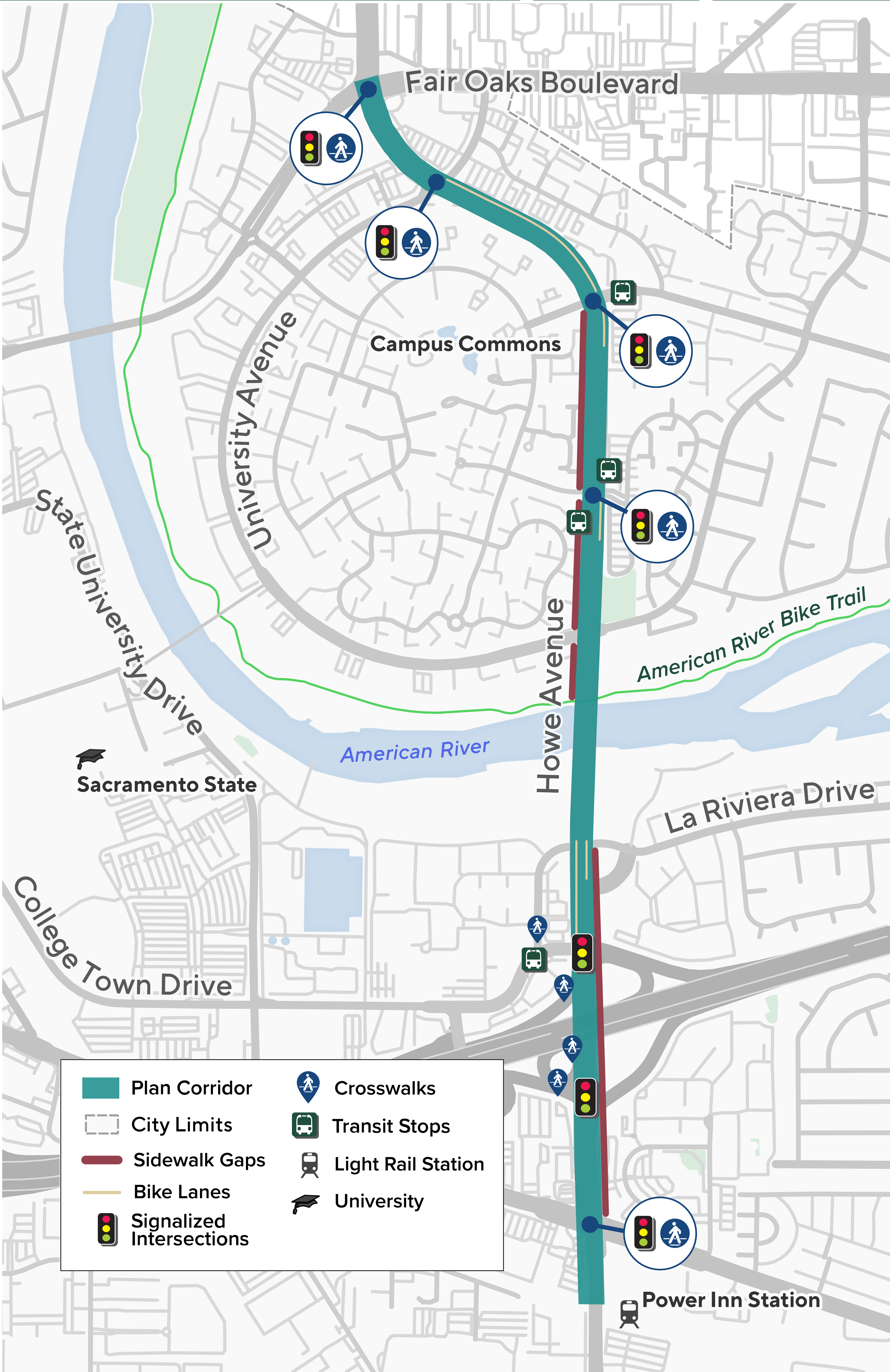
Taking Transit

PLEASE LEAVE YOUR COMMENTS ABOUT TAKING TRANSIT ALONG HOWE AVENUE.



