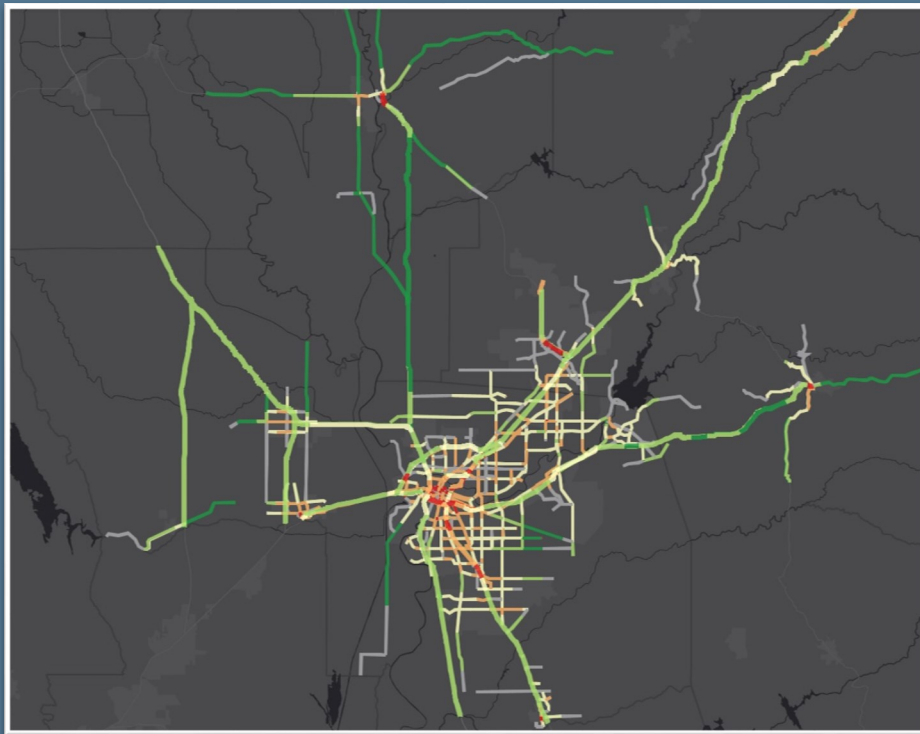


CONGESTION MANAGEMENT PROCESS



Sacramento Area Council of Governments

WHAT WE DO

The Sacramento Area Council of Governments (SACOG) is an association of Sacramento Valley governments formed from the six regional counties—El Dorado, Placer, Sacramento, Sutter, Yolo and Yuba—and 22 member cities. SACOG’s directors are chosen from the elected boards of its member governments. SACOG’s primary charge is to provide regional transportation planning and funding, as well as a forum for the study and resolution of regional issues. In this role, SACOG prepares the region’s long-range transportation plan; approves distribution of affordable housing around the region; keeps a region-wide database for its own and local agency use; helps counties and cities use federal transportation funds in a timely way; assists in planning for transit, bicycle networks, clean air and airport land uses; and has completed the Blueprint Project which links transportation and land development more closely.

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Delivering transportation projects; providing public information and serving as a dynamic forum for regional planning and collaboration in the greater Sacramento Metropolitan



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Executive Summary

This document is SACOG's Congestion Management Process (CMP) Report. To develop the CMP and this report, SACOG has:

- Assembled a local agency Working Group focused on the CMP and presented the project and process to numerous SACOG committees;
- Defined the CMP network and prepared a draft of the CMP network that includes roadway, transit and bike network;
- Assembled a vetted list of objectives and developed multimodal performance measures;
- Identified initial priority corridors;
- Identified initial approaches to monitoring performance over time;
- Assembled initial monitoring data related to CMP network definition, and developed technical tools to monitor congestion, delay, and reliability;
- Identified a methodology for analyzing congestion problems and needs;
- Identified deficient corridors that need strategic improvement plans; and
- Developed strategies for each deficient corridor for managing congestion.
- Developed an implementation plan for the CMP going forward.

The results of this process are the development of performance measures, a thorough analysis and identification of priority congested corridors in the region, strategies for each corridor, and an implementation plan along with a well-defined, repeatable process to assist SACOG, Caltrans, and local jurisdictions with congestion management over time. As an ongoing process, the CMP will be monitored and updated biennially and integrated into the planning process for the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) developed by SACOG for the region.

Background on Federal Congestion Management Requirements

Congestion management is the application of strategies to improve transportation system performance and reliability by reducing the adverse impacts of congestion on the movement of people and goods. A congestion management process, or CMP, is a systematic and regionally-accepted approach for managing congestion that provides accurate, up-to-date information on transportation system performance and assesses alternative strategies for congestion management that meet state and local needs.

Federal law requires metropolitan areas with population exceeding 200,000, known as Transportation Management Areas (TMAs), to develop a congestion management process (CMP) as an on-going process that is fully integrated into the metropolitan transportation planning process. Federal law also states that “In a TMA designated as nonattainment area for ozone or carbon monoxide pursuant to the Clean Air Act, Federal funds may not be programmed for any project that will result in a significant increase in the carrying capacity for SOVs (i.e., a new general purpose highway on a new location or adding general purpose lanes, with the exception of safety improvements or the elimination of bottlenecks), unless the project is addressed through a congestion management process.”¹

The congestion management process has eight steps:

1. Develop Regional Objectives
2. Define CMP Network
3. Develop Multimodal Performance Measures
4. Collect Data/Monitor System Performance
5. Analyze Congestion Problems and Needs
6. Identify and Assess Strategies
7. Program and Implement Strategies
8. Evaluate Strategy Effectiveness

¹ 23 CFR 450.322 (e)

Chapter 1 CMP Working Group and Regional Objectives

SACOG created a technical Working Group composed of representatives from Caltrans, Placer County Transportation Planning Agency (PCTPA), El Dorado County Transportation Commission (EDCTC), the City of Sacramento, and Sacramento County.

Working Group members are transportation professionals with expertise and local knowledge of their respective jurisdictions' transportation systems and congestion-related challenges. SACOG met with these members on a monthly basis and they played an integral part in development and approval of SACOG's CMP objectives, CMP network definition, performance metrics, and identifying deficient corridors to incorporate into SACOG's strategies for addressing congestion.

In developing regional CMP objectives, SACOG looked to current plans, input from Working Group members, and objectives adopted by peer agencies in developing their CMPs. To ensure alignment between the CMP and the Metropolitan Transportation Plan (MTP), SACOG drew on CMP objectives from the 2016 MTP Policies and Supportive Strategies section and from the Regional Blueprint, a document adopted in 2004 as a framework for guiding transportation and land use development in the Sacramento region. SACOG further refined its selection of CMP objectives based on Working Group input to develop the following five regional objectives:

1. Maintain or improve travel time reliability for freight and passenger vehicles
2. Reduce traffic congestion for freight and passenger vehicles
3. Promote development that encourages making trips by public transit
4. Support proactive and innovative education and transportation demand management programs covering all parts of the urbanized area, to offer a variety of choices to driving alone
5. Support transit investments that result in an effective transit system that serves both transit-dependent and choice riders

Chapter 2 CMP Network Definition

1. Road Network

For purposes of defining a transportation network for the CMP, SACOG staff started with the National Highway Systems (NHS) network. The draft CMP roadway network was developed as a subset of the NHS roadway network by identifying segments that met the count threshold outlined in Table 2-1 below.

