

# 3 MOBILITY

This Chapter addresses existing transportation systems within the Policy Area, including: roadways, transit services, bicycle facilities, airports, waterways, and railways.

## *Introduction*

### **Background**

Mobility and accessibility in the city of Sacramento is provided by a variety of facilities serving a variety of travel modes carrying people and goods.

In the 1920 and 1930s, transportation planning within the city was largely focused on railroads. Sacramento was served by five railroad companies and was seen as favorable for rail travel and freight service due to its central location and proximity to the Sacramento River. With the popularity of cars, roadway travel became more common and the planning focus shifted to roadway construction and maintenance. By the 1950s, the city was facing congestion issues with two-thirds of the city's roadways experiencing periods where demand exceeded capacity. The City's 1952 Annual Transportation Report acknowledged "California's traffic problem is serious today – it will be more critical tomorrow."

Roadway congestion continues to be a prominent transportation and planning issue within the city and Sacramento region. Although substantial growth has occurred in outlying areas in recent years, Downtown Sacramento continues to serve as a major employment center within the region, which necessitates travel to/from the Downtown. Congestion on freeways and major arterials in the City can cause drivers to divert onto neighborhood streets to avoid delays.

The transportation system in the city of Sacramento, along with the existing physical and operational conditions, is described below. The system is presented in terms of: the local and regional roadways, transit services, bikeways, pedestrian facilities, aviation facilities, waterways, and railways.

## **3.1 Roadways**

### *Introduction*

The City's roadway network consists of a combination of Federal interstates, a United States highway, California State highways, and city streets (arterial, collector, and local streets).

This roadway network is used extensively for personal vehicle travel. Table 3-1 documents the mode splits used by City residents to travel from home to work. As shown, approximately 86 percent of all city residents travel from home to work by automobile, of which 14 percent travel in a carpool of two or more persons. Public transit serves approximately four percent of residents commuting to work. Approximately 3 percent of residents walk to work, four percent work from home, and three percent use a different form of transportation than those specified above (including bicycle).

<i>Mode</i>	<i>Home-Work Mode Split</i>
Drive Alone	72.5%
Carpool	13.6%
Public Transportation	3.7%
Walk	3.1%
Work at Home	3.8%
Other (Includes Bicycles)	3.4%

Source: U.S. Census Bureau, 2007-2011 American Community Survey.

The Census Bureau data provides valuable insight into work commute trips, however these trips account for only a portion of the trips on the city’s roadways. The Sacramento Area Council of Governments (SACOG) maintains a regional travel demand forecasting model, and in this role, periodically performs a household travel survey used to assist in the calibration of the model. The data from SACOG’s 2000 Household Survey shows the range of travel purposes for residents of the city of Sacramento:

- 37 percent for shopping, personal business, meals outside home
- 24 percent for work
- 14 percent related to school
- 14 percent medical, civic, church, other
- 11 percent social/recreational

## *Existing Conditions*

### **Regional Roadway System**

Two major interstate highways converge in Sacramento: Interstate 5 (I-5), a north-south highway running from Canada to Mexico, and Interstate 80 (I-80), an east-west highway running between San Francisco and the New York City metropolitan area. Two other major freeways, State Route 99, which runs north-south, and U.S. Highway 50 (US 50), which runs east-west, also converge within the city. The Capital City Freeway and State Route 160 (SR 160) round-out the city’s network of freeways.

This system of freeways handles the bulk of the long-distance trips that cross through the Sacramento region en-route to other destinations, but it also handles large volumes of commute trips between residential suburbs and the employment-rich Central Business District located in Downtown Sacramento. Detailed descriptions of each of these and other major regional facilities are provided below:

- **Interstate 5** is a principal north/south freeway that extends the length of California into Oregon and Washington. Within the city, it travels along the eastern bank of the Sacramento River through Downtown, linking the primarily residential neighborhoods in Natomas and South Sacramento to the Central Business District. Interstate 5 also serves as the sole freeway in the region providing access to the Sacramento International Airport, and is a primary route used by long-distance truck traffic. Interstate 5 has six to eight travel lanes within the city.
- **Interstate 80** is a principal east/west freeway that extends across the United States, connecting California to New Jersey. Within this region, I-80 connects the San Francisco Bay Area to Lake Tahoe and Reno, Nevada. Interstate 80 serves as a bypass of Downtown Sacramento, and travels through the northern portion of the City. This freeway is used as a major commute route for employees traveling into Sacramento from the northeastern suburbs, as well as from the west. It also serves as a major truck route between the San Francisco Bay Area, Sacramento, the Tahoe Basin, and points east. Within the City, I-80 has six mainline travel lanes, and a project is currently underway to add one high-occupancy vehicle (HOV) lane in either direction between I-5 and Business 80.
- **Business 80**, also known as the Capital City Freeway or State Route 51 (SR 51), extends northeast from Downtown Sacramento, connecting to I-80 just east of Watt Avenue. In addition to serving as a link to the Central City, Business 80 provides access to major regional destinations including Cal Expo and Arden Fair Mall. Business 80 is a six to ten lane freeway within the city, and has one HOV lane in either direction between E Street and SR 99.
- **US Highway 50** is a major east/west route that extends from I-80 near Downtown Sacramento to the Tahoe Basin and ultimately to Ocean City, Maryland. Within the City, US 50 functions as a freeway, with eight to 10 travel lanes. This freeway connects Downtown Sacramento to the eastern suburbs, including the cities of Rancho Cordova and Folsom.
- **State Route 16** (SR 16), also known as Jackson Highway, is a designated State highway that links the city of Sacramento to eastern Sacramento County and Amador County. Apart from portions of the route co-designated with major freeways, SR 16 stretches approximately 1.5 miles within the city (from the US 50/Howe Avenue interchange to South Watt Avenue). The City and Caltrans are currently (2012) discussing the possibility of relinquishing this portion of the route to the City.
- **State Route 99** is a four-to-six lane freeway extending south from Business 80 to South Sacramento, Elk Grove, and through the Central Valley. This segment of SR 99 has one HOV lane in either direction on this major commute route between Downtown Sacramento and the southern suburbs. A portion of SR 99 is co-designated with US 50 and I-5 through Downtown Sacramento and Natomas. State Route 99 separates from I-5 near the northern city limit, stretching to the north as a four-lane freeway.

- **State Route 160** within the City limits remains under Caltrans control for a distance of just over two miles between Downtown Sacramento and Business 80. This spur off of the regional freeway system extends across the American River, and is a key route for trips between the central city and the northeastern suburbs. All other portions of this route located within the city were relinquished by Caltrans to the City of Sacramento.

## City Roadways

Figure 3-1 displays the functional classification and the number of travel lanes on roadways within the city as well as within the General Plan Policy Area. Functional classification describes the roadway purpose and use related to moving people and goods. The city's roadways are divided into the following classifications:

- **Arterial Streets:** Provide mobility for high traffic volumes between various parts of the city and the region, serving a mix of through traffic and local traffic. Arterials typically link freeways to collector streets and local streets. The city transportation network includes both suburban and urban arterials. Suburban arterials generally have higher speeds and more access control. Urban arterials have generally lower speeds and less access control due to the intensity of the development in the urban environment. Arterials within the city may have up to eight travel lanes.
- **Collector Streets:** Provide for relatively short distance travel between and within neighborhoods, and generally have lower speeds and traffic volumes than arterials. Driveway access to collectors is limited less than on arterials, but may still be discouraged. Collectors within the city may have up to four travel lanes.
- **Local Streets:** Provide direct roadway access to abutting land uses and serve short distance trips within neighborhoods. Traffic volumes and speed limits on local streets are low, and these roadways have no more than two travel lanes.

The following major city roadways provide arterial connections to the regional freeway system:

- Pocket Road
- Florin Road
- Seamas Avenue/Fruitridge Road
- Sutterville Road
- P Street & Q Street
- I Street & J Street
- Richards Boulevard
- Garden Highway
- El Camino Avenue
- Arena Boulevard
- Del Paso Road
- Elkhorn Boulevard
- Truxel Road
- Northgate Boulevard
- Norwood Avenue
- Marysville Boulevard/Raley Boulevard
- Cosumnes River Boulevard
- Mack Road
- 47<sup>th</sup> Avenue
- Exposition Boulevard
- Arden Way
- Marconi Avenue
- Fulton Avenue
- Watt Avenue
- Stockton Boulevard
- 65<sup>th</sup> Street
- Power Inn Road/Howe Avenue

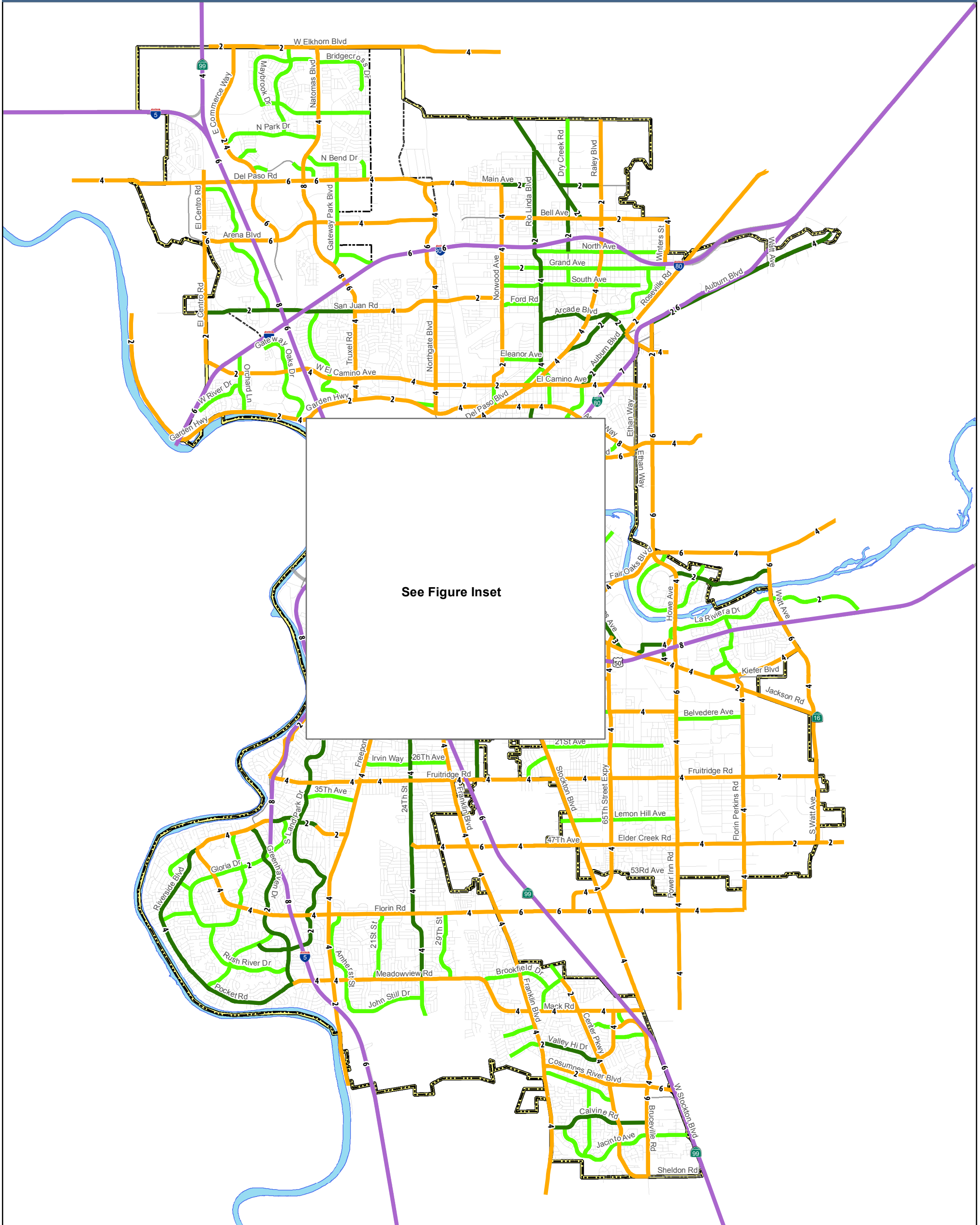
Appendix A lists all the roadways evaluated for this study, along with existing functional classification, geometric and traffic count data. Study roadways with segments that presently carry over 20,000 daily vehicle trips are listed below:

40,000 - 60,000 Daily Trips

- Howe Avenue
- Truxel Road
- Arden Way
- South Watt Avenue
- Florin Road
- Garden Highway








20,000 - 40,000 Daily Trips

- Del Paso Rd
- Northgate Blvd
- Natomas Blvd
- Arena Blvd
- El Camino Ave
- Arden Garden Connector
- W El Camino Ave
- Richards Blvd
- Exposition Blvd
- Fair Oaks Blvd
- Folsom Blvd
- Hornet Dr
- Sutterville Rd
- Fruitridge Rd
- Riverside Blvd/43rd Ave
- Freeport Blvd
- Stockton Blvd
- 65th St
- Power Inn Rd
- Raley Blvd
- Pocket Rd
- Meadowview Rd
- 47th Ave
- Stockon Blvd
- Elder Creek Rd
- Mack Rd
- Valley Hi Dr
- Bruceville Rd
- Franklin Blvd
- 16th St



See Figure Inset

## Legend

-  Number of Lanes
-  City Limits
-  Freeway
-  Waterways
-  Arterial
-  Major Collector
-  Minor Collector

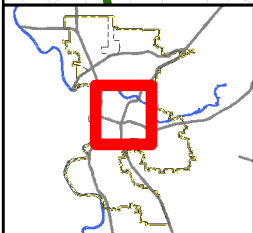
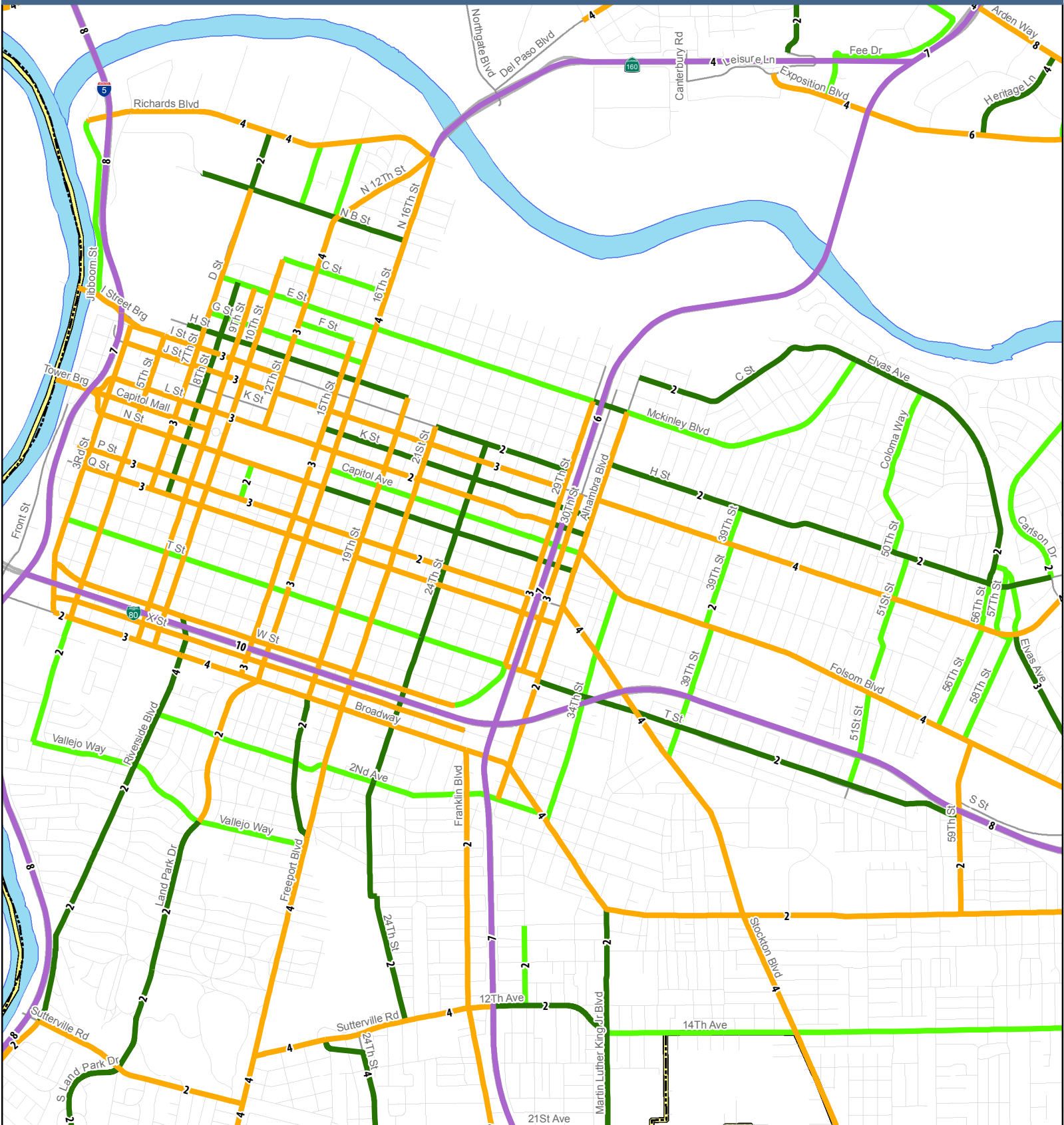