Driving

PLEASE LEAVE YOUR COMMENTS ABOUT DRIVING ALONG HOWE AVENUE.



APPENDIX F: PUBLIC COMMENT

SOCIAL PINPOINT COMMUNITY COMMENTS

INTERSECTION	COMMENT
WALKING	
FAIR OAKS BLVD	Too dangerous to cross Fair Oaks to get to Raleys or Starbucks. They don't seem to see pedestrians.
UNIVERSITY AVE	pedestrian island
	prioritize pedestrian crossing from campus comments to UV
	ped refuge for crossings
SWARTHMORE DR	street lighting especially at cross walks
	There is no sidewalk from American River to Swarthmore, so the public uses Campus Commons private property for access to the southbound bus stop just south of Swarthmore.
AMERICAN RIVER OVERPASS	separated walking path with greenery buffer
LA RIVIERA ACCESS RD	There should be access from the levee top trail to the bridge sidewalk that does not require you to jump the guardrail.
	There is no way for a pedestrian to get from La Riv to Howe on the North bound side of Howe
FOLSOM BLVD	Large gap in sidewalk on east side of PG&E Brighton Substation (south side of Folsom) to 8240 Folsom Blvd. Unsafe for pedestrians.
	tough to cross Folsom to LR - take alternate route
POWER INN LRT STATION	direct access to Power Inn station from Folsom
BICYCLING	
FAIR OAKS BLVD	bike detection at signals and along entire corridor
	We need bike lanes the full north/south route.

INTERSECTION	COMMENT
AMERICAN RIVER DR	driveway turnout @ apartment complex is dangerous for cyclists
	"lot of jump bikes
	bike trail on Northrop closest"
SWARTHMORE DR	separated bike lanes
	bike lane would be nice
	trail connection here for cyclists
TRANSIT	
SWARTHMORE DR	connector shuttle every 15 mins connecting to commerical + medical centers
	shade/cover from weather @ transit stops
	bus lane or light rail
	light rail please
POWER INN LRT STATION	Station feels isolated
DRIVING	
FAIR OAKS BLVD	The right turn signal on southbound Howe at Fair Oaks needs to be 'red' just a bit longer. It starts blinking yellow which for some people, they know to use caution and yield...but for at least half, they fly thru at speed and do not allow the people coming in from the turn lane or the U Turn - to get into the Raley/Starbux/CVS parking area off of Fair Oaks Blvd. I have almost been hit by people not yielding and i am trying to cross into that parking area. It would help us motorists to not have to fight it out.
	Signal timing issues
	Crazy misaligned intersection. for the speed of traffic coming across North/South it is really off-set.
	Also- stop the southbound right hand arrow turn land from interfering with traffic with right-of-way (coming in north taking a left. I don't

INTERSECTION	COMMENT
	shop at Raleys/Starbux there because it mostly is an unsafe battle to get past those cars to get into the lot near the OrangeTheory entrance off FO Blvd.
	"Fair Oaks light is long
	congestion during peak hours"
	Narrower lanes for traffic calming
UNIVERSITY AVE	Taking a left turn at university is difficult during rush hour
AMERICAN RIVER DR	"many accidents at Howe/American
	Reduce spaces?"
	When driving eastbound on American River (or turning left onto Howe from the Campus Commons side of American River), cars are in danger of being hit at high speeds by southbound Howe traffic who ignore the red light (or can't easily see it's gone red because of the blind curve coming towards the intersection). Perhaps retiming the lights so that the outflow traffic eastbound on American River from Campus Commons doesn't get a green immediately after the red to stop southbound Howe traffic would cause fewer accidents and near misses (including pedestrians trying to cross Howe on the north crosswalk along American River).
	avoid N Howe and take American River to Fair Oaks
	Cars use this RHT to access Fulton (via Munroe). They drive through this intersection as if it's not a light and cause problems for cyclists and pedestrians.
	Driveway is confusing for drivers
SWARTHMORE DR	Super wide traffic lanes here due to the merge and the paint is unclear. Make the lanes narrower to reduce vehicle speed
	Extend the LHT lane further at Swarthmore by several car lengths. Because the speed driving North on Howe is high during heavier traffic times, need more room to slow down to safely enter the LHT lane at Swarthmore.