CMP Inclusion Criteria:

- Inclusion in the NHS
- Average daily volume above thresholds based on Caltrans functional classification groupings (see Table 2-1 Proposed AADT Thresholds for Inclusion to CMP Roadway Network below)

Table 2-1 Proposed AADT Thresholds for Inclusion to CMP Roadway Network

CMP Functional Classification Groupings	Inclusion AADT Threshold (2012 Total ADT)
Interstate	≥ 85,000
Other Freeways/Expressways	≥ 60,000
Principal Arterials	≥ 20,000

Figure 2-1 shows the entire NHS network within the SACOG region, while Figure 2-2 shows the roadways that remain in the CMP network after trimming the NHS network based on the above volume thresholds.

US-50 in El Dorado County

In this first CMP iteration, SACOG omitted US-50 in El Dorado County because it did not meet the initial traffic volume thresholds for inclusion outlined in Table 2-1 above. However this is a significant regional corridor, particularly for tourist traffic to and from the Tahoe Basin. Recreational travel on this segment creates significant congestion in the City of Placerville during peak tourist seasons, and as such will be kept under consideration for inclusion in future CMP updates.

Figure 2-1 SACOG Region NHS Roads

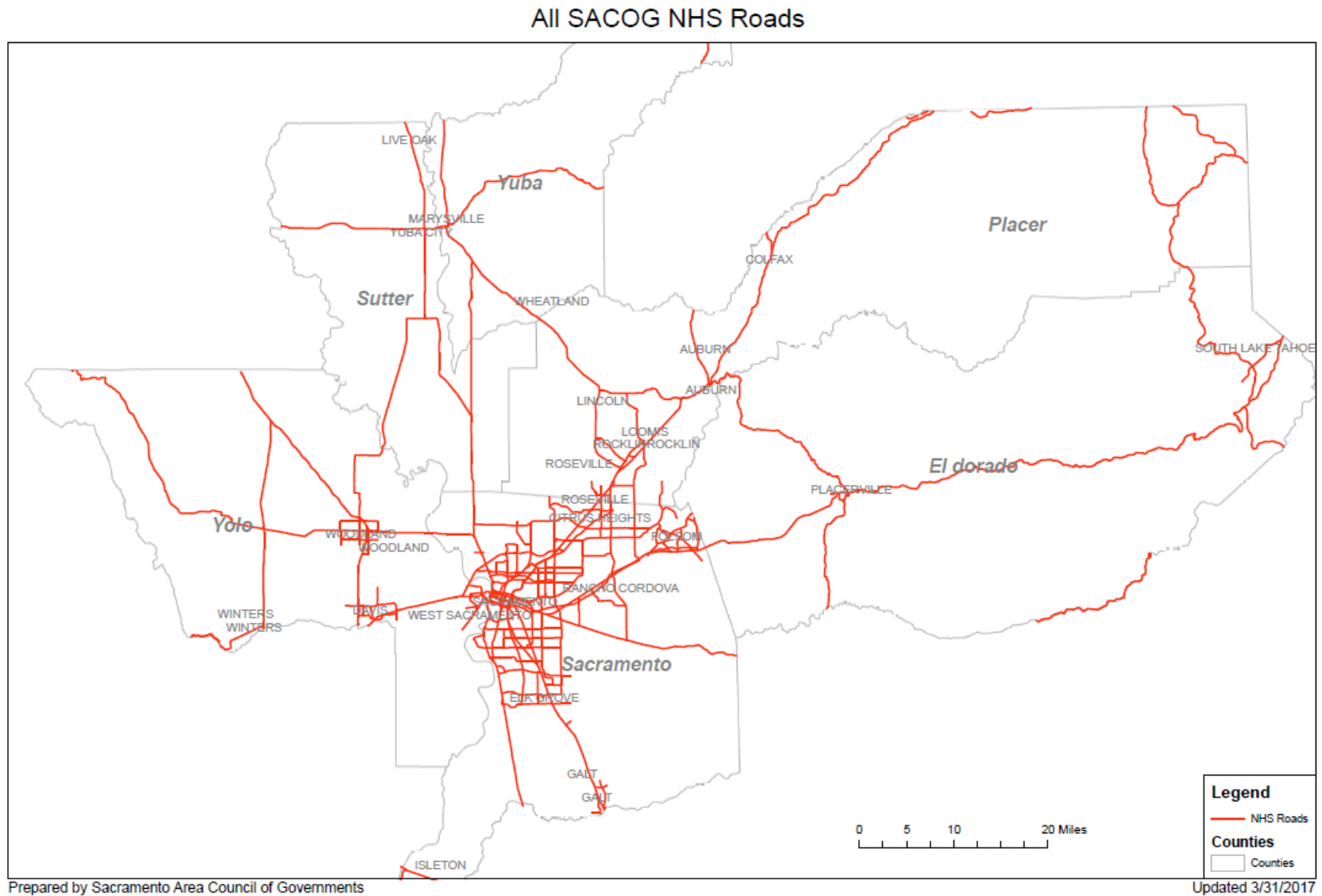
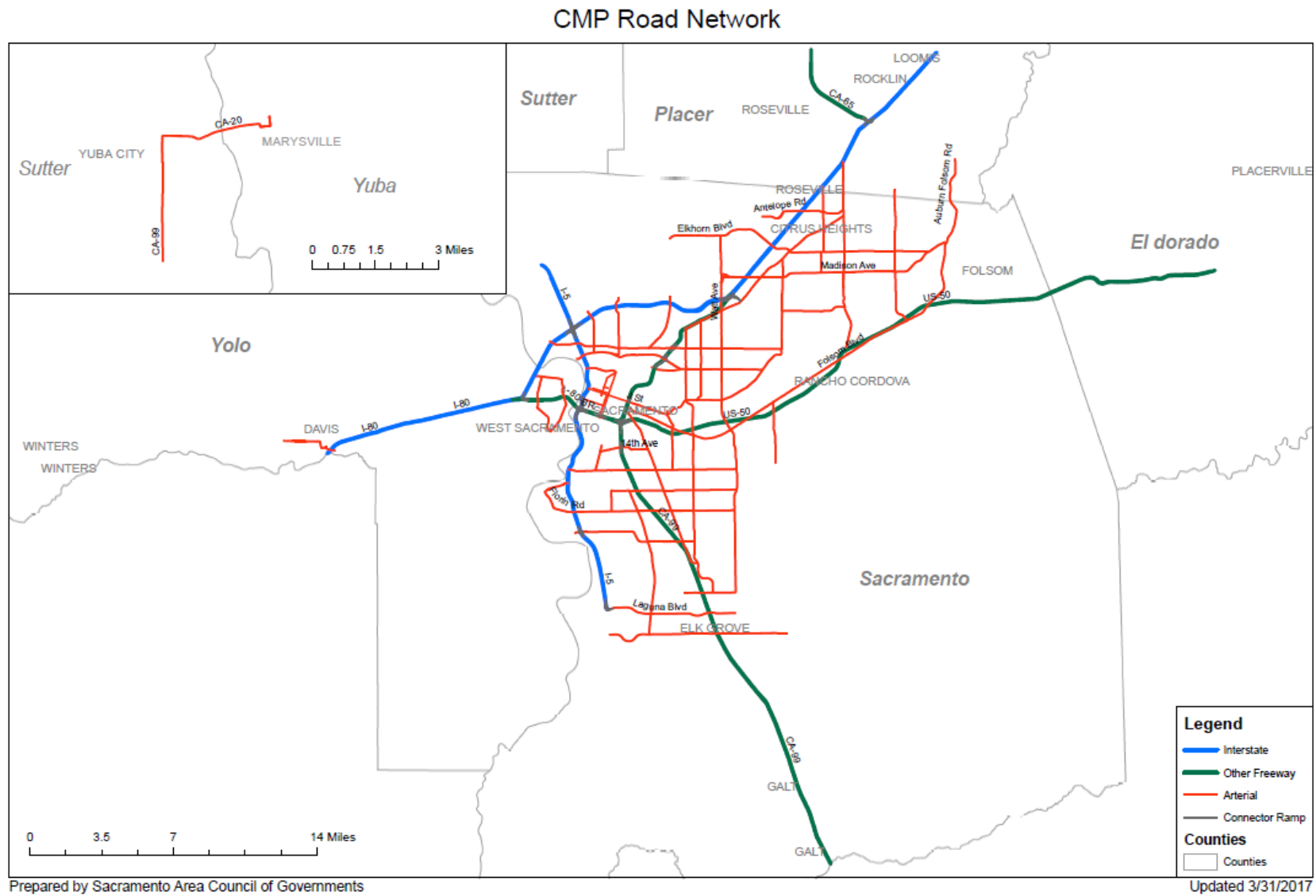