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













**Legend**

-  Number of Lanes
-  City Limits
-  Freeway
-  Waterways
-  Arterial
-  Major Collector
-  Minor Collector



0 0.25 0.5 Miles

Data Source: City of Sacramento, 2012;

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With the exception of a segment of 16<sup>th</sup> Street in Downtown Sacramento, all of the roadway segments currently carrying 20,000 or more vehicles per day are located outside of the Central City. Although the most densely developed parts of the city are within Downtown and Midtown, these areas have a gridded street system that disperses traffic and provide redundancy. Major arterial routes in other parts of the city typically lack closely-spaced adjacent roadways, and function as primary commute corridors linking residential neighborhoods to commercial areas and the regional freeway system.

### Roadway Capacity and Level of Service

Daily level of service (LOS) was calculated for each roadway segment in the regional roadway system to evaluate existing traffic conditions. Level of service is a qualitative measure of traffic operating conditions whereby a letter grade, from A (the best) to F (the worst), is used to describe the relationship between traffic demand on the roadway and the physical capacity of the roadway. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. Since this study relies on the daily LOS analysis, it is intended to gauge the need for potential roadway capacity expansion and does not provide an accurate assessment of peak period traffic operations when traffic volumes are at their highest and drivers tend to notice the effects of congestion. The LOS grades are generally defined in Table 3-2.

<i>Level of Service</i>	<i>Description</i>
A	LOS A describes primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at the boundary intersections is minimal.
B	LOS B describes reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted and control delay at the boundary intersections is not significant.
C	LOS C describes stable operation. The ability to maneuver and change lanes at midsegment locations may be more restricted than at LOS B. Longer queues at the boundary intersection may contribute to lower travel speeds.
D	LOS D indicates a less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections.
E	LOS E is characterized by unstable operation and significant delay. Such operations may be due to some combination of adverse progression, high volume, and inappropriate signal timing at the boundary intersections.
F	LOS F is characterized by flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing.

Source: Transportation Research Board 2010, Highway Capacity Manual, Volume 3, pp. 16-7 – 16-8.

LOS was determined by comparing existing traffic volumes against daily LOS capacity thresholds, which take into account the functional classification and capacity of each roadway segment. Table 3-3 displays the thresholds used for the analysis. The vast majority of the traffic volumes were collected in October and November of 2012, and represent an average of the volume measured during two mid-week 24 hour time periods. This data was supplemented with recent traffic counts provided by the City of Sacramento at select locations. Traffic count data for all freeway segments was provided by Caltrans, and obtained through the Caltrans Performance Measurement System (PeMS). Please refer to Appendix A for traffic count data. The traffic count data should be considered an estimate of current volumes as it is based on a small sample of data and not a full year of continuous counts.

<b>Table 3-3 Level of Service Thresholds for City Roadway Segments</b>						
<b>Operational Class</b>	<b>Number of Lanes</b>	<b>ADT Level-of-Service Capacity Threshold</b>				
		<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
Arterial – Low Access Control	2	9,000	10,500	12,000	13,500	15,000
	4	18,000	21,000	24,000	27,000	30,000
	6	27,000	31,500	36,000	40,500	45,000
Arterial – Moderate Access Control	2	10,800	12,600	14,400	16,200	18,000
	4	21,600	25,200	28,800	32,400	36,000
	6	32,400	37,800	43,200	48,600	54,000
Arterial – High Access Control	2	12,000	14,000	16,000	18,000	20,000
	4	24,000	28,000	32,000	36,000	40,000
	6	36,000	43,000	48,000	54,000	60,000
Collector Street – Minor	2	5,250	6,125	7,000	7,875	8,750
Collector Street – Major	2	8,400	9,800	11,200	12,600	14,000
	4	16,800	19,600	22,400	25,200	28,000
Local Street	2	3,000	3,500	4,000	4,500	5,000
<b>Facility Type</b>	<b>Stops/Mile</b>	<b>Driveways</b>		<b>Speed</b>		
Arterial – Low Access Control	4+	Frequent		25-35 MPH		
Arterial – Moderate Access Control	2-4	Limited		35-45 MPH		
Arterial – High Access Control	1-2	None		45-55 MPH		

Source: City of Sacramento 2009, 2030 General Plan Master Environmental Impact Report, p. 6.12-10.

Figure 3-2 graphically displays the resulting roadway LOS analysis results. As shown, the vast majority of roadway segments operate at LOS D or better.

While the Mobility Element of the 2030 City of Sacramento General Plan identifies LOS D as the base level of service goal, LOS E and F operations are acceptable in portions of the city as identified in Policy M 1.2.2 pertaining to roadway level of service:

M 1.2.2 The City shall allow for flexible Level of Service (LOS) standards, which will permit increased densities and mix of uses to increase transit ridership, biking, and walking, which decreases auto travel, thereby reducing air pollution, energy consumption, and greenhouse gas emissions.

- a. Core Area Level of Service Exemption—LOS F conditions are acceptable during peak hours in the Core Area bounded by C Street, the Sacramento River, 30th Street, and X Street. If a Traffic Study is prepared and identifies a LOS impact that would otherwise be considered significant to a roadway or intersection that is in the Core Area as described above, the project would not be required in that particular instance to widen roadways in order for the City to find project conformance with the General Plan. Instead, General Plan conformance could still be found if the project provides improvements to other parts of the citywide transportation system in order to improve transportation-system-wide roadway capacity, to make intersection improvements, or to enhance non-auto travel modes in furtherance of the General Plan goals. The improvements would be required within the project site vicinity or within the area affected by the project’s vehicular traffic impacts. With the provision of such other transportation infrastructure improvements, the project would not be required to provide any mitigation for vehicular traffic impacts to road

segments in order to conform to the General Plan. This exemption does not affect the implementation of previously approved roadway and intersection improvements identified for the Railyards or River District planning areas.

- b. Level of Service Standards for Multi-Modal Districts – The City shall seek to maintain the following standards in multi-modal districts including the Central Business District, areas within ½ mile walking distance of light rail stations, and in areas designated for urban scale development (Urban Centers, Urban Corridors, and Urban Neighborhoods as designated in the Land Use and Urban Form Diagram). These areas are characterized by frequent transit service, enhanced pedestrian and bicycle systems, a mix of uses, and higher-density development.
  - Maintain operations on all roadways and intersections at LOS A-E at all times, including peak travel times, unless maintaining this LOS would, in the City’s judgment, be infeasible and/or conflict with the achievement of other goals. LOS F conditions may be acceptable, provided that provisions are made to improve the overall system and/or promote non-vehicular transportation and transit as part of a development project or a City-initiated project.
- c. Base Level of Service Standard – The City shall seek to maintain the following standards for all areas outside of multi-modal districts.
  - Maintain operations on all roadways and intersections at LOS A-D at all times, including peak travel times, unless maintaining this LOS would, in the City’s judgment, be infeasible and/or conflict with the achievement of other goals. LOS E or F conditions may be accepted, provided that provisions are made to improve the overall system and/or promote non-vehicular transportation as part of a development project or City-initiated project.
- d. Roadways Exempt from Level of Service Standard – The above LOS standards shall apply to all roads, intersections, or interchanges within the City except as specified below. If a Traffic Study is prepared and identifies a significant LOS impact to a roadway or intersection that is located within one of the roadway corridors described below, the project would not be required in that particular instance to widen roadways in order for the City to find project conformance with the General Plan. Instead, General Plan conformance could still be found if the project provides improvements to other parts of the city wide transportation system in order to improve transportation-system-wide roadway capacity, to make intersection improvements, or to enhance non-auto travel modes in furtherance of the General Plan goals. The improvements would be required within the project site vicinity or within the area affected by the project’s vehicular traffic impacts. With the provision of such other transportation infrastructure improvements, the project would not be required to provide any mitigation for vehicular traffic impacts to the listed road segment in order to conform to the General Plan.

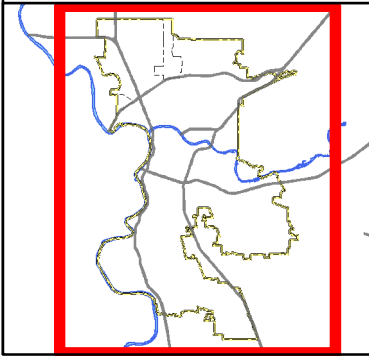
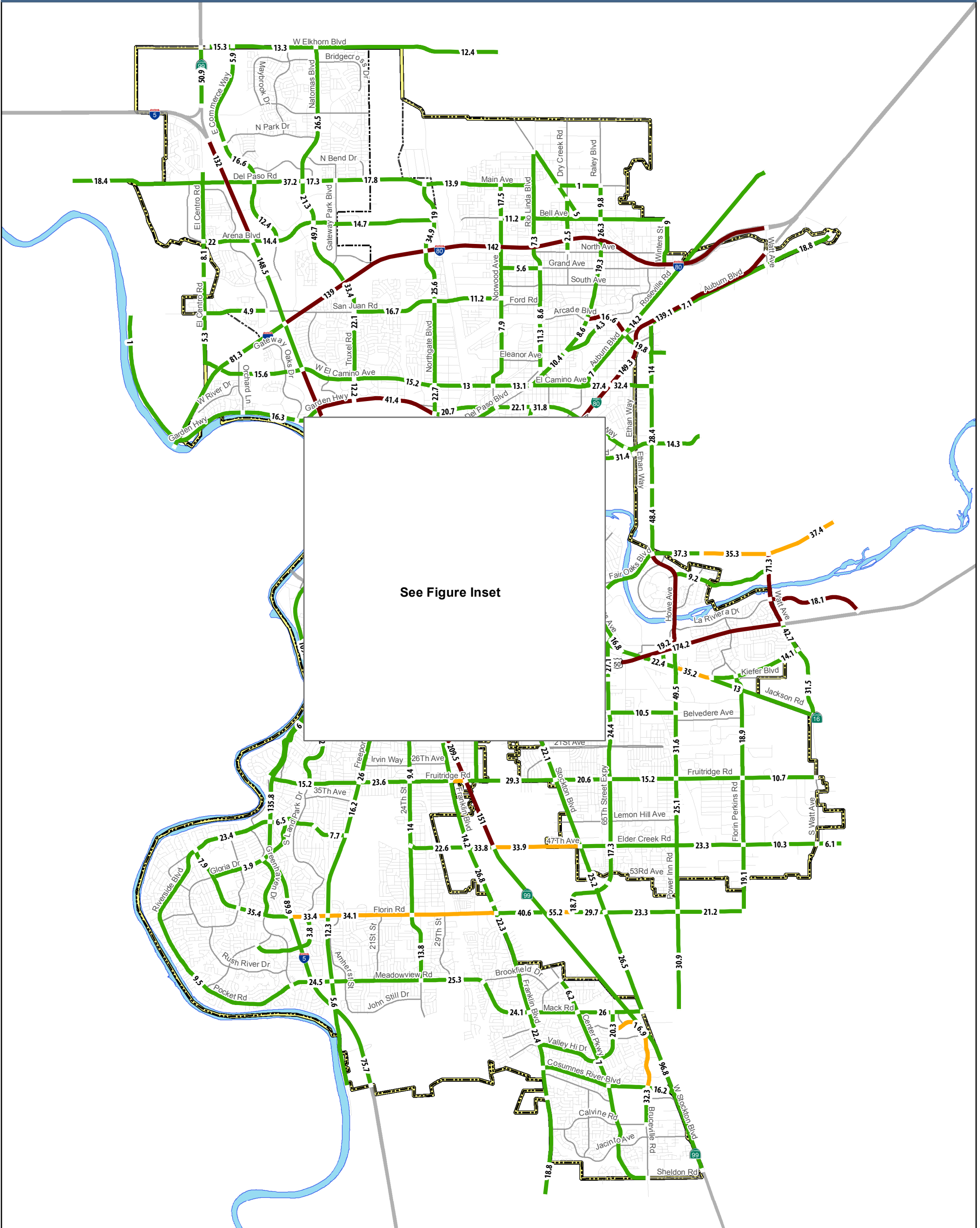
- 12th/14th Avenue: State Route 99 to 36th Street
- 24th Street: Meadowview Road to Delta Shores Circle
- 65th Street: Folsom Boulevard to 14th Avenue
- Alhambra Boulevard: Folsom Boulevard to P Street
- Arcade Boulevard: Marysville Boulevard to Del Paso Boulevard
- Arden Way: Capital City Freeway to Ethan Way
- Blair Avenue/47th Avenue: S. Land Park Drive to Freeport Boulevard
- Broadway: 15th Street to Franklin Boulevard
- Broadway: 58th to 65th Streets
- El Camino Avenue: Stonecreek Drive to Marysville Boulevard
- El Camino Avenue: Capitol City Freeway to Howe Avenue
- Elder Creek Road: 65th Street to Power Inn Road
- Florin Perkins Road: 14th Avenue to Elder Creek Road
- Florin Road: Greenhaven Drive to I-5; 24th Street to Franklin Boulevard
- Folsom Boulevard: 34th Street to Watt Avenue
- Freeport Boulevard: Broadway to Seamas Avenue
- Fruitridge Road: Franklin Boulevard to SR 99
- Garden Highway: Truxel Road to Northgate Boulevard
- Howe Avenue: American River Drive to Folsom Boulevard
- J Street: 43rd Street to 56th Street
- Mack Road: Meadowview Road to Stockton Boulevard
- Martin Luther King Boulevard: Broadway to 12<sup>th</sup> Avenue
- Marysville Boulevard: I-80 to Arcade Boulevard
- Northgate Boulevard: Del Paso Road to SR 160
- Raley Boulevard: Bell Avenue to I-80

- Roseville Road: Marconi Avenue to I-80
- Royal Oaks Drive: SR 160 to Arden Way
- Truxel Road: I-80 to Gateway Park

Table 3-4 lists all locations currently operating at LOS E or F. None of the locations listed in Table 3-4 are located within the Core Area defined in Policy M 1.2.2, and therefore LOS F operations are not acceptable at any of these locations during any time period of the day.