INTERSECTION	COMMENT
	in general, the speeds on Howe Ave are just usually too fast. I work out at the Rio Del Oro club and live right across the street. I do NOT feel safe to walk or ride my bike across Howe- so i DRIVE 1/4 mile to the gym when i would love to ride my bike. It is just so dangerous. Listening to the traffic at night - esp. THUR Nights Motorcycle races--I am kind of afraid to go out at all onto that road. It is a shame we can't get some better modulated traffic speeds and wider/safer for peds and bikes. Def need to widen it? Run the lite rail down it? etc.
AMERICAN RIVER DR OVERPASS	Speeds are too high over the river and down towards Fair Oaks Blvd. The light at Swarthmore slows traffic down, but it is a speedway from the I-50 interchange to Swarthmore. With the incline to the bridge, people often drive 15+ over the posted sped limit.
LA RIVIERA ACCESS RD	short on ramps - cars come fast, can't accelerate to avoid conflict
	reduce speed and improve signal times
US 50	The bulb out for the LHT is at an awkward angle for drivers making a LHT. Many vehicles hit the traffic furniture, scraping the left side of their vehicles.
POWER INN LRT STATION	signal (turning left) for power inn LRT station takes too long - needs better timing
SAFETY	
FAIR OAKS BLVD	Merge lane creates conflicts
	Congestion and aggressive drivers at shopping center
UNIVERSITY AVE	Agree with the cutout on concrete where people like to ''camp'' on the sidewalk. not safe and is an eyesore to the community
	Prevent the sidewalk cutout from being used for unsheltered camping. With traffic going by at high speeds, this is an unsafe location for homeless camping. In addition, the unmanaged trash generated at this location is a health and safety and community quality of life issue.
AMERICAN RIVER DR	this intersection does not feel safe to cross on foot or walking a bike across or etc. Many like to blow through the red light and speeds are too high. I would love to ride my bike to the gym on Scripps,

INTERSECTION	COMMENT
	however instead I drive! I just don't ride anywhere in traffic anymore. But even walking across feels like a challenge. It is a LONG crossing so more warning for cars/better marking may be needed.
	Sound barriers should be established and road surfaces installed that minimize road noise from impacting the adjacent neighborhoods.
	Reduce speed
SWARTHMORE DR	make the MERGE area more clear. Trees are growing over signs and there is no paint showing the 'zipper' lane is ending. with speed of traffic on this road it is so dangerous to sit at the Swarthmore light hoping nobody careens into you and kills you as they jostle for position. The speed is TOO HIGH on this road-people are going 50-80MPH in many cases.
AMERICAN RIVER OVERPASS	Create comfortable trail access
COLLEGE TOWN RD	lots of crashes, drunk driving near bar
FOLSOM BLVD	change center divide concrete so people cannot STAND there in traffic asking for money. So dangerous and they are inches from cars going 50MPH + - same at F.O and Howe intersection.
POWER INN LRT STATION	There is a section of the railing that has been removed so people can cut though into the parking lot instead of going all the way down to power inn rd and turning in where cars enter. I have used this many times coming from the light rail stop. This should be made official and have the dirt section between the path and the parking lot paved and curb cuts added so bike riders don't have to dismount every time we use it.
OTHER COMMENTS	
FAIR OAKS BLVD	would take bike trail, no real trail access on Howe
UNIVERSITY AVE	new infill development will create traffic