Figure 2-2 CMP Road Network (Comprised of NHS roads meeting the volume criteria outlined in Table 2-1)



2. Transit Network

Public transit also plays a role in defining the CMP network. Fixed-route transit provides opportunities to manage or reduce congestion by more efficiently using existing road space and providing travelers an alternative to SOV use and driving in congested conditions, such as through using rail transit or commuter and express bus services in HOV lanes. Given this role, the CMP has incorporated a subset of transit routes that are relevant to the CMP roadway network, determined by a combination of reasonably high ridership, and proximity to the draft CMP roadway network. Based on these criteria, the CMP priority transit routes selected include:

- All light rail lines.
- Amtrak's Capitol Corridor.
- Fixed-route bus lines within ¼ mile of the CMP roadway network, including:
 - Local bus lines with more than 800 boardings on an average weekday.
 - Commuter express bus routes with an average of >20 boardings per scheduled run, which equates to each vehicle running at least half full.

Figure 2-3 shows all transit routes in the SACOG region, while Figure 2-4 shows the transit routes included in the CMP Transit Network.

Figure 2-3 All 2012 SACOG Regional Transit Routes

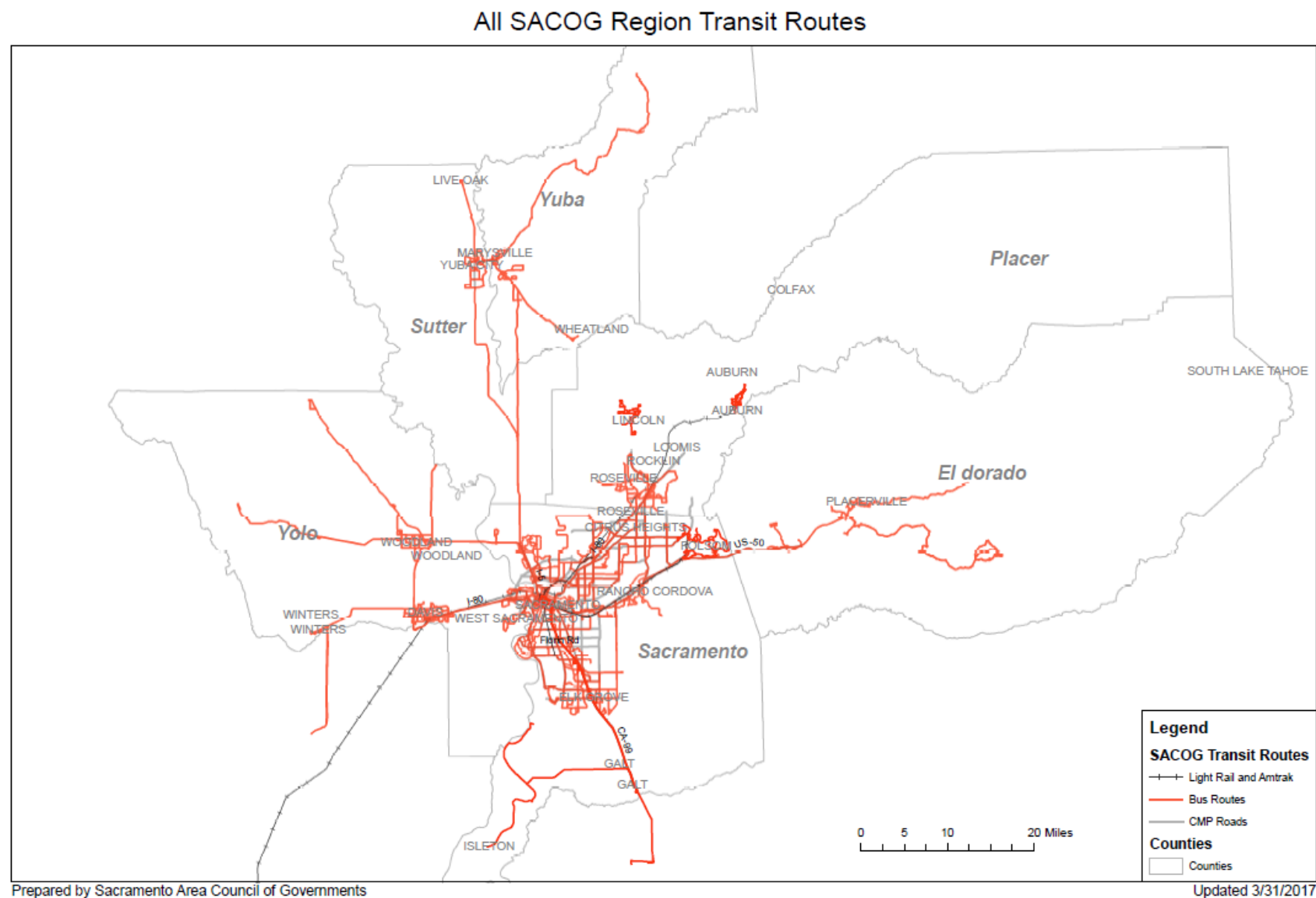
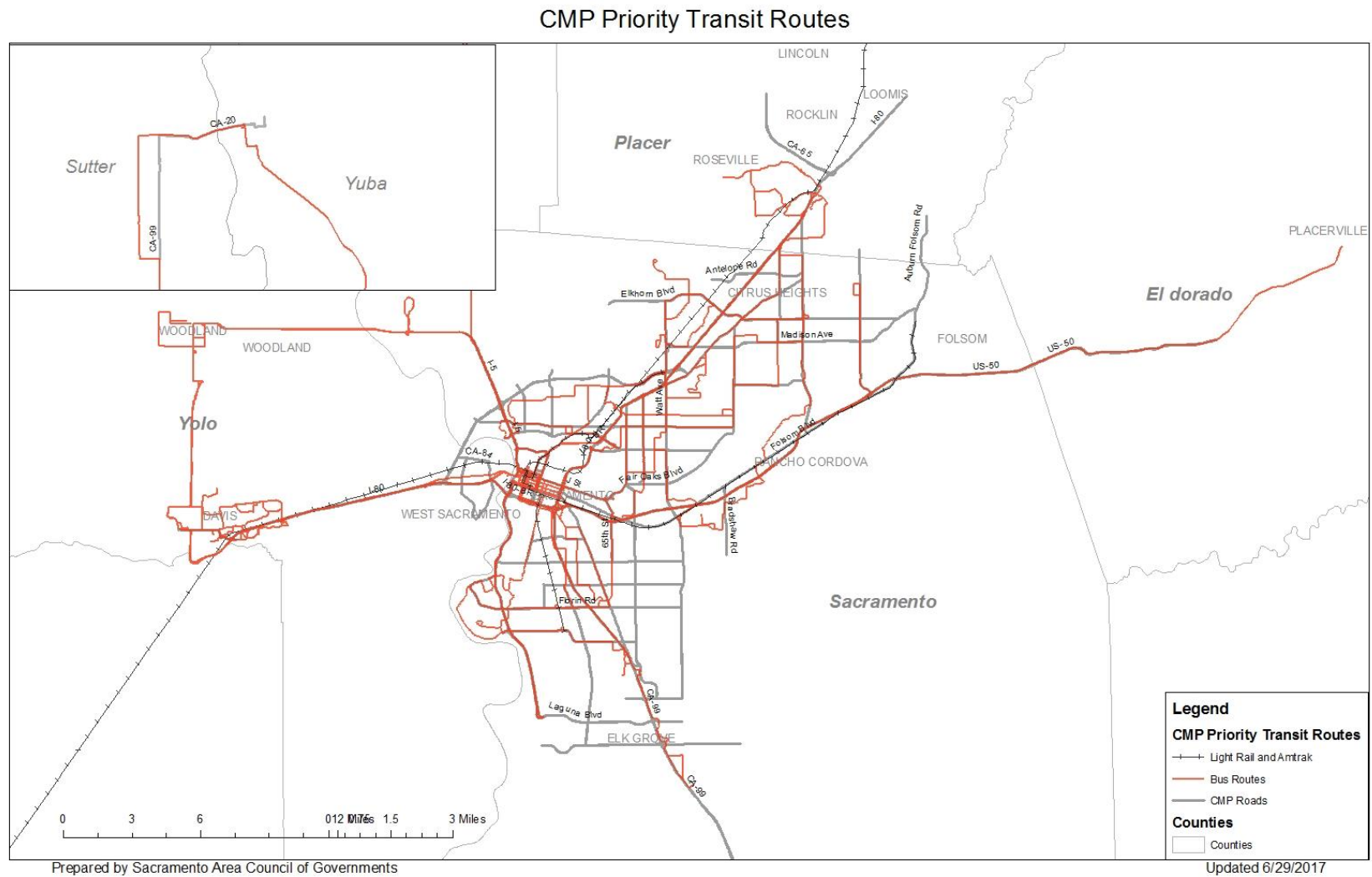