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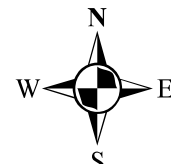


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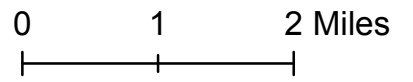
#### Level of Service

- 24.5 Traffic Volume x 1,000
- A - D
- E
- F

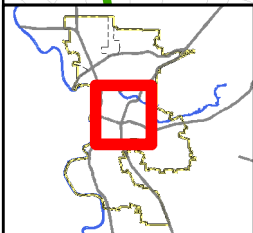
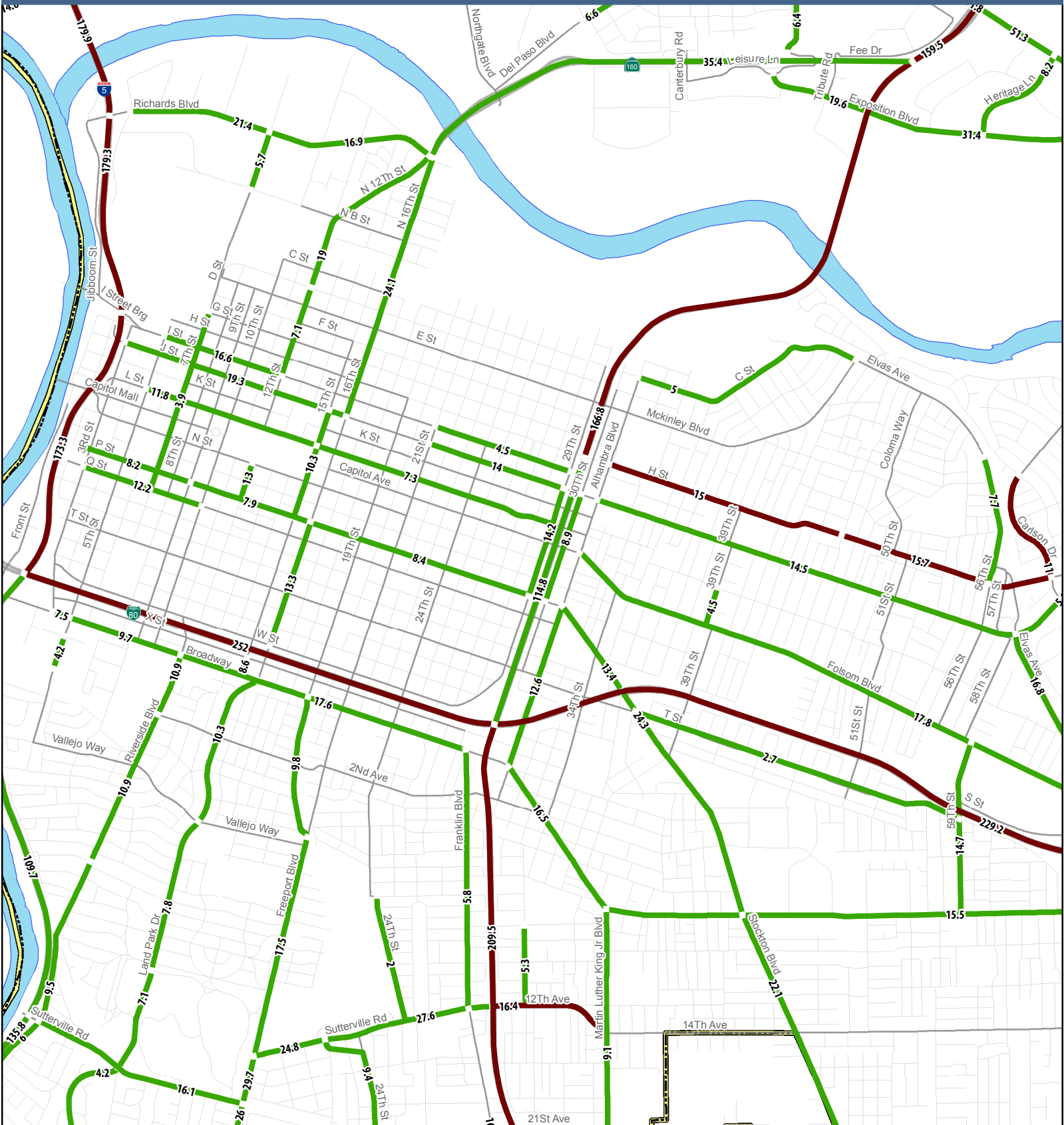
- City Limits
- Waterways



0 1 2 Miles

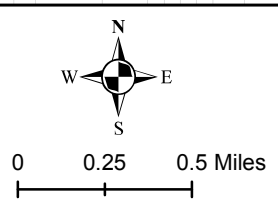






**Legend**

- x Traffic Volume x 1,000
- A - D
- E
- F
- City Limits
- Waterways



0 0.25 0.5 Miles

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**Table 3-4 Roadway Segments Operating at LOS E or Worse, City of Sacramento, 2012**

Roadway	Segment	Lanes	Daily Volume	Existing LOS
Arcade Blvd	Marysville Blvd to Roseville Rd	2	16,600	F
Howe Ave	US-50 to Fair Oaks Blvd	4	48,400	F
H St	Alhambra Blvd to 45 <sup>th</sup> St	2	15,000	F
H St	45 <sup>th</sup> St to Carlson Dr	3	15,700	F
Folsom Blvd	Howe Ave to Jackson Rd	4	35,200	E
Carlson Dr	Moddison Ave to H St	2	11,000	F
Fruitridge Rd	Franklin Blvd to SR-99	4	32,600	E
12 <sup>th</sup> Ave	Martin Luther King Jr. Blvd to SR-99	2	16,400	F
Florin Rd	Freeport Blvd to Franklin Blvd	4	34,100	E
Florin Rd	I-5 to Freeport Blvd	4	33,400	E
47 <sup>th</sup> Ave	SR-99 to Stockton Blvd	4	33,900	E
Garden Hwy	Truxel Rd to Northgate Blvd	2	41,400	F
Garden Hwy	I-5 to Truxel Rd	2	31,000	F

Source: Fehr & Peers, 2013.

Three of the roadway segments operating at LOS E fall partly within a multi-modal district as defined in Policy M 1.2.2. Information pertinent to the application of the Policy M 1.2.2 to each of the segments currently operating at LOS E is detailed below:

- **Folsom Boulevard** (between Howe Avenue and Jackson Road): the entire length of this segment is within ½ mile of a light rail station, and therefore LOS E is acceptable.
- **Fruitridge Road** (between Franklin Boulevard and SR 99): the westernmost portion of this segment is within a ½ mile walk of a light rail station (LOS E acceptable). Land use designations along the entire segment are a mix of “suburban” and “traditional neighborhood” designations (LOS D). Therefore, this may constitute a deficiency.
- **Florin Road** (between Freeport Boulevard and Franklin Road): the eastern-most portion of this segment is within a ½ mile walk of a light rail station and has an “urban” land use designation (LOS E acceptable). The remainder of this segment has “suburban” land use designations (LOS D). Therefore, this may constitute a deficiency.
- **47<sup>th</sup> Avenue** (between SR 99 and Stockton Boulevard): the western portion of this segment is within unincorporated Sacramento County (LOS E acceptable). The eastern-most portion of this segment located in the City is not within ½ mile of a light rail station, and has a mix of “public/quasi-public,” and “suburban” land use designations (LOS D). Therefore, according to the City LOS standards, LOS E is a deficiency.

The guidance provided by the City’s current LOS policy at times results in situations where the acceptable LOS threshold for a given roadway facility is unclear. Examples include intersections with urban land use designations on some quadrants; roadway segments with portions passing through non-urban land use designations; roadway segments with urban land use designations on one side of the roadway.

A total of 43 roadway segments within unincorporated Sacramento County were evaluated to determine existing conditions just outside of the Policy Area boundary. Table 3-4 lists the locations of seven roadway segments with existing unacceptable LOS according to the County’s existing standards.

Policy CI-9 contained in the Circulation Element of the Sacramento County General Plan (Sacramento County 2011) sets forth definitions for what is considered an acceptable level of service. The following excerpt from the level of service policy is relevant to this study:

CI-9 Plan and design the roadway system in a manner that meets Level of Service (LOS) D on rural roadways and LOS E on urban roadways, unless it is infeasible to implement project alternatives or mitigation measure that would achieve LOS D on rural roadways or LOS E on urban roadways. The urban areas are those areas within the Urban Service Boundary as shown in the Land Use Element of the Sacramento County General Plan. The areas outside the Urban Service Boundary are considered rural.

All roadway segments studied within Sacramento County are located within the Urban Service Boundary, and therefore LOS E is considered acceptable.

**Table 3-5 Road Segments Exceeding Acceptable LOS Standards in Adjacent Jurisdictions, County of Sacramento, 2012**

<i>Roadway</i>	<i>Segment</i>	<i>Lanes</i>	<i>Daily Volume</i>	<i>Existing LOS</i>
Watt Ave	Fair Oaks Blvd to US-50	6	71,300	F
La Riviera Dr	Watt Ave to Folsom Blvd	2	18,100	F

Source: Fehr & Peers, 2013.

Two roadway segments were evaluated in the city of Elk Grove including a portion of Franklin Boulevard and Bruceville Road immediately south of the City’s Policy Area boundary. These road segments operate under acceptable levels under existing conditions according to the City of Elk Grove’s existing standards.

## **Freeways**

Table 3-6 displays the thresholds used for the freeway LOS analysis, and Table 3-7 shows the results of the LOS analysis for 28 freeway segments located within the city. As shown in Table 3-7, 17 of the 28 freeway segments are rated at LOS F under daily conditions. This typically implies that peak period conditions are sufficiently congested to justify actions aimed at reducing or managing demand, improving transit, changing land use, or expanding the facility depending on other transportation objectives of Caltrans and affected agencies.



**Table 3-6 Level of Service Thresholds for Freeway Segments**

Number of Lanes	ADT Level-of-Service Capacity Threshold				
	A	B	C	D	E
2	14,000	21,600	30,800	37,200	40,000
4	28,000	43,200	61,600	74,400	80,000
6	42,000	64,800	92,400	111,600	120,000
8	56,000	86,400	123,200	148,800	160,000
10	70,000	108,000	154,000	186,000	200,000

Source: City of Sacramento 2009, 2030 General Plan Master Environmental Impact Report, p. 6.12-10.

**Table 3-7 Existing Daily Freeway Segment Operations, City of Sacramento, 2012**

Freeway	Segment	Current LOS
Interstate 5	SR-99 Interchange to Arena Blvd	F
Interstate 5	Arena Blvd to I-80 Interchange	D
Interstate 5	I-80 Interchange to W El Camino Ave	D
Interstate 5	W El Camino Ave to Richards Blvd	F
Interstate 5	Richards Blvd to J St	F
Interstate 5	J St to US-50 Interchange	F
Interstate 5	US-50 Interchange to Sutterville Rd	C
Interstate 5	Sutterville Rd to 43 <sup>rd</sup> Ave	D
Interstate 5	43 <sup>rd</sup> Ave to Florin Rd	C
Interstate 5	Florin Rd to City Limits	C
Interstate 80	Garden Hwy to I-5 Interchange	C
Interstate 80	I-5 Interchange to Northgate Blvd	F
Interstate 80	Northgate Blvd to Watt Ave	F
US 50	I-5 Interchange to SR-99 Interchange	F
US 50	SR-99 Interchange to 65 <sup>th</sup> St	F
US 50	65 <sup>th</sup> St to S Watt Ave	F
Business 80	SR-99 Interchange to J St	D
Business 80	J St to SR-160 Interchange	F
Business 80	SR-160 Interchange to El Camino Ave	F
Business 80	El Camino Ave to Marconi Ave	F
Business 80	Marconi Ave to Fulton Ave	F
Business 80	Fulton Ave to City Limits	F
State Route 99	W Elkhorn Blvd to I-5 Interchange	C
State Route 99	US-50 Interchange to Fruitridge Rd	F
State Route 99	Fruitridge Rd to 47 <sup>th</sup> Ave	F
State Route 99	47 <sup>th</sup> Ave to Mack Rd	F
State Route 99	Mack Rd to Sheldon Rd	E
State Route 160	Richards Blvd to Business 80 Interchange	B

Source: Fehr & Peers, 2013.

The *Transportation Corridor Concept Report, Interstate 5* (Caltrans 2010), like all Caltrans transportation corridor or route concept reports, identifies long-range improvements for specific state highway corridors. These reports also establish the “concept” or desired LOS for specific corridor segments. The long-range improvements are identified to bring the existing facility up to the design concept expected to adequately serve 20-year traffic forecasts. In addition, the ultimate design concept for the facility is also identified for conditions beyond the immediate 20-year design period. Throughout the City of Sacramento, the concept service level on I-5 is LOS F with the exception of a short segment located within the city west of SR-99, which has a concept service level of LOS D. Caltrans typically established LOS E as the desired concept LOS in urban areas, but will establish LOS F thresholds when the improvements to accommodate LOS E are not feasible due to environmental, right-of-way, financial, and other constraints.

From the southern city limit to Pocket Road, the 20-year concept for Interstate 5 (I-5) is an eight-lane freeway with one HOV lane in each direction, and the ultimate facility concept is a ten-lane freeway with eight general-purpose lanes and one high occupancy vehicle (HOV) lane in each direction. From Pocket Road, through Downtown Sacramento, north to the I-5/SR 99 interchange, the 20-year and ultimate facility concept is a ten-lane freeway with four general-purpose lanes and one HOV lane in each direction (with the exception of the segment in Downtown Sacramento between US 50 and the Union Pacific Railroad tracks, which has a 20-year and ultimate concept of two fewer mainline lanes). From SR 99 to the Sacramento/Yolo County Line, the 20-year concept is a six-lane freeway with four general purpose lanes and one HOV lane in either direction, and the ultimate facility concept is an eight-lane freeway with three general-purpose lanes and one HOV lane in each direction.

The *Transportation Corridor Concept Report, Interstate 80* (Caltrans 2010) contains the 20-year improvement concept for I-80. Throughout the city of Sacramento, the concept service level is LOS F. The 20-year concept and the ultimate facility concept for the corridor is an eight-lane freeway with three general-purpose lanes and one HOV lane in each direction.

The *Transportation Corridor Concept Report, United States Highway 50* (Caltrans 2010) contains the 20-year improvement concept for US 50. Throughout the city of Sacramento, the concept service level is LOS F. Throughout the entire city, the 20-year concept and the ultimate facility concept is a 10-lane freeway with one HOV lane in each direction.

The *State Route 99 Transportation Corridor Concept Report* (Caltrans 2010) contains the 20-year improvement concept for SR 99. South of US 50, the concept service level is LOS F throughout the city of Sacramento. The 20-year concept is a six-lane facility south of Florin Road, an eight-lane facility between Florin Road and Fruitridge Road, and a ten-lane freeway between Fruitridge Road and US 50; each of these segments includes one HOV lane in each direction. The ultimate facility concept is an eight-lane freeway including one HOV lane in each direction south of Mack Road, and a 10-lane freeway including one HOV lane in each direction north of Mack Road.

For the segment of SR 99 within the city located north of I-5, the concept service level is LOS E. The 20-year concept for this segment is a six-lane freeway including one HOV lane in each direction, and the ultimate facility concept is a 10-lane freeway including one HOV lane in each direction.