Figure 2-4 SACOG CMP Priority Transit Routes

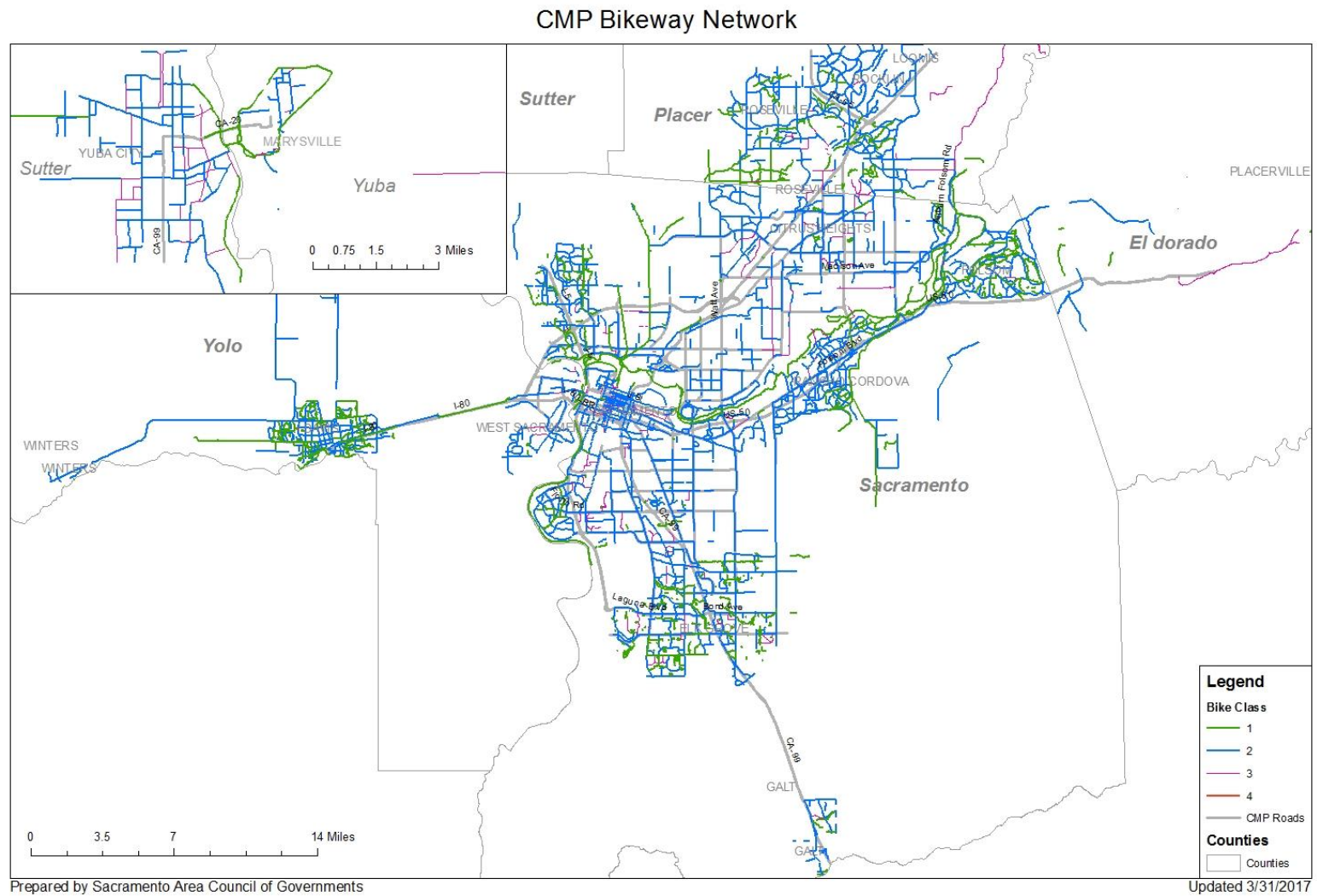


3. Bikeway Network

Similar to transit, bicycling helps address congestion by making more efficient use of road space, and in the case of Class 1 bike paths, relieves demand on CMP network roads by diverting travelers to dedicated bicycle facilities.

The initial CMP bikeway network was limited to Class 1 paths within a half mile of the CMP road network and Class 2 bike lanes within a quarter mile of the CMP road network. Through Working Group consideration, the bikeway network was defined to include all facilities within a mile of a transit stop on the CMP priority transit network, under the rationale that bicycling has potential as a first-last mile connection for transit riders. Upon seeing that this expanded network included nearly all of the region's bikeway facilities, SACOG and the Working Group therefore decided to include all regional bicycle facilities as part of the CMP bikeway network, as shown in Figure 2-5.

Figure 2-5 CMP Bikeway Network



Chapter 3 Developing Multimodal Performance Metrics

Working Group members and SACOG staff contributed to selecting performance metrics for the CMP by providing their insights on how well given metrics tied to the CMP regional objectives identified in Chapter 1, as well as how appropriate the metrics were for the SACOG region. Performance metrics were selected based on a review of metrics used by peer agencies, each metric's relevance and connection to a CMP objective, and data availability and quality.

The following principles were identified to guide the evolution of SACOG's CMP performance metrics over time:

- Recognize that no single data source is perfect. Utilize the best available data, and include time and resources to do validation and check the reasonableness of the sources used for the CMP. Be open to identifying and using alternative data sources as they become available.
- Where possible, find alignment on performance metrics and data sources. The ability to share performance metrics and data sources developed as part of the CMP with other projects and initiatives is highly desirable and beneficial given the cost of developing and utilizing data for performance measurement at the system segment level. On the flip side, if performance metrics and data sources are available and in use for other projects, and could be re-used or re-purposed for the CMP, the CMP should be open to using those metrics and sources.
- Data availability should NOT limit the scope of issues and objectives to be addressed in the CMP. Where consensus exists on the importance of a particular objective to the goals of the CMP, that objective should be included with the best available data source and metric. In other words, the objectives should drive the performance metrics, and not the other way around.

Table3-1 summarizes SACOG's CMP regional objectives, the metric(s) developed related to each objective, and the data to be used to calculate each metric.

Table3-1 CMP Objectives and Performance Metrics