The *Interstate 80 and Capital City Freeway Corridor System Management Plan* (Caltrans 2009) contains the 20-year improvement concept for the Capital City Freeway (SR 51). Throughout the city of Sacramento, the concept service level is LOS F. From the US 50/SR 99 junction to J Street, the 20-year concept and



the ultimate facility concept for SR 51 is an eight-lane freeway with three general-purpose lanes and one HOV lane in each direction. From J Street to the I-80/SR 51 junction, the 20-year concept and ultimate facility concept is a six-lane freeway.

### Truck Routes

The Federal and State highways within the city and General Plan Policy Area have been designated as truck routes by Caltrans. I-80, I-5, U.S. 50, SR 99, and Business 80 are included in the National Network for Service Transportation Assistance Act (STAA) of 1982.

State Route 160, most of which Caltrans relinquished to the City, is part of the California Legal Network. The California Legal Network limits some of the larger trucks allowed under the STAA network. Trucks are defined as heavy freight vehicles that meet the STAA definitions found in the California State Vehicle Code.

The percentage of truck traffic on freeways in the city is summarized in Table 3-8. As shown, I-5 through Downtown Sacramento has the highest truck percentage (8.1 percent), while Business 80 (Capital City Freeway) has the lowest percentage of trucks (3.4 percent).

<i>Interstate/Highway</i>	<i>Vehicle AADT1</i>	<i>Truck AADT1</i>	<i>Percentage of Trucks</i>
I-5 south of Jct. I-80	152,000	12,282	8.1%
I-80 east of Jct. I-5	144,000	8,251	5.7%
U.S. 50 east of Jct. SR 99	206,000	7,643	3.7%
SR 99 south of Jct. U.S. 50	211,000	9,516	4.5%
Business 80 at Exposition Blvd	159,000	5,422	3.4%

Notes:

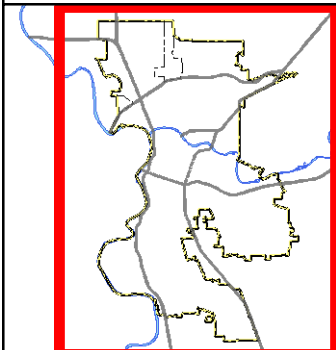
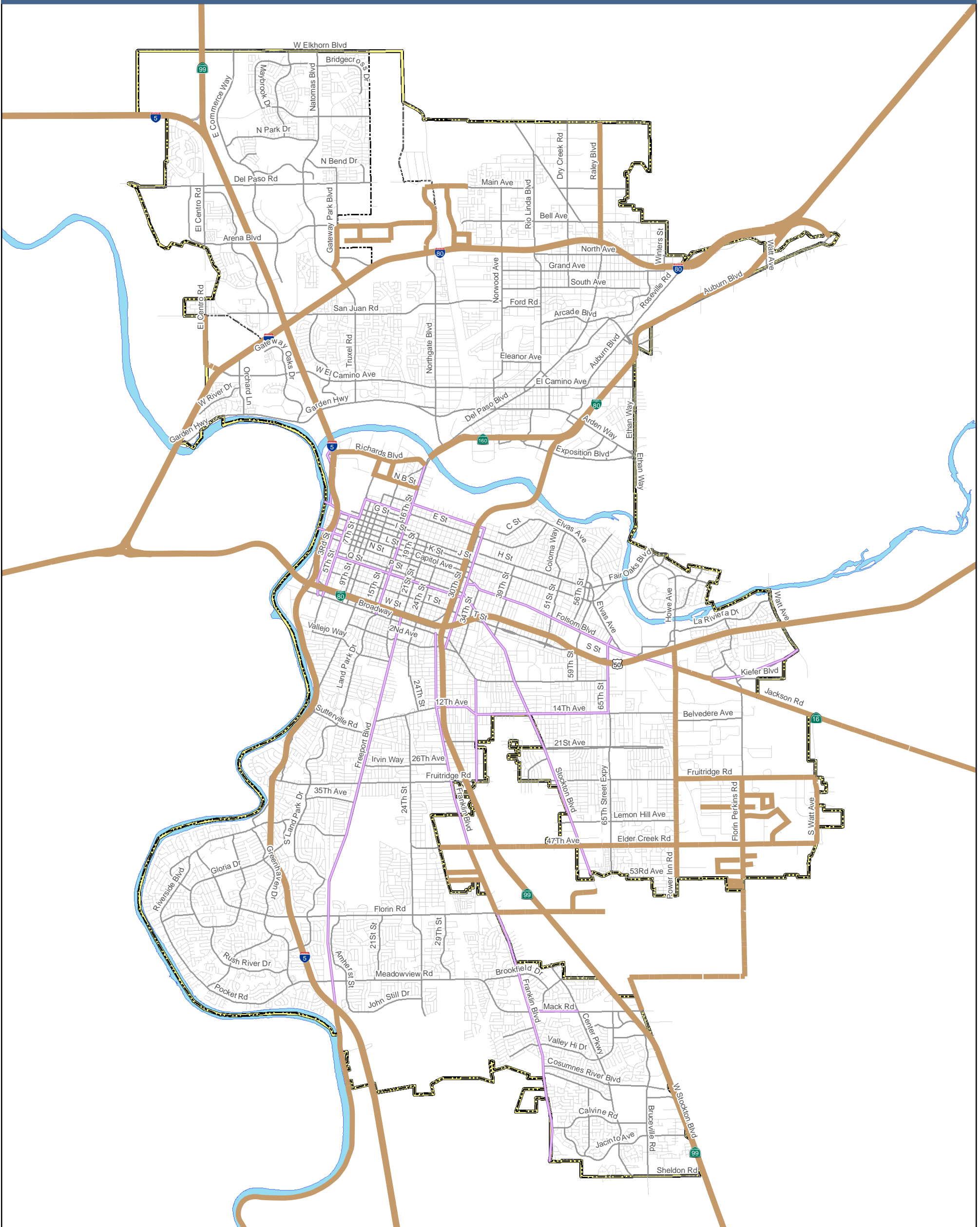
1. AADT = 2011 Average annual daily traffic volumes.

Source: Average Annual Daily Truck Traffic on the California State Highway System, Caltrans, 2011 (pages 24, 128, 92, 157, 94)

Seven City streets were identified as STAA truck routes by a 2002 City Council resolution:

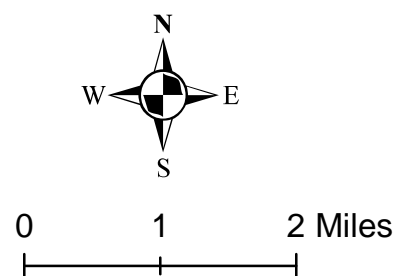
- Elder Creek Road & 47th Avenue (Steiner Drive - South Watt Avenue)
- Fruitridge Road (Power Inn Road – South Watt Avenue)
- Gateway Park Drive (Truxel Road – North market Boulevard)
- Power Inn Road (US 50 – Junipero Street)
- Raley Boulevard (I-80 – Ascot Avenue)
- South Watt Avenue (Elder Creek Road – 200’ north of District Court)
- Truxel Road (I-80 and Gateway Park Drive)

The designation of roadways as STAA routes promotes their use by larger trucks and connects key industrial facilities in the city to the State and Federal system. In addition to the streets designated as STAA routes, the City identified 31 streets (plus one-way streets) as truck routes in a 1983 resolution. Those streets are shown on Figure 3-3. Designation as a truck route means that trucks are allowed to use those roadways for “through” trips. Unless explicitly prohibited by local ordinance, the California Vehicle Code allows trucks on all streets if they are along a reasonable route to the intended destination.



## Legend

- City Truck Routes
- STAA Truck Routes
- City Limits
- Waterways





## Traffic Safety

For general plan purposes, the City addresses traffic safety by using roadway design standards. These standards minimize safety problems by ensuring a consistent drive experience when it comes to using the City's roadways. The City's standards consider national and state design standards including the American Associate of State Highway Officials *A Policy on Geometric Design of Highways and Streets*, the Caltrans *Highway Design Manual*, and the *California Manual on Uniform Traffic Control Devices*.

The City ensures that all new roadways are built according to current design standards. As the City's standards have evolved over time, many city roadways were built prior to the adoption of the existing standards. Therefore, some streets do not meet current design standards. During scheduled maintenance of City roadways, targeted improvements are made to non-standard roadway segments as funding allows. As development occurs in these areas, roadways are also improved to meet current standards. This practice is expected to continue into the future.

## Neighborhood Traffic Management Program (NTMP)

The City developed the NTMP to promote safety on local streets and improve the quality of life in the city's neighborhoods. The objectives of the NTMP are to improve driver awareness and behavior, reduce traffic volumes and travel speeds, and enhance the environment of the neighborhood. The NTMP creates a partnership between the residents of the neighborhood and City Public Works staff. Residents provide insight into the challenges and issues facing their neighborhood roadways and City staff present a variety of traffic calming solutions to meet the neighborhoods needs. Traffic calming plans developed through the NTMP are voted on by the residents of the neighborhood prior to implementation. There are two phases of this process – Phase I involves less restrictive modifications such as the installation of high visibility speed limit signs, striping of bike lanes, and the installation of speed humps. Phase II involves more restrictive measures including half- and full-street closures, diverters, and one-way/two-way street conversions. Phase II modifications are implemented if the Phase I modifications do not adequately address neighborhood concerns.

The NTMP has three major components:

1. Education: City staff informs neighbors of traffic calming tools available to address specific concerns, such as travel speeds, cut-through traffic, etc.
2. Engineering: A traffic calming plan is developed and implemented based on neighborhood input and engineering principles.
3. Enforcement: Improvements are enforced by police and parking services.

The NTMP's goal is to serve eight to twelve neighborhoods per year with one or more neighborhoods being selected from each council district. Residents submit a community action request form to the City and the program is initiated in the order the applications are received. The NTMP is funded by the gas and transportation sales tax. The City has implemented traffic calming plans for 109 neighborhoods as part of the NTMP and approximately 13 neighborhoods are currently (2012) involved in the process. A complete list of neighborhoods that have completed the process, are currently (2012) engaged in the process, or are scheduled to participate in the future can be found on the City's web site under Traffic Engineering.

## Emergency Service Routes

The City Public Works Department works closely with the Fire Department to determine emergency response routes for projects that may impact emergency response travel times. Traffic calming is the most common type of project on which the Public Works Department works with the Fire Department. The City does not place speed humps on streets that are identified as emergency response routes. Speeds lumps (humps with cut-outs for wheel base of larger vehicles) have been approved by the Fire Department on a case-by-case basis along response routes.

## Regulatory Context

### Federal

There are thousands of Federal laws and regulations related to goods movement, homeland security, street maintenance, traffic safety, and transportation funding. The following legislation established the framework for transportation planning at the federal level: Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) approved in 2012.

### State

The California Transportation Plan (CTP) for 2025, developed by Caltrans, provides broad system concepts, strategies, and performance measures for the State facilities (all modes).

Caltrans' Route Concept Reports identify long-range improvements for specific State highway corridors and establish the concept or desired LOS for specific segments. Long-range improvements are identified to improve the existing facility up to the design concept expected to adequately serve 20-year traffic forecasts. As previously discussed, nearly all freeway segments within the City have a concept LOS F, with the exception of I-5 west of the I-5/SR 99 interchange (LOS D) and SR 99 north of this interchange (LOS E).

Since 2005, the State of California has adopted the following pieces of legislation with major implications for transportation planning, in addition to an executive order issued by the Office of the Governor:

- **Executive Order S-03-05 (2005):** Establishes state agency climate action team, and directs GHG emission reductions as priority
- **AB 32 (2006):** Required California Air Resources Board (CARB) to identify sector-specific measures to reduce GHG emissions.
- **SB 97 (2007):** Required Office of Planning & Research (OPR) to adopt CEQA greenhouse gas (GHG)/climate change guidelines.
- **SB 375 (2008):** Required MPOs to develop sustainable community strategies to achieve AB 32 GHG reduction targets established through the regional targets advisory committee and provides potential CEQA relief for select development projects. SACOG adopted their SCS in May 2012.



- **AB 1358 (2008):** Required the legislative body of a city or county, upon revision of the circulation element of their general plan (after January 1, 2011), to identify how the jurisdiction will provide for the routine accommodation of all users of the roadway (i.e., complete streets) including motorists, pedestrians, bicyclists, individuals with disabilities, seniors, and users of public transportation.
- **SB 226 (2011):** Required Office of Planning & Research (OPR) to modify the CEQA Guidelines to set forth a streamlined review process for infill projects.

## Regional

SACOG is responsible for the preparation of, and updates to, the Metropolitan Transportation Plan (MTP)/SCS and the corresponding Metropolitan Transportation Improvement Program (MTIP). The MTP/SCS provides a 20-year transportation vision and corresponding list of projects. The MTIP identifies short-term projects (seven-year horizon) in more detail. The 2035 MTP/SCS was adopted by the SACOG board in 2012.

SACOG is also responsible for the oversight and distribution of most Federal and State transportation funding, and develops the air quality plans and compliance measures, which incorporate mobile (vehicular) pollution sources.

The Sacramento Transportation Authority is responsible for administering the original Measure A half-cent sales tax and its recent extension.

## Local

The Mobility Element of the City of Sacramento's 2030 General Plan contains goals and policies related to the City's roadway network.

Section 15 of the City's Design and Procedures Manual (2009) contains street design standards for City roadways.

The Sacramento Climate Action Plan (2011) sets forth locally-based strategies, measures, and actions to reduce GHG emissions within the City. The plan includes transportation-focused strategies related to mobility and connectivity within the City, as well as to the relationship between transportation infrastructure and sustainable land use practices.

Many of the arterials and collectors within the city continue into adjacent jurisdictions (West Sacramento, Sutter County, Sacramento County, etc.). These agencies control the size and function of the roadway within their boundaries, and land uses within these bordering jurisdictions generate traffic on the city's roadways.

## 3.2 Transit Services

### *Introduction*

A wide range of transit services are provided in the city. Transit services include public bus service, light rail transit, commercial bus service, and interregional and interstate passenger train service. Park-and-ride facilities are also provided throughout the city to facilitate ridesharing and automobile access to the regional transit system, and carpooling. According to the US Census Bureau's 2007-2011 American Community Survey, 3.7 percent of commuters take transit to work in the City of Sacramento, which is lower than the state average of 5.1 percent.

### *Existing Conditions*

Local, regional and interregional transit services within the City are described below.

#### **Local Service**

The Sacramento Regional Transit (RT) District provides local bus and light rail service within the city of Sacramento and the greater Sacramento Region, an area of 418 square miles. The agency aims to “promote and enhance regional mobility and serve the public by providing quality transit services and solutions that improve the overall quality of life in the Sacramento region,” and to “improve the efficiency and effectiveness of the current RT system while positioning the agency to sustainably meet future transit demand” within the region (RT 2004). The eight-member RT Board of Directors, made up of local and county elected officials – is charged with implementing this vision and oversees the agency's \$134.3 million operating FY 2013 budget and its \$153.2 million FY 2013 budget for capital improvements.<sup>1</sup>

#### *Transit Fleet*

The RT transit vehicle fleet currently (2012) includes 212 compressed natural gas-powered buses and 27 shuttle vans (six vans are powered by compressed natural gas, four are hybrid, and 17 run on diesel) (RT 2012a; RT 2012b). During peak periods, 145 RT buses and 13 shuttle vans are in service, while only 121 buses and six shuttle vans operate during off-peak periods.

To provide peak-period light rail service, 61 vehicles are required. During the off-peak period, 31 light-rail vehicles are required.