Generalized Objective	Performance Metrics	Data Required	Data Sources
1 - Maintain or Improve Travel Time Reliability for Freight and Passenger Vehicles	Truck TT reliability (TTTR) index, interstates only	NPMRDS	NPMRDS
	Level of TT reliability (LOTTR) index	NPMRDS	NPMRDS
	Percent of directional miles with LOTTR < 1.5	NPMRDS	NPMRDS
2 -Reduce Traffic Congestion for Freight and Passenger Vehicles	Average peak period travel speed, all vehicles	NPMRDS	NPMRDS
	Percent of directional miles with average peak period > 60 percent of unconstrained speed	NPMRDS	NPMRDS
		Speed limits	local jurisdictions, Google street view
	Average peak period truck speed on interstates	NPMRDS	NPMRDS
3 - Promote Development That Encourages Making Trips by Public Transit	Dwelling units built within 1/2 mile of high-frequency or rail transit service	Residential building permit data	SACOG
		high-quality transit overlay map	SACOG
	Jobs within 1/2 mile of high-frequency or rail transit service	2012 Base year parcel file	SACOG
		high-quality transit overlay map	SACOG
4 - Support Proactive and Innovative Education and Transportation Demand Management Programs Covering All Parts of the Urbanized Area, to Offer a Variety of Choices to Driving Alone	Employers in a Transportation Management Association (TMA)	Count of employers in a TMA	SACOG TDM team
	Count of registered vanpools	Vanpool DB	SACOG TDM team
	Count of Commuter Club members	Commute Club DB	SACOG TDM team
	Non-SOV mode share	Non-SOV mode share	MTP
5 - Support Transit Investments that Result in an Effective Transit System that Serves Both Transit-Dependent and Choice Riders	Weekday transit boardings by route for CMP priority transit routes	Transit operations data	Transit agencies
	Congested CMP directional miles with transit service	Transit SHPs	SACOG
		CMP road network	SACOG
		Speed data	NPMRDS
	Unreliable CMP directional miles with transit service	Transit SHPs	SACOG
		CMP road network	SACOG
		Speed data	NPMRDS

Following is a more detailed description of each objective and performance metric, along with a description of each metric's rationale and relevance to its corresponding objective.

Objective 1. Maintain or Improve Travel Time Reliability for Freight and Passenger Vehicles

Travel time reliability is increasingly recognized as an important mobility and congestion management goal because unreliable system performance leads to wasted time and lost economic activity by having to build in “buffer” time to trips, which is time that could be spent on more productive activities. SACOG will use the following metrics to measure travel time reliability at both a segment level and a system level:

- *Truck travel time reliability index (TTTR)*
The TTTR provides a measure of how consistent travel times are for truck traffic by comparing the 80th percentile travel time to the median (50th percentile) travel time. For example, if the 80th percentile travel time is 45 minutes and the 50th percentile travel time is 30 minutes, the TTTR is 1.5. A larger TTTR score means that there is a greater difference between the 80th and 50th percentile travel times, indicating less reliability.