#### *Bus and Shuttle Service*

RT operates 68 bus routes, including 38 regular all-day routes, 19 peak-period-only routes and 11 Community Bus Service routes. Three of the Community Buses, referred to as Neighborhood Ride services, deviate from published routes on demand.<sup>2</sup>

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1 Operating and capital budgets are beginning to rebound after declining since FY 2008.

2 This so-called Neighborhood Ride service is designed to curb rising paratransit costs, serve the geographically dispersed aging population, and meet demand from business parks and transportation management associations.



Fixed-route bus routes reach 3,200 bus stops, 15 percent of which have covered bus shelters (RT 2012b). Eight bus-only transfer centers accommodate transfers between routes, while 25 transit centers facilitate transfers between bus routes and intermodal transfers to and from RT Light Rail lines.

### ***Light Rail Service***

To provide high-frequency, high-capacity transit service, RT operates a 38.5-mile light rail transit system on three lines with 48 stops and 97 light rail vehicles (RT 2012a). Figure 3-4 shows the alignment and location of stations for RT's Blue, Gold, and Green Light Rail Lines, the location of RT-operated Park and Ride lots, and the roadways in the General Plan Policy Area that are served by RT bus routes. Riders can travel along the Blue Line to the north-east through the Arden/Del Paso area to the I-80/Watt Avenue light rail station, and to the south through South Sacramento and past Sacramento City College to the Meadowview station. Riders can travel along the Gold Line from the Sacramento Valley station in Downtown Sacramento to the east through East Sacramento and past California State University at Sacramento (CSUS) to the City of Folsom. The Green Line runs through north downtown to Township 9, Natomas, and is projected eventually to reach Sacramento International Airport.

### ***Span and Frequency of Bus and Light Rail Services***

RT provides transit service 365 days a year. Buses operate from 4:38 AM to 9:46 PM, with service every 12 to 75 minutes, depending on the route, day, and time of day. Light rail service operates daily, beginning on weekdays at 4:00 AM, with service at 15-minute intervals throughout the day and every 30 minutes in the evening. On weekdays, trains operate until 1:00 AM on the Blue Line, until 12:00 AM on the Gold Line between Sacramento Valley Station and Sunrise Station, and until 7:00 PM from Sunrise Station to the terminus at Historic Folsom and until 9:00 PM on the Green Line.

### ***Service for Patrons with Limited Mobility***

Although RT bus and light rail services are accessible to the disabled community, the agency also provides door-to-door service for patrons unable to travel on fixed-route bus and light rail lines, as required by the Americans with Disabilities Act (ADA). In FY 2012, RT provided over 340,000 ADA paratransit trips with 109 shuttle vehicles (RT 2012a). RT has contracted with Paratransit, Inc. to provide this essential service for over 30 years.

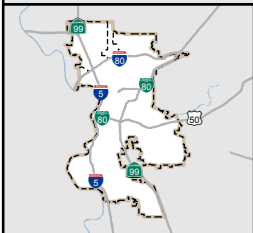
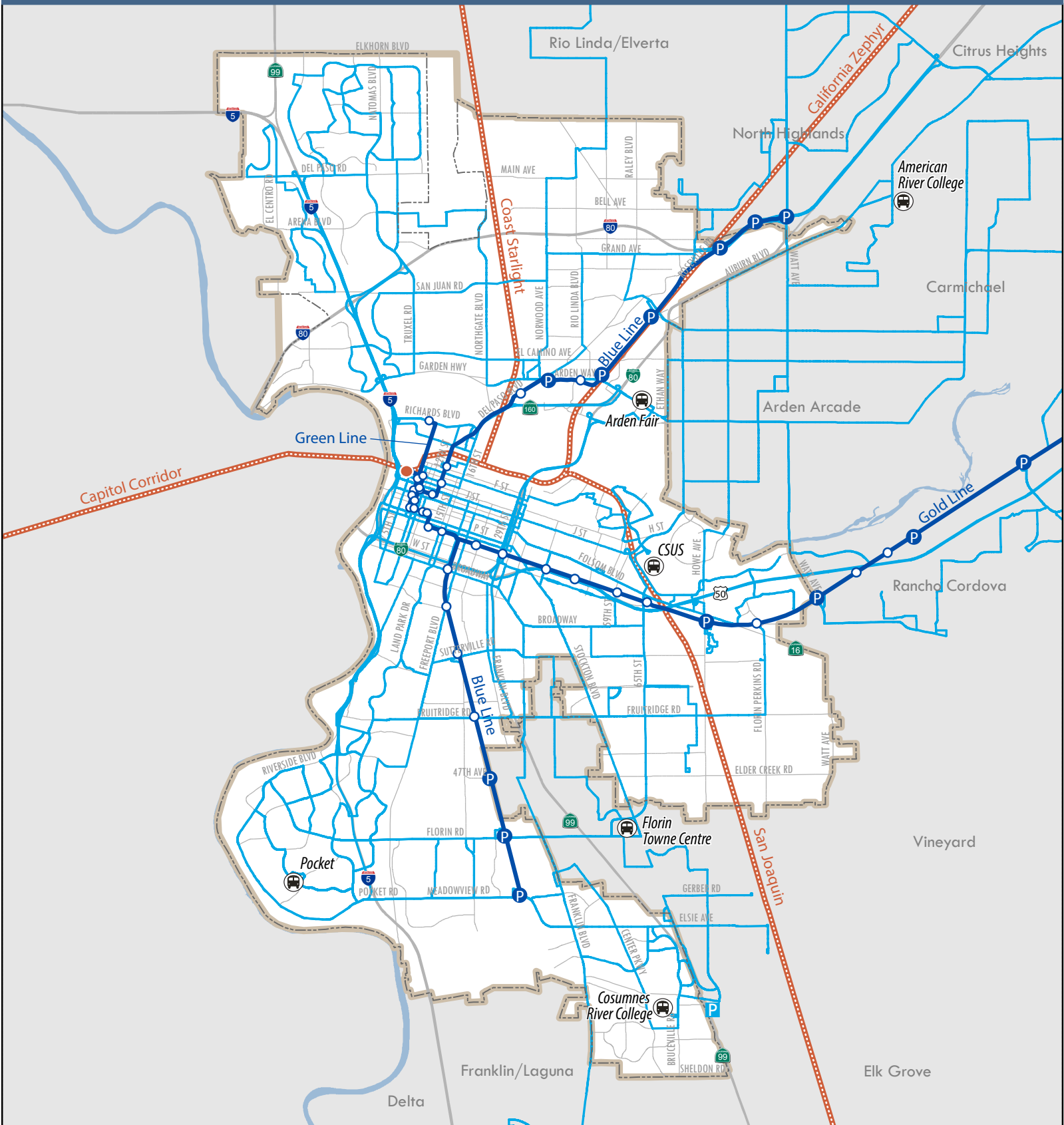
### ***Ridership***

- From September through November of 2012, RT bus lines served an average of 52,311 passenger trips per weekday, and 19,293 passenger trips per Saturday (RT 2012b).<sup>3</sup>
- During FY2012, average weekday boardings at RT Light Rail Stations were 46,998 per day. This represents an increase from FY2011, with 7 percent growth in boardings on the Gold Line and a 13 percent increase in boardings on the Blue Line during the same period (RT 2012c).

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<sup>3</sup> Calculated from documentation of average weekday bus ridership by line for the period 09/02/12 to 11/30/12.

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Light Rail	Transit Centers	Highways
Stations (Park-and-Ride)	Amtrak	Major Roads
Stations (No Parking)	Amtrak Station	City Limits
Bus Routes		Policy Area
Park-and-Ride		Waterways

Data Source: City of Sacramento, 2012;

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***Planned Improvements***

RT's top priority for future service provision is to increase service hours to pre-2010 service levels by 2017 (RT 2012c). In addition, RT plans the following improvements to its light rail system:

- Installation of double track on segments of the Gold and Blue Lines to improve operational flexibility, schedule reliability, and system safety.
- Signal improvements on the Gold Line.
- The South Sacramento Corridor Phase 2 Project would extend light rail service on the Blue Line from the existing terminus at Meadowview station, for a distance of approximately 4.3 miles, to the intersection of Calvine Road and Auberry Drive. Four new stations are planned at: Morrison Creek, Franklin Boulevard, Center Parkway, and Cosumnes River College. Service is expected to begin in 2015.
- The planned Green Line to the Airport Project would extend service from Downtown Sacramento through Natomas to the Sacramento International Airport. The project is approximately 13 miles in length and would have a total of 13 stations.

In 2012, the City of Sacramento completed the Sacramento Streetcar Planning Study (City of Sacramento 2012). The Study defines:

- A recommended streetcar network in the area bounded by the Sacramento River on the west, H Street on the north, Broadway on the south and the Union Pacific Railroad on the east.
- An initial starter line connecting the Sacramento Convention Center and adjacent hotels with the K-Street Mall, the Sacramento Valley Station/Intermodal Terminal, the planned Entertainment and Sports Complex (ESC), Old Sacramento and the City of West Sacramento.
- Additional routes in areas planned for major development, including:
  - The Railyards
  - River District
  - Arden Mall/Cal Expo

**Regional Service**

Greyhound provides commercial bus service, with connections to over 3,800 service destinations in North America. In July 2011, a new LEED-certified Greyhound bus terminal opened on Richards Boulevard north of Downtown Sacramento. The terminal is open 24-hours a day and houses an on-site restaurant, passenger waiting areas, and ticketing facilities.

In addition, a new private city-to-city express bus service, Megabus, began operations in December, 2012 from Sacramento to Los Angeles, San Francisco, Oakland, Riverside, and San Jose as well as Las Vegas, Reno, and Sparks, Nevada.

As shown in Table 3-9, Amtrak provides interregional and interstate passenger train service to a station in Downtown Sacramento on I Street. The station is open seven days a week from 4:15 AM until 11:59 PM for ticket sales and baggage service. Amtrak offers interregional and interstate service via the following lines and service levels:

<b>Table 3-9 AMTRAK Interregional Service</b>	
<i>Route</i>	<i>Service</i>
California Zephyr (San Francisco, Sacramento, Denver, Chicago)	1 trip/day
Coast Starlight (Seattle, Portland, Sacramento, San Francisco, Los Angeles)	1 trip/day
San Joaquin (San Francisco, Sacramento, Bakersfield)	12 trips/day
Capitol Corridor (Sacramento, Bay Area)	16 trips/weekday 11 trips/weekend

Source: Amtrak. 2013. Capitol Corridor Schedule, Effective Jan. 14, 2013, <http://www.amtrak.com/ccurl/656/659/Capitol-Corridor-Schedule-011413.pdf>, Accessed on Jan. 31, 2013; Amtrak. 2013. Coast Starlight Schedule, Effective Jan. 14, 2013, <http://www.amtrak.com/ccurl/608/261/Coast-Starlight-Schedule-011413.pdf>, Accessed on Jan. 31, 2013; Amtrak. 2013c San Joaquin Schedule, Effective Jan. 14, 2013, <http://www.amtrak.com/ccurl/619/580/San-Joaquin-Schedule-011413.pdf>, Accessed on Jan. 31, 2013.

The Capitol Corridor is the busiest line serving Sacramento, with 16 roundtrips to destinations in the San Francisco Bay Area each weekday and 11 roundtrips on Saturday and Sunday. The Capitol Corridor is an intercity passenger train service, operated by Amtrak that provides service along a 170-mile rail corridor between San Jose, Oakland, Richmond, Sacramento and Placer County.<sup>4</sup> The Capitol Corridor Joint Powers Authority (CCJPA) is a partnership of six local transit agencies in the eight-county service area that shares the administration and management of the Capitol Corridor. The San Francisco Bay Area Rapid Transit District (BART) provides day-to-day management support to the CCJPA along with the partners who help deliver the Capitol Corridor service. , Capitol Corridor trains carried over 1.7 million passengers annually since FY 2010 (CCJPA 2011). It's 95 percent on-time performance makes this corridor the best performing service in the Amtrak system. Since 1998, service levels have increased by 300 percent from 8 to 32 daily trains on weekdays. During the same period, ridership has increased from 460,000 to 1.7 million and corridor revenue has increased by 335 percent to \$27.2 million (CCJPA 2011).

***Planned Improvements***

Sacramento's downtown historic train depot (Sacramento Valley Station) is being transformed into an intermodal transportation hub to serve all modes of travel to and from the station: passenger train, light rail, bus, taxi, rental car and bicycle. The site was once the western terminus for the transcontinental railroad and has been part of major railroad holdings in downtown Sacramento since the mid-19th century. The project is anticipated to occur in three stages:

- Phase 1 (Completed February 2013) - Resulted in passenger and freight railroad tracks being moved 500 feet north to accommodate longer passenger trains, more efficient rail travel, a safer means of crossing the railroad tracks and connections to the downtown with the Railyards property. New facilities included passenger platforms and canopied walkways, electronic

<sup>4</sup> Amtrak Thruway Buses provide direct transfers to San Francisco from the Capitol Corridor Station in Emeryville

information systems, landscaping and other amenities. The phase also included construction of three tunnels under the realigned tracks - the Central Passenger Tunnel, the Service Tunnel, and the West Tunnel. The depot will also receive basic structural upgrades and code improvements, including seismic retrofit work, installation of fire sprinklers and detection systems and accessibility improvements.

- Phase 2 – Involves several enhancements including upgraded building systems, improving existing windows, facades and signage, repairing drainage, leaks, settlement, pile caps, rehabilitating historic features, and increasing usable interior area by 40 percent by enabling several features - introducing retail use and amenities and opening up the upper floors, reducing distances traversed to make transportation connections, adding bicycle facilities and other transportation uses, building rehabilitation, and adding outdoor spaces and connections.
- Phase 3 – Completes the transformation into a multimodal regional transportation district by enabling state-of-the-art operations and expansion for multiple modes in a district within close range of each other, improving mobility for passengers, creating a destination facility, offering new transit services and alternative modes of travel, enhancing a historic landmark, becoming a catalyst for redevelopment, and improving traffic congestion, air quality and supporting sustainable practices.

### **Park-and-Ride Lots**

Park-and-ride lots enable commuters to access the regional public transit system by automobile, or to form carpools with other drivers. RT operates 18 park-and-ride lots with a total of 7,379 parking stalls (RT 2012d). Parking is available free of charge at 12 of the lots. In 2010, RT began charging \$1 per day, or \$15 per month for parking at six park-and-ride lots, including four located in the city of Sacramento. The largest park-and-ride lots charge \$1 per day and are located along the I-80/Watt Avenue LRT line at Roseville Road (1,090 parking spaces) and along the LRT South line at Florin Road (1,080 parking spaces). Caltrans operates additional park-and-ride lots at locations across the Sacramento Region, including along SR 99 at Sheldon Road, Elkhorn Boulevard, Calvine Road, and at the Caltrans maintenance yard in Elk Grove.

### ***Regulatory Context***

#### **Federal and State**

- The Federal Transit Act, approved in 1976, provides policy and guidance for Federal involvement in public transit.
- The State's recently developed California Transportation Plan (CTP) 2025 (State of California 2006), and the associated CTP 2030, Addendum to the CTP 2025 for Compliance with SAFETEA-LU Compliance (State of California 2007) provide guidance on inter-regional transit issues including coordination with planning and implementation of heavy rail and high-speed rail services.



- The California Sustainable Communities and Climate Protection Act of 2008 (SB 375) requires each Metropolitan Planning Organization in the state, including the Sacramento Council of Governments (SACOG), to develop a Sustainable Communities Strategy (SCS) that integrates planning for transportation – including public transit – with land use and housing policies to ensure achievement of transportation-related greenhouse gas emissions reduction targets established by the California Air Resources Board (CARB).