The TTTR was only considered for limited-access freeways within the CMP network in order to limit its evaluation to parts of the network that are designated freight corridors. Maps of the TTTR score for freeways are located in Appendix 3.

- *Level of travel time reliability (LOTTR) index*
The LOTTR measure works on the same principle as the TTTR, but instead of using truck travel times, it uses travel times for all vehicles. Truck travel time reliability is calculated separately from the general fleet reliability due to lower top speeds for trucks and a desire to obtain a more specific look at freight performance.

The LOTTR is measured for each Traffic Message Channel (TMC), or road segment, in the CMP network and incorporated into the system performance maps discussed in the Combined Road Performance Metric section in Chapter 5.

- *Percent of directional miles with LOTTR < 1.5*
The January 2017 MAP-21 rule established an LOTTR score of 1.5 (meaning the 80th percentile travel time is 1.5 times longer than the median travel time) as the threshold for “excessive unreliability.” With this metric, SACOG seeks to monitor reliability at a system level and gauge overall region-wide CMP network reliability.

Objective 2. Reduce Traffic Congestion for Freight and Passenger Vehicles

Delay caused by congestion is a well-known cause of wasted fuel, additional vehicle-sourced pollutants, stress, and lost economic activity. This makes its measurement and management a primary element of SACOG's CMP. Congestion-related delay measures SACOG used for its first-round CMP include:

- *Average peak period travel speed (all vehicles)*

Average peak period travel speed was selected as a metric for gauging congestion based on its intuitive nature as well as being the basis for the more detailed performance maps in the Combined Road Performance Metric section of Chapter 5.

- *Percent of directional miles with average peak period > 60 percent of unconstrained speed*

As a way to measure the intensity of congestion, SACOG took average peak period travel speeds for each TMC and measured them in comparison to the TMC's "unconstrained" speed. For the CMP, the "unconstrained" speed is the 85th percentile "epoch" speed for all epochs, or five-minute time periods, falling between 6:00 pm and 6:00 am. Following these parameters, the unconstrained speed is supposed to represent the speed vehicles travel along a given TMC when there is no congestion delay.

Using the above definition of "unconstrained speed," SACOG and the Working Group have agreed for the first-round CMP to define a road as congested during a given period if the observed average speed during that period is less than 60 percent of that road's unconstrained speed. The 60 percent threshold derives in part from the January 2017 MAP-21 rule, which establishes a travel speed that is 60 percent of the posted speed limit as the threshold for measuring "excessive" delay. SACOG's congestion measure slightly modifies this threshold by using the above-described unconstrained speed, rather than the speed limit, as the baseline for measuring congestion. The decision to make this modification is based in part on a lack of comprehensive speed limit data and a desire to base unconstrained conditions on observed data rather than a posted limit.

Tables summarizing system-level congestion and reliability metrics are available in Appendix 2.

- *Average peak period truck speed on freeways*

As with average vehicle speed, average truck speed was selected based on being a reasonably intuitive measure of system performance. Truck speeds were considered separately from the general fleet speed because trucks, on average, travel slower than other vehicles.

As was the case with the TTTR, average peak period truck speed was only considered for limited-access freeways within the CMP network in order to limit its evaluation to parts of the network that are designated freight corridors.

Maps showing peak period truck speeds are in Appendix 3.

Objective 3. Promote Development That Encourages Making Trips by Public Transit

As outlined in the Blueprint and adopted 2016 MTP, land use is a major component of the SACOG region's approach to addressing regional mobility by encouraging development that makes more efficient modes of transportation, in particular mass transit, a convenient option. Connected to the CMP, promoting development that facilitates travel via public transit helps address regional congestion by both reducing space demands on the region's roadways as well as providing alternatives, like light rail and bus rapid transit, that are less affected by congestion.

In this land use vein, SACOG and the Working Group arrived at the following metrics to help measure development that encourages public transit use:

- *Dwelling units built within 1/2 mile of high-frequency or rail transit service*

This metric refers to residences built within a half-mile of light rail service, Amtrak Capitol Corridor service, or high frequency bus transit service, defined as having peak headways of 15 minutes or less.

The rationale behind this metric is that light rail and high frequency bus service provide a level of convenience and travel time flexibility that make them a more competitive alternative to traveling via single-occupancy vehicle, especially for traveling to more central destinations with heavy congestion or expensive parking. Rail transit, even if a lower-frequency service such as Amtrak's Capitol Corridor, was considered because it provides an effective way for users to bypass congestion by not sharing the road with private automobiles. Rail's separate right-of-way also gives it significant potential capacity should demand grow in the future, and locating housing within walking distance to rail transit is a key component of strategically providing housing where transit can be economically provided.

The data for dwelling units built within a half-mile of high-frequency transit are summarized in Appendix 4.

- *Jobs within 1/2 mile of high-frequency or rail transit service*

Living near rail or high-frequency bus transit will do little to encourage use if the transit does not travel to residents' common destinations. This is why the first-round CMP also measures how many jobs are within a half-mile of rail or high-frequency bus transit, so SACOG can monitor the region's progress toward its broader goal of encouraging development that encourages public transit use.

The data for jobs within a half-mile of rail and high-frequency transit are summarized in Appendix 4.

Objective 4. Support Proactive and Innovative Education and Transportation Demand Management Programs Covering All Parts of the Urbanized Area, to Offer a Variety of Choices to Driving Alone

Transportation Demand Management (TDM) is an important suite of "soft" tools that SACOG uses to address congestion through educating commuters on their available travel options, creating awareness of the relative costs and benefits to driving alone versus using shared or non-motorized transportation, and providing incentives to use shared transportation.

The metrics selected for the first-round CMP are based on the general assumption that participation rates in TDM programs are a rough proxy for those programs' effectiveness. In particular, the metrics looked at include:

- *Count of employers in a Transportation Management Association*

Transportation Management Associations (TMAs) are made up of employers and provide a shared resource that those employers and their employees can use to learn more about travel options available, benefit from services such as Emergency Ride Home programs, match up with carpool/vanpool partners, and enroll in incentive programs such as transit pass subsidies and commuter clubs.

Under the assumption that access to the services that TMAs provide will shift some commute trips from solo driving to more efficient modes such as transit, bicycling, and carpooling, monitoring the total number of employers in TMA can provide insight into how many commuters are exposed to the services and incentives that encourage commuting through modes other than solo driving.

- *Count of registered vanpools*

By carrying up to 15 people per vehicle, vanpools are a significantly more space-efficient mode of transportation than solo driving. Monitoring the total number of regional vanpools provides a rough measure for how much travel demand is eased through using vanpools.

- *Count of Commuter Club members*

The Sacramento Region Commuter Club serves some of the functions of a TMA by providing Members with services such as carpool and vanpool matching, bike and transit trip planners, and an Emergency Ride Home program.

Membership in the Commuter Club is only a rough proxy for how many commuters are using a non-single occupant vehicle (SOV) travel mode, as a certain portion of members may not always use an alternative mode. However, it does serve as a reliable measure for regional awareness and interest in alternative travel modes, which is why SACOG includes it as a metric for TDM effectiveness.

- *Non-SOV mode share*

Many factors beyond the influence of TDM programs can affect the non-SOV mode share, such as major economic or infrastructure changes. But because the primary aim of TDM efforts is to reduce single-occupant commute trips, using the Census journey-to-work mode split data is a rough way of measuring TDM efforts against desired outcomes.

More detailed information about TMAs and specific TDM programs in the SACOG region are provided in Appendix 6.

Objective 5. Support Transit Investments that Result in an Effective Transit System that Serves Both Transit-Dependent and Choice Riders

Part of addressing regional congestion is providing reliable and useful alternatives to traveling in congestion. This includes public transit, which uses the same roadway space to carry more people per vehicle who are traveling at the same time.

Our transit metrics focus on CMP priority transit routes, defined in Chapter 2, because these transit routes travel either on, near, or parallel to identified CMP roadways and are therefore most likely to provide a reasonable travel alternative to solo driving on those CMP facilities.

The metrics we selected for measuring progress toward this objective include:

- *Weekday transit boardings by route for CMP priority transit routes*
Transit boardings at the route level are an intuitive overall measure of transit's role in addressing roadway congestion, by providing a rough gauge for estimating how many trips may have been taken using a less space-efficient mode such as a small carpool or solo driving.
- *Congested CMP directional miles with CMP priority transit service*
While CMP network congestion affects all *vehicles*, congestion on CMP road segments with transit service will affect a greater number of *people* given that public transit vehicles generally have more passengers than private vehicles. Following from that, this metric seeks to identify portions of the CMP road network where congestion affects a disproportionate number of people due to transit vehicles' higher occupancy rate.
- *Unreliable CMP directional miles with CMP priority transit service*
Using the same rationale as the prior metric, this metric seeks to measure how much of the CMP roadway network has unreliable conditions that affect a disproportionate number of people due to the presence of transit vehicles on those portions of the network.

Chapter 4 Data Collection and System Monitoring

This chapter describes the data collection and initial system assessment efforts undertaken to develop this initial CMP and prepare for future system monitoring.

Traffic Volumes

Vehicle volume counts were a primary data input for use in defining the initial draft CMP network, and will be a key monitoring data source to identify and evaluate potential changes to the network over time. Traffic counts will come from several sources:

- Caltrans' Performance Measurement System (PeMS)—for ongoing vehicle volumes on the state highway system. Summaries of PeMS raw data will come from Caltrans, and from SACOG's periodic summaries of "typical weekday" volumes.
- Local agency count programs—Each of the 28 local agencies within the SACOG region counts and archives vehicle volumes on selected roadway segments within their jurisdiction. SACOG will work with local agencies to periodically assemble counts for use in the CMP (as well as other activities, such as validation of the SACOG travel demand model, etc.).

Initial vehicle count data for deficient corridors are in Appendix 6. SACOG and the Working Group fully understand that more current data will be required, and efforts are under way to update the count data and utilize more current sources.

CMP Transit Ridership

Transit routes and ridership data are for the MTP base year of 2012 and were collected from the transit agencies with routes in the CMP priority transit network. Appendix 1 provides ridership for each CMP transit route. SACOG and the Working Group fully understand that more current data will be required, and efforts are under way to update transit ridership data as well as identify any revisions to high frequency bus routes.

National Performance Measurement Research Data Set (NPMRDS)

1. NPMRDS Data Overview

Available from FHWA for use in implementation of MAP21 congestion and reliability performance rules, the NPMRDS provides travel time data for cars and trucks at 5-minute intervals for over 2,400 road segments throughout the SACOG region, including all segments in the draft CMP roadway network. Data in the the NPMRDS come from movement information obtained through GPS-enabled mobile devices. SACOG has been using the NPMRDS to derive traffic speeds and evaluate congestion-related performance metrics.

2. CMP Metrics Using NPMRDS Data

SACOG recently completed a partnership project with the University of Pacific Data and Analytics graduate program, to develop an open source, PYTHON and SQL script for efficiently reducing NPMRDS data to the TMC-segment values needed to compute the basic congestion, delay and reliability metrics included in

the draft MAP21 rule. This script is easily adaptable for use in generating variants of the MAP21 metric for use in the CMP monitoring program.

FHWA provides these data to SACOG as average travel times for vehicles along pre-defined roadway segments known as TMCs. The average travel times for each TMC are calculated for five-minute increments, known as “epochs”, 24 hours a day, 365 days a year. These travel times, in conjunction with each TMC’s distance, form the basis for calculating the congestion-related CMP metrics, described in more detail below.

The CMP metrics derived from the NPMRDS are calculated for each TMC segment and include:

- Average peak period travel speeds
- Peak period congestion level (defined as the average speed / 85th percentile epoch speed)
- Peak period travel time reliability (80th percentile travel time / 50th percentile travel time)

3. Defining Analysis Time Period(s)

Since the NPMRDS-derived metrics depend on accurate traffic speeds, SACOG staff looked at average traffic speeds during several time periods, including:

- Annual AM and PM peak periods
- Annual PM peak hour
- October AM and PM peak periods
- October PM peak hour

To visualize the data, SACOG prepared a web map of the average travel speeds along each segment of the CMP road network during each of the above time periods. The map may be viewed at the following link: <http://arcg.is/2IO4E6C>. The web map has been instrumental in helping assess the advantages and disadvantages of choosing one time period versus another, and also brought to light several issues in the data, described in more detail below. SACOG plans to maintain and potentially expand the web map’s functionality in the future with updated speed data that local agencies can use to monitor their own roadways’ performance.

NPMRDS Data Concerns for Peak Period Speeds

SACOG initially focused analysis on the AM and PM peak periods as defined in the regional travel model, which are:

- Monday-Friday 6am-9am for the AM peak period; and
- Monday-Friday 3pm-6pm for the PM peak period.

SACOG looked at annual average AM peak period and PM peak period speeds. However, the speeds estimated for the 3-hour peak periods did not align with the professional experience of SACOG staff or CMP Working Group members. Specifically, average speeds derived from NPMRDS data along many segments were significantly faster than conditions perceived by Working Group members through their professional experience.

SACOG staff considered several possible explanations for the higher-than-expected peak period speeds. The first possibility explored was that a three-hour peak period may be too long, with faster speeds during the shoulders of the peak (e.g., 3:00-4:00 pm for the PM peak period) potentially pulling up the three-hour average speed. To explore this possibility, SACOG drilled down to see how speeds varied over each hour, specifically narrowing the PM peak period from 3:00-6:00 pm down to 4:30-5:30 pm. Travel speeds were significantly slower in the 4:30 pm-5:30 pm hour than during the 3:00-6:00 pm peak period. However, because one-hour traffic patterns may be very location-specific, SACOG and the Working Group are opting for a three-hour time period to better capture regional congestion patterns.