## *Local*

The development of local and regional transit facilities, provision of transit services, and related policies are guided by the vision, goals, and strategies articulated in the following plans:

- Sacramento Regional Transit District Draft Short Range Transit Plan FY 2012-2022 (Sacramento Regional Transit District 2012). This plan identifies immediate actions to meet near-term needs in a fiscally constrained environment.
- TransitAction: Sacramento Regional Transit Master Plan (Sacramento Regional Transit District 2009). This Plan identifies the vision, goals, and strategies necessary to meet the region’s long-term transit needs.
- Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan/Sustainable Communities Strategy for 2035 (SACOG 2012).
- Sacramento Regional Transit District Strategic Plan 2004-2009 (Sacramento Regional Transit District 2005)
- City of Sacramento Climate Action Plan (City of Sacramento 2012), Adopted February 14, 2012. This plan establishes City targets for the reduction of greenhouse gas (GHG) emissions in the City of Sacramento to 38% below 2005 levels by 2030 – the time horizon for this update to the Sacramento General Plan. The CAP details strategies, and specific actions the City can take to reduce emissions and avoid or mitigate the effects of climate change, including the following transportation-related measures (Strategy 2 – Mobility and Connectivity), which are projected to contribute to 8% of the total reduction in GHG emissions necessary for the City to meet its interim targets by 2020:
  1. Multi-modal travel options: Includes expanded public transit facilities and services, and improves access to existing transit increasing overall transit ridership.
  2. Improved pedestrian environment: Improves access to transit.
  3. Increased transit mode share
  4. Low-emission vehicles: May include upgrading public transit fleet to reduce emissions.
  5. Connected transportation system: Includes improving connections to and within the regional transit system and between transit and other modes of transportation.
  6. Transportation Demand Management (TDM): Includes incentives, policies and other programs that encourage utilization of public transit.



## 3.3 Bikeways

### *Introduction*

The City adopted the 2010 Sacramento City/County Bikeway Master Plan in 1995. The plan identifies existing and planned bicycle trails and routes within the city. The primary purpose of the bikeway master plan is to identify the recreational and commute needs of bicyclists and to promote bicycling as an alternative form of transportation. The plan also presents the appropriate design features of bikeways, such as signs and markings, and promotes bicycle safety and education programs. The primary goal of the bikeway improvements proposed in the City's Bikeway Master Plan is to increase bicycle ridership for work and non-work trips.

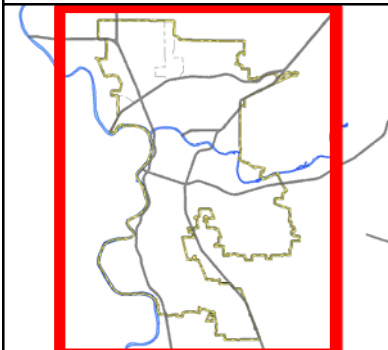
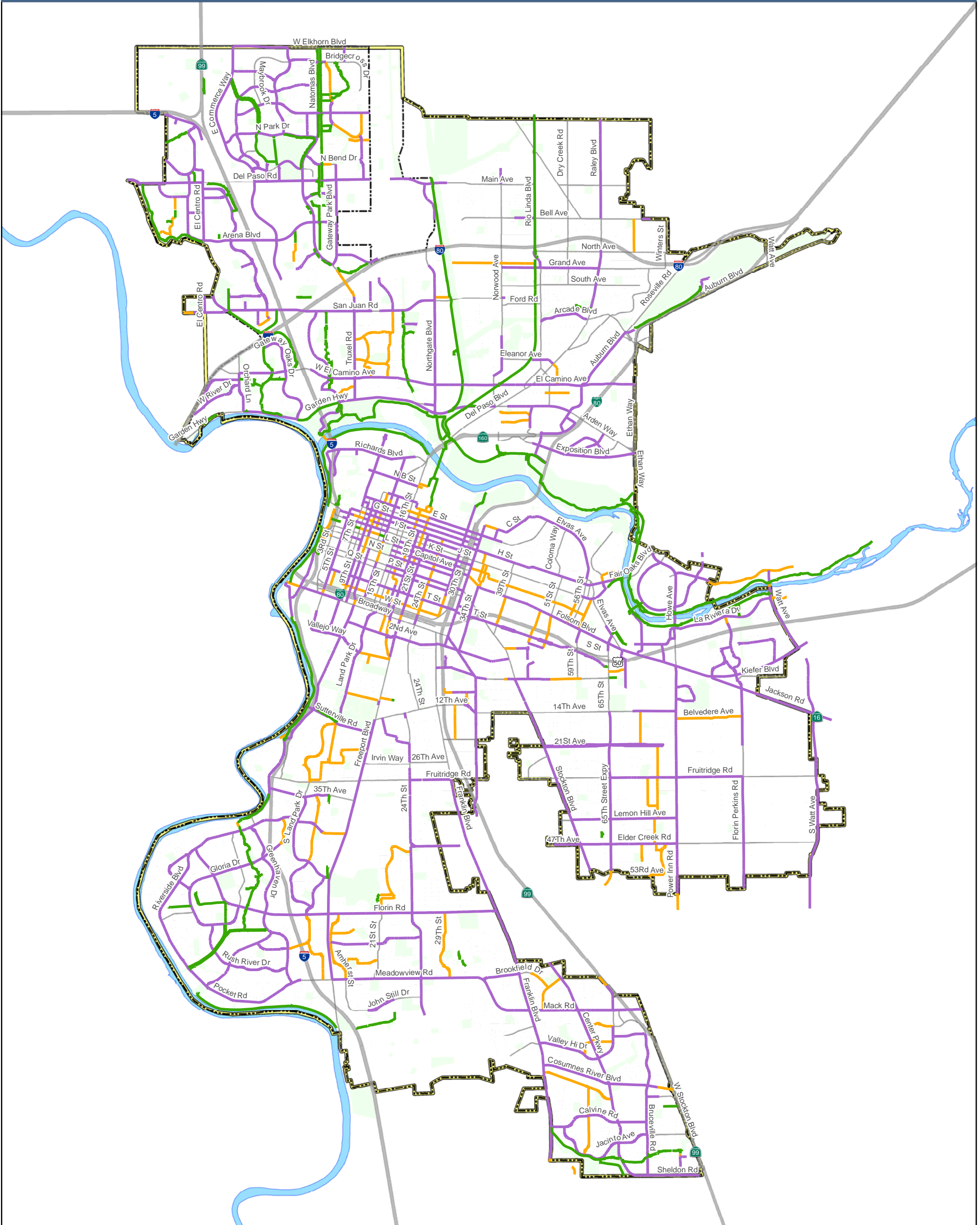
### *Existing Conditions*

Bikeways are classified according to the following three types:

- Class I—off-street bike paths
- Class II—on-street bike lanes marked by pavement striping and signage
- Class III—on-street bike routes that share the road with motorized vehicles

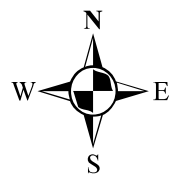
Existing and proposed bicycle facilities within the city are displayed in Figure 3-5. As shown, many roadways within the city contain on-street bike lanes (Class II) or are signed as a bicycle route (Class III).

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### Legend

- Class 1 Bike Path
- Class 2 Bike Lane
- Class 3 Bike Route
- City Limits
- Waterways



0 1 2 Miles



The American River Bike Trail is a Class I bicycle facility between Discovery Park in Sacramento and the city of Folsom. The bicycle path is approximately 30 miles long and follows the American River. The path serves weekday bicyclists commuting to work and weekend recreational users.

## *Regulatory Context*

### **Federal and State**

There are no Federal or State regulations relevant development of the General Plan policy relating to bikeways.

### **Local**

The City of Sacramento's 2030 General Plan contains goals and policies related to bikeways.

The City/County Bicycle Master Plan contains goals and policies related to the planning, operation, and design of bicycle facilities.

## **3.4 Pedestrian Facilities**

### *Introduction*

The City adopted a Pedestrian Master Plan in 2006. This document complements prior City documents and programs such as the Pedestrian Safety Guidelines and the Neighborhood Traffic Management Program. In California, 2.8 percent of commuters walk to work (U.S. Census Bureau, 2007-2011 American Community Survey). In Sacramento, 3.1 percent of commuters walk to work, which is greater than the state average, and an increase from 2.7 percent reported by the 2000 U.S. Census.

Walking travel in Sacramento varies greatly by neighborhood. As shown in Figure 3-6, neighborhoods with the highest percentages of commuters who walk to work are located in the Central City, and neighborhoods with the lowest percentages of residents who walk to work are generally within the northern-most and southern-most portions of the city. Many factors help explain these differences, including the fact that the Central City has a dense system of gridded streets, and residential land uses located near retail and employment land uses.

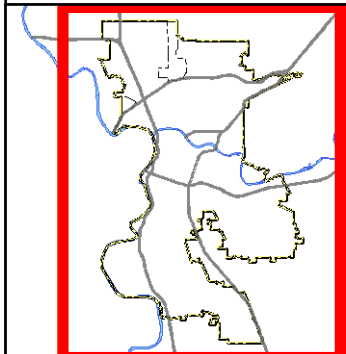
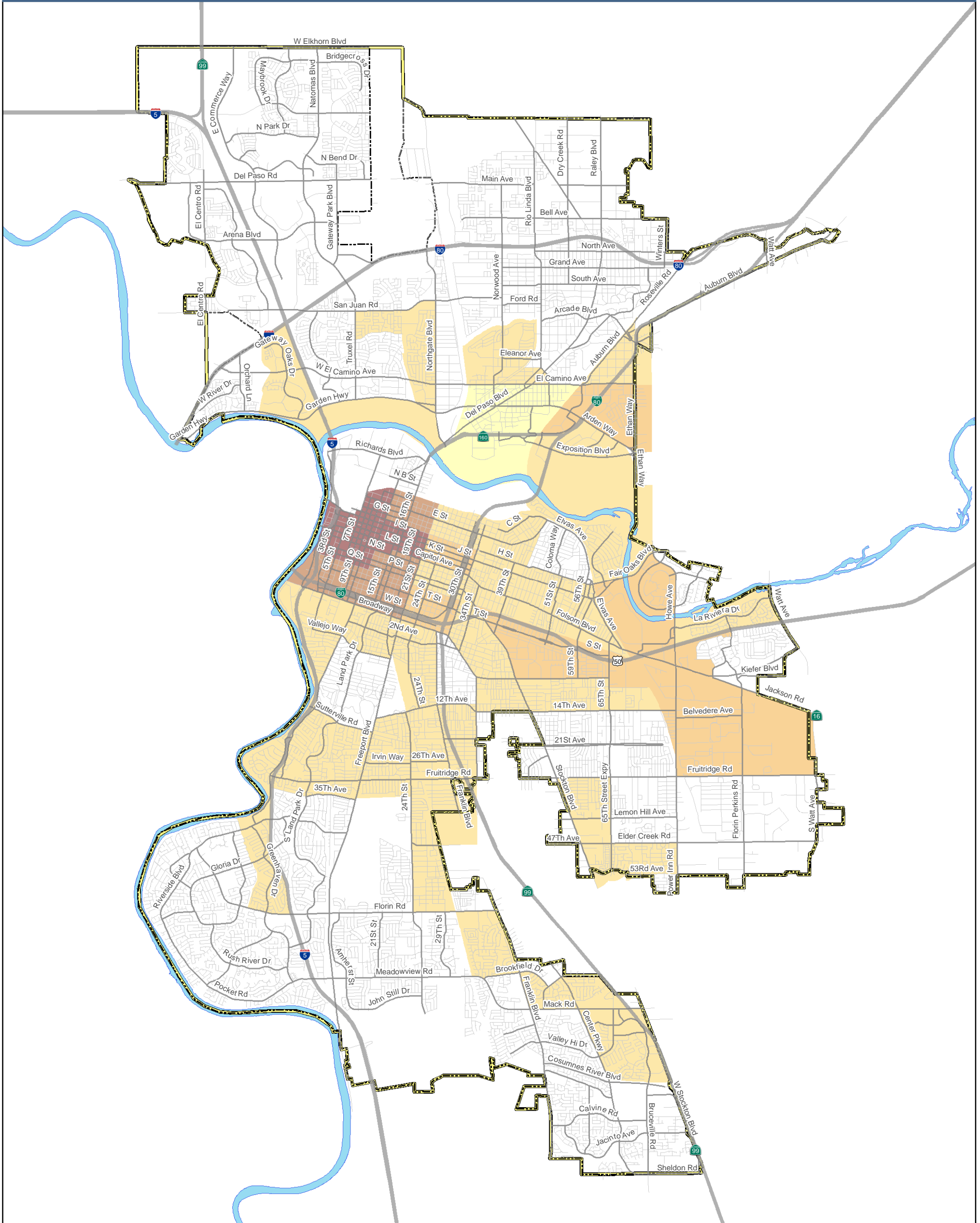
Pedestrian travel is of prime importance to the City, and pedestrian facilities, such as enhanced crosswalks and pedestrian count-down signals, new sidewalks, traffic calming measures, and streetscape enhancements are continuously being implemented in the City.

### *Existing Conditions*

The City has implemented community programs and adopted guidelines over the past several years to enhance the pedestrian environment within Sacramento as described below.

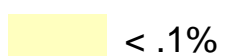




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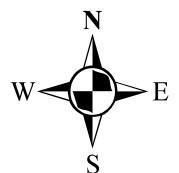
### Legend

#### Percent Commuters Walking

	< .1%		1 - 3%
	.1 - .5%		3 - 4.1%
	.5 - 1%		

 City Limits

 Waterways



0 1 2 Miles







The City's Neighborhood Traffic Management Program (NTMP) was adopted in 1995 and strives to improve neighborhood livability by slowing vehicles and creating a more desirable pedestrian environment. In 2002, the City adopted Traffic Calming Guidelines to be used by City staff when reviewing proposed development projects. The guidelines are also used through the NTMP to educate residents of potential traffic calming devices. The City adopted the Pedestrian Safety Guidelines in 2003 to provide design guidelines on the current best practices for pedestrian facilities, to promote the enhancement of existing facilities, and to ensure that new developments provide a pedestrian friendly environment. In 2004, the City adopted Pedestrian Friendly Street Standards. The new roadway standards include narrower vehicle travel lanes and enhanced sidewalks to promote pedestrian travel within the city. The City adopted a Pedestrian Master Plan, in 2006, that documents existing pedestrian infrastructure and establishes an implementation program for pedestrian improvement projects. The plan also presents LOS criteria for pedestrian facilities and design standards.

To ensure that pedestrian facilities comply with ADA standards, the City adopted a Transition Plan. The plan identifies physical improvements needed to provide access to services and activities for disabled users. The plan also contains a schedule for improving curb ramps at intersections in the city to meet ADA standards. The City provides \$5 million in funding for curb ramp improvements each year. This funding allows the City to construct 1,500 curb ramps each year that meet ADA standards.

To promote safety for children walking to and from school, the City has constructed several pedestrian infrastructure improvement projects through the Safe Routes to School program, and implemented "Kids X-ing," which provides crossing guards at 35 elementary schools in the city through a five-year Federal grant.

## *Regulatory Context*

### **Federal and State**

The Americans with Disabilities Act (ADA) establishes requirements to accommodate disabled persons in all settings, including transportation facilities. These requirements include maximum sidewalk grades, minimum sidewalk widths, curb cut locations, and number/location of accessible parking facilities.

### **Local**

The City of Sacramento's 2030 General Plan contains goals and policies related to pedestrian facilities.

The City of Sacramento has adopted several local policies to enhance pedestrian safety and comfort. These documents are identified earlier in this chapter and include the Pedestrian Master Plan, Pedestrian Safety Guidelines, and Traffic Calming Guidelines.

## 3.5 Aviation Facilities

### *Introduction*

Six airports that serve both military and civilian operations are located in or close to the city of Sacramento. Executive Airport in south Sacramento is the only facility located within the city limits.

### *Existing Conditions*

The Sacramento County Airport System oversees four airports: Executive Airport, Sacramento International, Mather Airport, and Franklin Field. Rio Linda Airport is not part of the Sacramento County Airport System; McClellan Airfield, although managed by the County Airport System is under the County's Department of Economic Development and Intergovernmental Affairs. A brief summary of physical and operational conditions at each airport is provided below. Figure 3-7 identifies airport locations.

Executive Airport is owned by the City and located on Freeport Boulevard in South Sacramento. It has three runways; the largest runway is 5,503 feet long and 150 feet wide. About 365 aircraft are based at the field, 280 are single-engine and 70 are multi-engine airplanes. Executive Airport serves transient general aviation, local general aviation, air taxi, and limited military purposes.

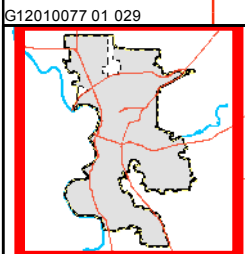
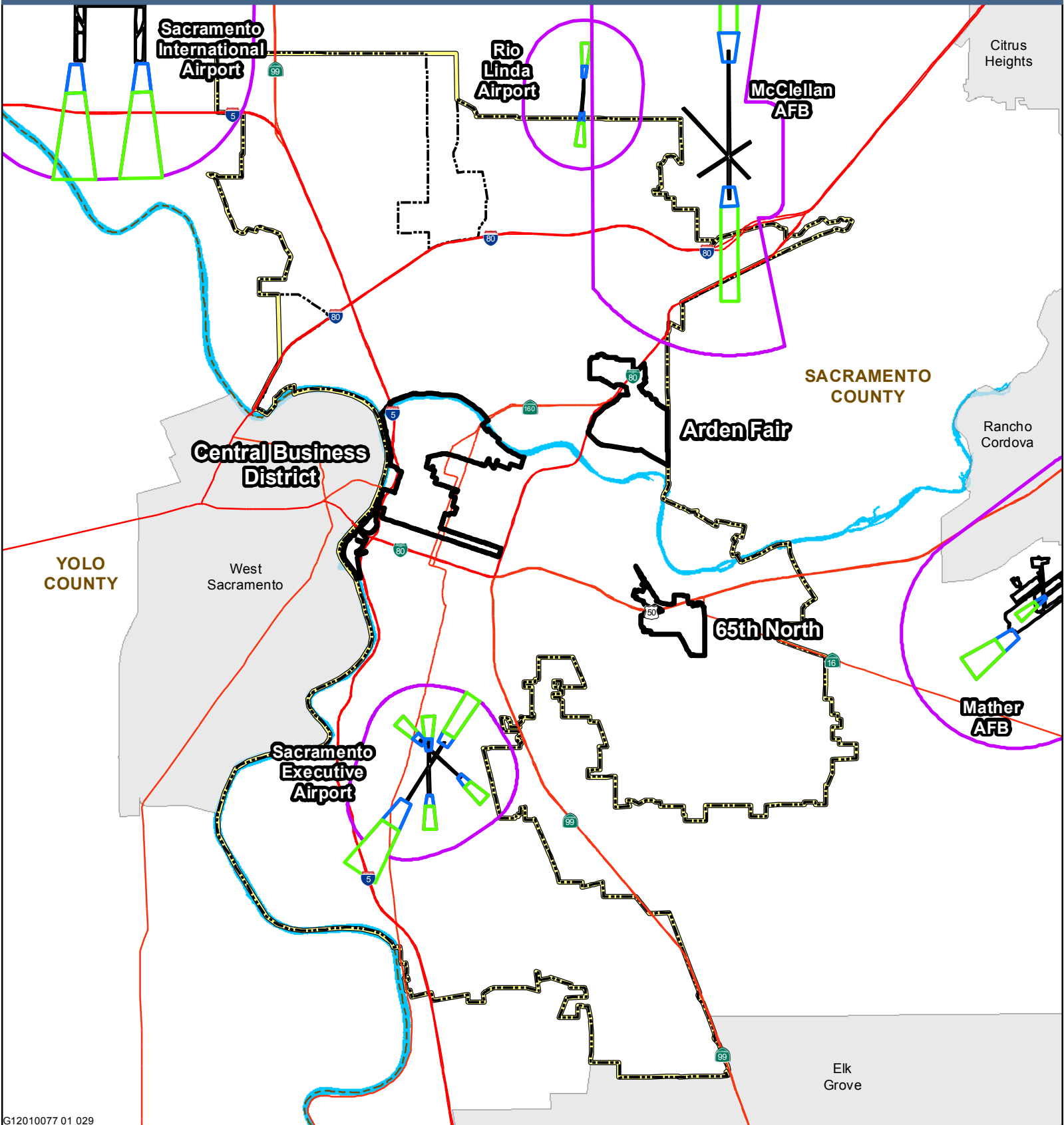
Sacramento International, located 10 miles northwest of Downtown Sacramento, is owned by Sacramento County and has two runways. The longest runway is 8,601 feet long and 150 feet wide. Sacramento International serves commercial, local general aviation, air taxi, and limited military purposes.

Sacramento County completed a 20-year Master Plan for Sacramento International. As stated in the Master Plan, passenger activity at the airport grew at an average rate of 6.4 percent per year between 1980 and 1999. From 2000 to 2020, passenger traffic is expected to grow by 3.5 percent per year. To accommodate the projected growth, the Master Plan identifies the following key improvements:

- Extend existing runway to 11,000 feet and construct a new runway (8,600 feet)
- Construct new passenger terminal (replace existing Terminal B)
- Improve the airport's roadway/circulation system

With the exception of the runway extension to 11,000 feet, all of the above major improvements have now been completed.

Mather Airport is located 10 miles east of Sacramento and has two runways. The longest runway is 11,301 feet long and 150 feet wide. About 152 aircraft are based at the airport; 35 single-engine, 36 multi-engine, and three jet-engine airplanes, 37 helicopters, and 41 military aircraft. Mather Airport serves local general aviation, air taxi, transient general aviation, commercial, and military purposes.



**Legend**

- Tier 1 Priority Investment Areas
- Airports
- Approach/Departure Zone
- Clear Zone
- Overflight Zone
- Highways
- Waterways
- Policy Area
- City Limits
- County Boundary



0 1 2 Miles

*Data Source: City of Sacramento, 2012*

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McClellan Airfield, located six miles northeast of Sacramento, is owned by Sacramento County and has one runway 10,600 feet long and 200 feet wide. The airfield has about 84 aircraft with 3 single-engine, 54 multi-engine, and 19 jet-engine airplanes, 4 helicopters, and 4 military aircraft. McClellan Airfield serves air taxi purposes, military, transient general aviation, and limited local general aviation purposes.

Rio Linda Airport is privately owned and is located one mile south of Rio Linda. It has one runway approximately 2,625 feet long and 42 feet wide. A total of 163 aircraft are based at the airport, with most being single-engine planes. Rio Linda Airport serves local general aviation and transient general aviation purposes.

Franklin Field is currently a public use airport owned and operated by Sacramento County. The facility is considered an uncontrolled airport since it does not have an air traffic control tower or personnel. There are approximately 36,000 operations each year at Franklin Field, including flight training. The airport was acquired by the County of Sacramento in 1947 from the federal government under the Surplus Property Act of 1944 and was the former site of bomber training during World War II.

## *Regulatory Context*

### **Federal and State**

There are no Federal or State regulations relevant to the development General Plan policy relating to airports.

### **Local**

The City of Sacramento's 2030 General Plan contains goals and policies related to airports.

## **3.6 Waterway Facilities**

### *Introduction*

Waterways within the city serve as recreational facilities and as a means to transport goods. The Sacramento River and American River are used by city residents and tourists for recreation and are vital parts of the community. The Port of Sacramento, located just west of the City Limits, imports and exports goods into the city and region.

### *Existing Conditions*

Waterways within the city serve as recreational facilities and as a means to transport goods. The Sacramento and American rivers are used by city residents and tourists for recreational use and are vital parts of the community.

The Port of Sacramento is located in West Sacramento in the southeast part of Yolo County and across the river from Downtown Sacramento. The facility is operated by the Port Authority, which consists of the city of Sacramento, Sacramento County, city of West Sacramento, and Yolo County. Facilities and terminals located at the port include five docking bays (each 600 feet long), a Union Pacific rail yard that services the port, and commodity handling facilities, including bulk rice and bulk grain elevators, bulk commodities bagging facility, and dry bulk cargo warehousing.

Within the City of Sacramento, the Sacramento Marina located in Miller Park on the Sacramento River provides berths for 475 vessels (City of Sacramento n.d., p. 2). This marina is owned and operated by the City.

## *Regulatory Context*

### **Federal and State**

The Sacramento and American Rivers are designated as navigable waterways according to the U.S. Army Corps of Engineers as follows (USACE 2013):

- American River – mouth to Bradshaw Road
- Sacramento River – full length through the City of Sacramento

These designations influence the construction of new crossings of the rivers such that new crossings must be at least as high as existing downstream bridges.

### **Local**

The City of Sacramento's 2030 General Plan contains goals and policies related to waterways.



## 3.7 Railways

### *Existing Conditions*

The city is served by the Union Pacific Railroad (UPRR) freight trains. The UPRR serves 23 states in the western portion of the United States and is the largest North American railroad company. Transported commodities include chemicals, coal, food and food products, truck trailers and containers, forest products, grain and grain products, metals and minerals, and automobiles and parts. UPRR operates a railroad line that provides services within the Port of Sacramento.

UPRR also operates two railroad lines within the city in both the north-south and east-west directions. Through Downtown Sacramento the railroad operates at-grade and impedes vehicle traffic flows through the area. Over 20 at-grade crossings are located throughout the city. Long freight trains can impact traffic operations on city streets, especially during peak commute hours.

Railway passenger services are discussed under Section 3.2, Transit Services. Figure 3-8 displays freight and passenger railways located within the City.

### *Proposed High-Speed Rail*

The California High-Speed Rail Authority has proposed a 110 mile long Sacramento to Merced high-speed rail link as part of the second phase of the proposed statewide high-speed rail network. Planning for this segment is underway in the form of an Alternatives Analysis. The Sacramento Valley Station in Downtown Sacramento would serve as the system's northern terminus, and as the only station located within the City. The most recent projections released by the High-Speed Rail Authority estimate that this station would be served by 57 daily high-speed trains, and would handle approximately 19,000 daily boardings (California High-Speed Rail Authority, 2012).

### *Regulatory Context*

#### **Federal and State**

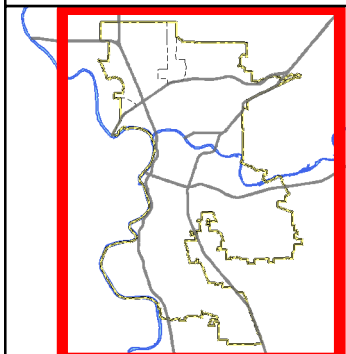
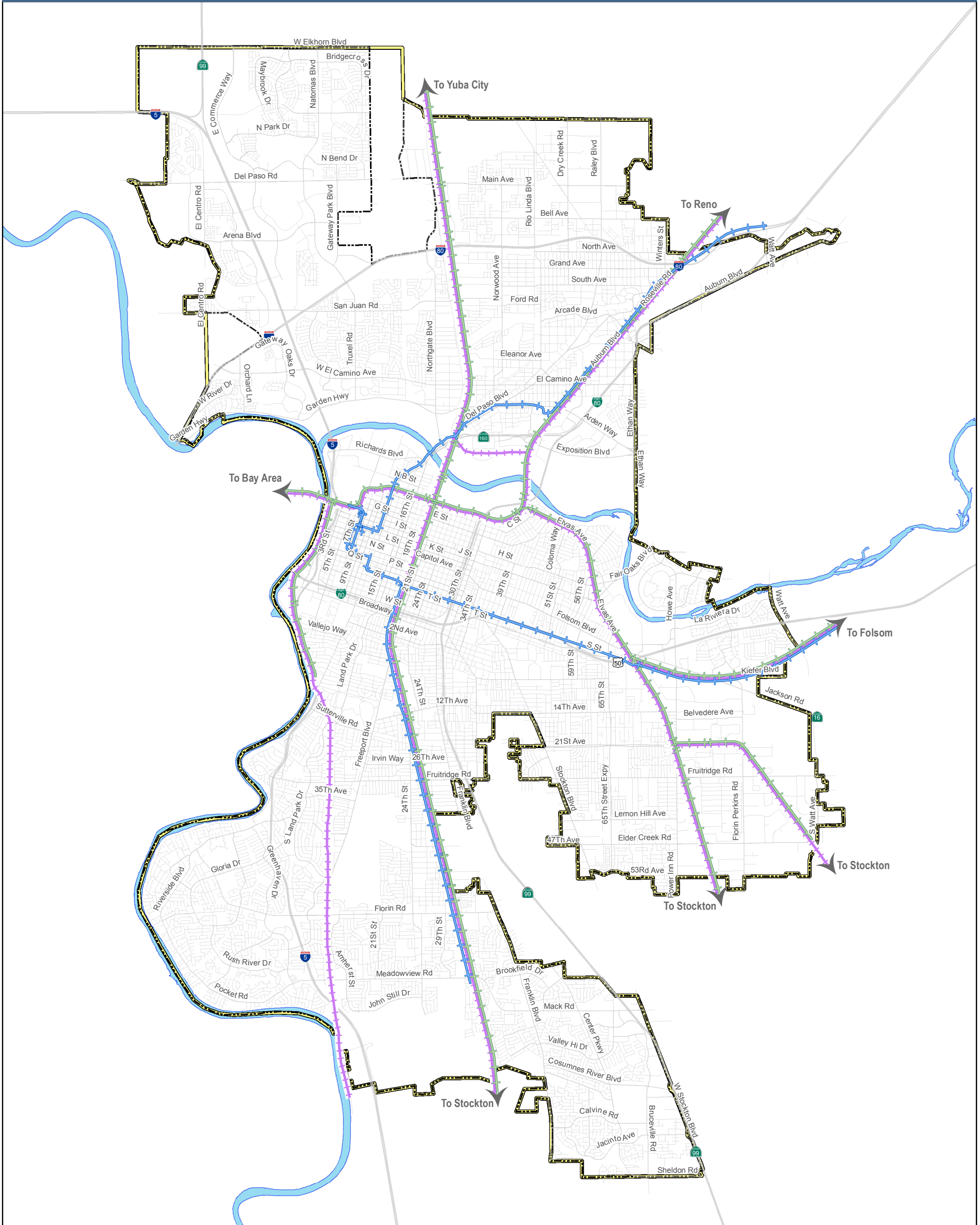
There are no Federal regulations relevant to the development General Plan policy relating to railways.

- The State's recently developed California Transportation Plan (CTP) 2025 (State of California 2006), and the associated CTP 2030, Addendum to the CTP 2025 for Compliance with SAFETEA-LU Compliance (State of California 2007)) provide guidance on inter-regional transit issues including coordination with planning and implementation of heavy rail and high-speed rail services.






#### **Local**

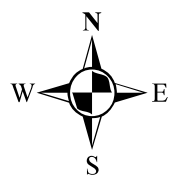
The City of Sacramento's 2030 General Plan contains goals and policies related to railways.

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## Legend

-  Passenger Rail
-  Light Rail Transit
-  Freight Rail
-  City Limits
-  Waterways



0 1 2 Miles





## 3.8 Local Traffic Development Funding Programs

The City of Sacramento has adopted the following developer-funded traffic impact fee program to pay a portion of the cost of constructing future transportation improvements.

- The North Natomas Public Facilities Fee (PFF) was adopted by the City Council in 1994 and updated in 2005. The North Natomas New Growth Area is bounded by I-80 to the south, Elkhorn Boulevard to the north, and city limits to the east and the west. The PFF funds backbone infrastructure and is paid for by developers prior to issuance of building permits.

The City has finance plans that provide funding for transportation projects in several locations including the following areas:

- Delta Shores
- Downtown
- Jacinto Creek
- North Natomas
- Pocket Road
- Railyards
- Richards Boulevard
- South Natomas
- Willowcreek

The City also has a Major Street Construction Tax, a surcharge on all new construction and reconstruction of buildings (excluding disaster reconstruction) that is currently (2012) set at 0.8 percent of building permit valuation. These funds can only be used for construction, replacement or alteration of major roadways, traffic control, and lighting.

## 3.9 Roadway Maintenance and Funding

According to a staff report presented to the City Council in 2010, over 3,030 lane miles of paved roadways are located within the city (City of Sacramento 2010). The City's maintenance plan has a goal of re-paving approximately 2.7 million square yards of roadway annually, which ensures that each roadway segment will be improved over a 10-year period. As of 2010, the City's annual roadway maintenance funds amounted to approximately \$6 million per year, covering only half of the City's needs. Due to this shortfall in funding, many roads in need of maintenance have been deferred, resulting in a backlog.

The City also has a Capital Improvement Program (CIP) to fund transportation projects, such as roadway widening, signalization of intersections, signing and striping. Four subprograms are part of the CIP: 1) Street Maintenance, 2) Street Improvements, 3) Signal/Lights/Traffic Control, and, 4) Parking Facilities. The City's Transportation Programming Guide (TPG) indicates the priority of transportation projects and programs for implementation. The list of transportation projects is developed through a City-Community partnership in which City staff works with a Community Advisory Committee to determine the projects to be contained in the TPG.

Funding for capital improvement projects is provided by a range of federal, state, regional, and local programs. Major transportation projects are often funded with a mix of sources. A brief description of current funding sources is provided below.

- Transportation Sales Tax – Measure A: A local one-half cent transportation sales tax approved by Sacramento County voters in November 1988, and extended through a second vote in November 2004. These funds can only be used for certain projects listed in the ballot measures, and specifically approved by the Sacramento Transportation Authority (STA) – the administering agency for the sales tax program.
- Gas Tax: In 2010, Governor Schwarzenegger signed Assembly Bill 105, which influenced how the state taxes gasoline and spends those revenues. The bill, known as the “fuel tax swap”, eliminated the state sales tax on gasoline and replaced it with a 17.3 cent excise tax. Under the new law, the excise tax is to be adjusted annually by the State Board of Equalization to account for the effects of inflation. The proceeds of this excise tax are allocated:
  - 44% to local streets and roads
  - 44% to the State Transportation Improvement Program (STIP), which funds new construction projects that add capacity to the transportation system
  - 12% to the State Highway Operation and Protection Program (SHOPP), which provides funding for pavement maintenance, rehabilitation, and safety projects on the state’s highways and bridges

This “tax swap” resulted in dramatic reductions in the total amount of revenue available to local jurisdictions for roadway maintenance.

- Major Street Construction Tax: A local City-imposed surcharge on all new construction or reconstruction of buildings. These funds can only be used for construction, replacement or alteration of major roadways, traffic control, and lighting.
- Federal Capital Grants: Revenues provided through a range of federal funding programs identified in the multi-year reauthorization legislation. These funds are dedicated to the specific capital improvement projects for which the grant is provided.
- State Capital Grants: Revenues provided through the State Transportation Improvement Program (STIP), adopted by the California Transportation Commission every two years. These funds are dedicated to the specific capital improvement projects for which the grant is provided.
- Landscape and Lighting Assessment District: Revenues generated from a local district for specific improvements. These funds can only be used for capital improvements for specific transportation projects.
- Parking Fund: Revenues generated from parking fees charged to users of public parking garages and surface lots. These funds can only be used for the operation, maintenance, and capital improvements of City-owned off-street parking facilities.



- Public Facility Fee: Local development impact fee established for the North Natomas Financing Plan. These funds can be used only for capital projects identified in the plan including bikeways, freeway improvements, major roads, bridges, signals, shuttles, and landscaping.

A portion of the funding needed to maintain City roads and construct improvements is generated through the countywide one half cent sales tax for transportation (Measure A). This sales tax was approved by Sacramento County voters in 1988 and an extension was approved in 2004, which will fund local transportation projects and air quality improvements from 2009-2039. The purpose of the tax is to supplement local transportation revenues. This sales tax provides funding for street maintenance and transportation projects that benefit the Sacramento area. The tax also provides for transit projects and operations, bicycle improvements, and pedestrian improvements. Although Measure A has provided additional funding, the City still faces funding shortfalls for roadway maintenance and transportation projects.

## 3.10 Parking

### *Introduction*

Parking is a crucial component of the city's transportation system. Parking affects the operation of the overall transportation network and impacts individual choices regarding where people live and how they travel. Parking is also an economic issue which is intimately connected to the vibrancy of commercial districts and small business, and is a key factor in the success of new office, commercial, and housing developments.

### *Existing Conditions*

Sacramento's Zoning Code (Sacramento 2012a) parking requirements were recently updated (see below) to help achieve the City's General Plan and Center City goals of increased livability and a sustainable and multimodal transportation system while adequately addressing the rapidly evolving challenges of new development and economic growth. In certain areas Downtown and near other destination centers, on-street parking shortages often occur even as vast amounts of nearby off-street parking is underutilized. In residential neighborhoods adjacent to busy commercial corridors, parking demand spillover can create parking shortages even on otherwise quiet streets (Sacramento 2011).

Previous parking requirements inadvertently created barriers to economic development in many instances, increasing the difficulty, expense, and uncertainty for the City, residents, developers, and businesses. Parking requirements for storefront commercial uses exceeded parking demand rates associated with urban retail, were onerous for in-fill development projects, and were overly specific. The parking entitlement process created uncertainty for developers and absorbed an inordinate amount of time and resources. As a result, parking supply greatly exceeded demand in many facilities at peak hour. Meanwhile, on-street parking shortages continued in several commercial hotspots likely due to a combination of free and low-cost on-street parking that discourages the use of more expensive off-street lots and garages, and inadequate wayfinding signage to off-street garages (Sacramento 2012b).



## **Zoning Code Parking Update**

The City updated its off-street parking ordinance in 2012 to address many of the challenges described above. The revised Zoning Code makes parking requirements more context-sensitive, and allows for greater creativity on the part of developers and building managers in reducing the number of automobile trips generated. The following changes were adopted:

- Projects on small lots, and retail, restaurant, and service uses within residential mixed-use developments, are exempt from parking requirements.
- Shared parking is permitted, and both minimum and maximum requirements adjusted to be context-sensitive.
- Greater flexibility was introduced to meet future demand.
- Parking requirements were simplified across categories and the process made more predictable.
- The Central Business District, many areas within Midtown, and several commercial corridors have a substantial available supply of parking. The updated Zoning Code includes measures to maximize the use of these facilities before additional commercial parking is built.
- Revisions to parking stall dimensions.
- Enhanced bicycle parking requirements.
- Development relief from minimum parking requirements by allowing alternatives to on-site parking.

The Zoning Code parking requirement update is also designed to support and reinforce other City parking reform efforts, such as the updated Residential Permit Parking Program (RPP), and to create a flexible regulatory environment in which developers are encouraged to explore creative parking plans and utilize proven tools to manage parking.

## **On-Street Parking and Current Initiatives**

In most of Sacramento, on-street parking shortages are uncommon. Near Downtown and some residential neighborhoods, however, long-term commuter parking and demand for parking near major destinations results in limited on-street parking availability. To better manage on-street parking supply and encourage parking turnover, the City operates metered parking in some areas Downtown and a Residential Permit Parking program.

There are two types of metered on-street parking in the city: short-term and long-term. Short-term metered parking is designed to facilitate shorter trips Downtown, such as shopping or other errands. All short-term metered parking is currently priced at the same flat rate, though dynamic pricing based on demand at different times of day and locations could eventually be implemented to help improve vehicle turnover. The City also has special long-term meter rates in some locations, such as near light rail stations, to facilitate longer-term parking while still maintaining some availability at all times.

The Residential Permit Parking program was established in 1979 to address on-street parking shortages in residential neighborhoods that result from long-term parking by commuters. Over 25,000 on-street parking spaces are regulated by residential permit parking rules that restrict the length of stay for people who do not live in the area. New RPP areas are initiated by residents opting into the program through a majority consensus of the neighborhood.

## *Regulatory Context*

### **Federal and State**

There are no Federal or State regulations relevant to the development General Plan policy relating to parking.

### **Local**

The Sacramento Zoning Code regulates both on-street parking (chapter 10.36) and the provision and operation of off-street parking (chapters 10.44 and 17.64), including the provision of shade trees (also 17.64) and stormwater management (sections 13.16 and 15.92). The Zoning Code also regulates how parking fees from public on- and off-street parking may be used (chapter 10.40).

## **3.11 Transportation Demand Management**

Transportation Demand Management (TDM) is a term that broadly covers programs designed to reduce traffic congestion and improve air quality by offering a combination of incentives and market-based measures to increase alternative mode use among employees and residents.

### *Existing Conditions*

#### **Transportation Systems Management Program**

Sacramento's Transportation Systems Management (TSM) establishes requirements for employers and developers within the city to meet the City's 35 percent trip reduction goal. These requirements are designed to promote alternative commute modes in order to reduce traffic congestion, optimize use of the transportation system, and improve air quality (Sacramento 1988).

The TSM program requires minor development projects (those that will have 25 to 99 employees) to post information about alternative commute modes, such as public transportation and ridesharing, and to coordinate with relevant transportation agencies to maintain current commute information. Major projects (those that will have 100 employees or more) are required to follow the same requirements as minor projects, and must also have a transportation coordinator, provide an annual status report to the City, and develop a Transportation Management Plan (TMP) approved by the City. The status report must include commute mode data for employees at the project, an update on progress toward attainment of the alternative commute mode goal of the City, and, if the alternative commute mode goal has not been attained, a plan for additional TSM measures.

The TMP must set out how the project will attain its designated alternative commute mode goal. The TMP may include joining a Transportation Management Association (TMA) for the area, providing

carpool/vanpool spaces; parking fees; transit facilities or subsidies; a shuttle bus program; a vanpool program; showers and lockers for bicyclists; or other means of promoting alternative modes, as agreed upon by the City.

As a result, major projects such as expansions of Sacramento State University and the Park Place Shopping Center (HDR 2008; UC Sacramento 2012) have adopted TMPs that include a variety of transportation demand management measures:

- Sacramento State University has implemented free shuttle buses, discounted transit passes, on campus-carsharing, bike rentals, secure bike parking, priority parking for carpools, a guaranteed ride home program through the local TMA, and marketing of alternative commute mode options.
- Park Place Shopping Center has implemented priority parking for carpool/vanpool and alternative fuel vehicles; bus shuttle service and a guaranteed ride home program through the local TMA; transit pass subsidies for employees (50 percent of the pass cost); nine secure bicycle parking spaces; showers and lockers for employees who commute by bicycle; a vanpool program for employees; and a transportation information kiosk where the transportation coordinator posts information about alternative commute mode options.

The existing implementation of the TSM ordinance has been difficult for some companies because of its complexity. The City is leading an initiative to put all TSM program information and the TSM application online to simplify the process. This effort will allow companies to go through the process online in a streamlined way.

### **Other Programs Impacting Trip Generation**

Many of the City's transportation programs are designed to reduce the number of trips taken by automobile. Over time, the revised Zoning Code parking requirements, which reduce minimum parking requirements, will also reduce the overall parking supply relative to the number of workers and residents in the city. Many cities have found that constraining parking supply is a very effective automobile trip reduction measure. The revised parking regulations also allow companies to build fewer parking spaces in return for implementing transportation demand management programs.

Sacramento has a successful Neighborhood Traffic Management Program (Sacramento 2012c), which helps neighborhoods address livability issues by implementing traffic calming and reduce traffic volumes through residential streets.

The City also actively encourages alternative modes of transportation such as public transportation, walking and bicycling, which can reduce the demand for automobile trips.

## *Regulatory Context*

### **Federal and State**

California Parking Cash-Out Program (Assembly Bill 2109) requires that employers meeting certain criteria (over 50 employees, in an air basin with nonattainment status) that also provide their employees with subsidized parking, must offer the cash value of the parking subsidy to employees who do not drive to work.

California Sustainable Communities and Climate Protection Act (Senate Bill 375) requires each MPO to prepare a Sustainable Communities Strategy (SCS) laying out how they will meet the emissions reduction targets set by the Air Resources Board. The SCS is part of the regional transportation plan, which is federally enforceable. While the implementation is the responsibility of SACOG, the City of Sacramento will have an important role to play in meeting the region's emissions reduction goals.

### **Local**

The TSM ordinance contains goals and policies related to transportation demand management

## **3.12 Mobility Findings**

Key findings for the mobility section are presented below:

- The City's current LOS policy allows for flexible LOS standards, which accept LOS F operations during peak hours within the Core Area and on specified roadway segments, and LOS E operations within multi-modal districts. The base level of service standard for all areas is LOS D.
- The roadway segment analysis conducted in 2012 for the General Plan Update evaluated daily operations on 260 roadway segments. Of the 260 segments, 216 operate at LOS D or better, 10 operate at LOS E, and 34 operate at LOS F. Of the 34 study segments reported to operate at LOS F, approximately half (17 segments) are freeway segments.
- RT is the primary transit service provider in the city with fixed route bus and light rail transit service and demand responsive paratransit services. In FY2011, RT bus lines served over 14 million passenger trips, while RT Light Rail trains carried a total of 13,124 passenger trips. In FY 2012, average weekday boardings increased by 7 percent and 13 percent from FY2011 on the Gold and Blue Light Rail Lines, respectively.
- RT transit service improvement plans include (1) restoring service to pre-2010 levels by 2017, (2) implementation of the South Sacramento Corridor Phase 2 Project, which would extend the Blue Line from its existing terminus at Meadowview station, 4.3 miles, to the intersection of Calvine Road and Auberry Drive (with new stations at Morrison Creek, Franklin Boulevard, Center Parkway, and Cosumnes River College), and (3) extending the planned Green Line approximately 13 miles from Downtown Sacramento through Natomas to the Sacramento International Airport, with a total of 13 stations.

- Proposed bicycle facility improvements are contained in the City/County Bikeway Master Plan. The City is continually expanding its network of bicycle facilities.
- The City has implemented several programs and adopted policies to improve the pedestrian environment, including the following: Pedestrian Master Plan, Neighborhood Traffic Management Program, Traffic Calming Guidelines, Pedestrian Safety Guidelines, and Pedestrian Friendly Street Standards.
- In 2012 the City approved significant changes to the zoning code parking section designed to maximize the use of existing off-street parking, ease demand on constrained on-street parking, address concerns regarding spillover parking in residential neighborhoods adjacent to commercial areas, and make parking a less onerous component of the (re)development process.
- Sacramento's Transportation Systems Management (TSM) program requires developers and employers within the City to achieve a 35 percent trip reduction. Larger projects must produce a Transportation Management Plan (TMP), which is monitored by the City. The City is in the process of moving the TSM program online, making it more user-friendly.