1. Challenges with Annual Data

Annual data present two potential complications. One issue is that they include summer months, during which time schools are out of session and a higher than average portion of the workforce is on vacation, resulting in traffic speeds that are faster than during the rest of the year. These higher summer speeds may be pulling up annual average speeds such that they seem faster than Working Group members' perceptions.

A second complication with annual data is that over 110 road segments – representing nearly 60 percent of the CMP network – only have speed data for the months of November and December. Due to higher than normal holiday and shopping-related traffic, vehicle speeds are likely to be lower than during the rest of the year, and peak periods may vary. These segments would be inaccurate if included in a map or data set that was supposed to show annual data.

2. October AM and PM Peak Period

To address the challenges presented by annual data, SACOG staff focused on looking at peak period speeds averaged for the month of October, rather than over the entire year, since most schools are in session and fewer people are out of town on vacation. As expected, October peak period average traffic speeds are slower than annual peak period traffic speeds. However, as described above, October data were missing for over 110 road segments, leaving out significant portions of several key arterials.

3. October PM Peak Hour

In addition to considering October peak period (6:00-9:00 am and 3:00-6:00 pm) speeds, SACOG staff drilled down to October peak hour speeds (for 4:30-5:30 pm) to eliminate the influence of both lower-volume summer months and potentially faster traffic speeds occurring during the first hour of the PM peak period.

Of all month/time period combinations explored, October PM peak hour traffic speeds were the slowest. However, as was the case for the October three-hour peak period speeds, the NPMRDS was missing October data for substantial portions of the CMP network. Thus, a challenge of relying on October data for providing a complete and accurate picture of regional congestion is that a significant portion of the CMP road network lacks speed data for the month, including all TMC segments on El Camino Avenue and substantial portions of Fulton Avenue and Folsom-Auburn Road. To address this, we attempted to combine the data from several other months, March, April, and September. However, most of the

segments missing October data were also missing data for these months, making their addition of little extra value. Bearing in mind these missing data, we will use October data for this CMP while exploring the extent of data coverage in the NPMRDS for subsequent years.

NPMRDS Traffic Speed Reasonableness Checks

1. Overview

In response to concerns that NPMRDS speed data in certain areas during the peak periods appear to be faster than staff and Working Group members' experiences indicate, SACOG also undertook several reasonableness checks to get a better sense of the reliability of the NPMRDS data.

The NPMRDS data are from 2015 and are comprised of continuous five-minute increments for road segments known as TMCs.

2. Comparisons

Inrix Data

SACOG staff compared the NPMRDS data with Inrix data from 2012. While the Inrix data are three years older and capture speed data in 15-minute increments instead of the NPMRDS's 5-minute increments, these differences should not drastically affect the time period compared. The Inrix data also has the advantage of using a very similar road segmentation system, allowing reasonably accurate location-specific speed comparisons.

For an apples-to-apples comparison, we compared the annual average speed for each data set for the month of September, Monday-Friday, from 3:00-6:00 pm in each set's respective year.

Inrix Comparison Findings

The 2012 Inrix speeds were overall slightly faster than the 2015 NPMRDS data, but the difference was reasonably minor. In particular:

- Per Table 4-1 Overall Speed Differences, 2012 Inrix vs. 2015 NPMRDS, the average travel speed for all TMCs was 4 MPH slower for 2015 NPMRDS data than for 2012 Inrix data.
- As shown on the histogram in Table 4-1, average 2015 NPMRDS speeds were 0-5 MPH slower speeds on 815 TMCs (about 46 percent of all TMCs).
- 2015 NPMRDS speeds were within +/- 5 MPH of 2012 Inrix speeds for two thirds of TMCs

Table 4-1 Overall Speed Differences, 2012 Inrix vs. 2015 NPMRDS

Aggregate Values	MPH Change (CMP)
Biggest Speed Decrease	-27.9
Biggest Speed Increase	15.3
Average Speed Change	-4.0

Figure 4-1 Histogram of TMC Count by Speed Change.

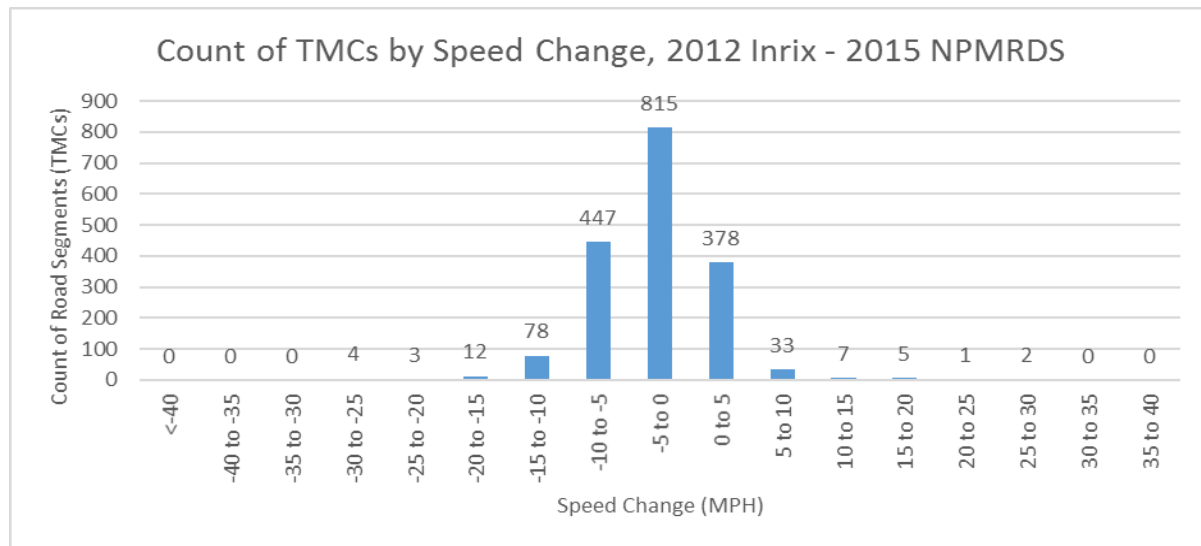


Figure 4-2 provides a segment map comparing NPMRDS and Inrix speed data. Overall, most NPMRDS speeds were within five miles per hour of Inrix speeds, and generally a few miles per hour slower, which could be consistent with population and economic growth occurring during the three years that elapsed between each data set's collection period. In turn, it is reasonable to conclude the Inrix data corroborate the NPMRDS data.

3. Google Typical Traffic

As a second reasonableness check, SACOG staff compared Google Maps' traffic layer with the NPMRDS data, specifically for the "typical traffic" they show for different periods on weekdays from 3:00-6:00 pm.

Google Maps Limitations and Results

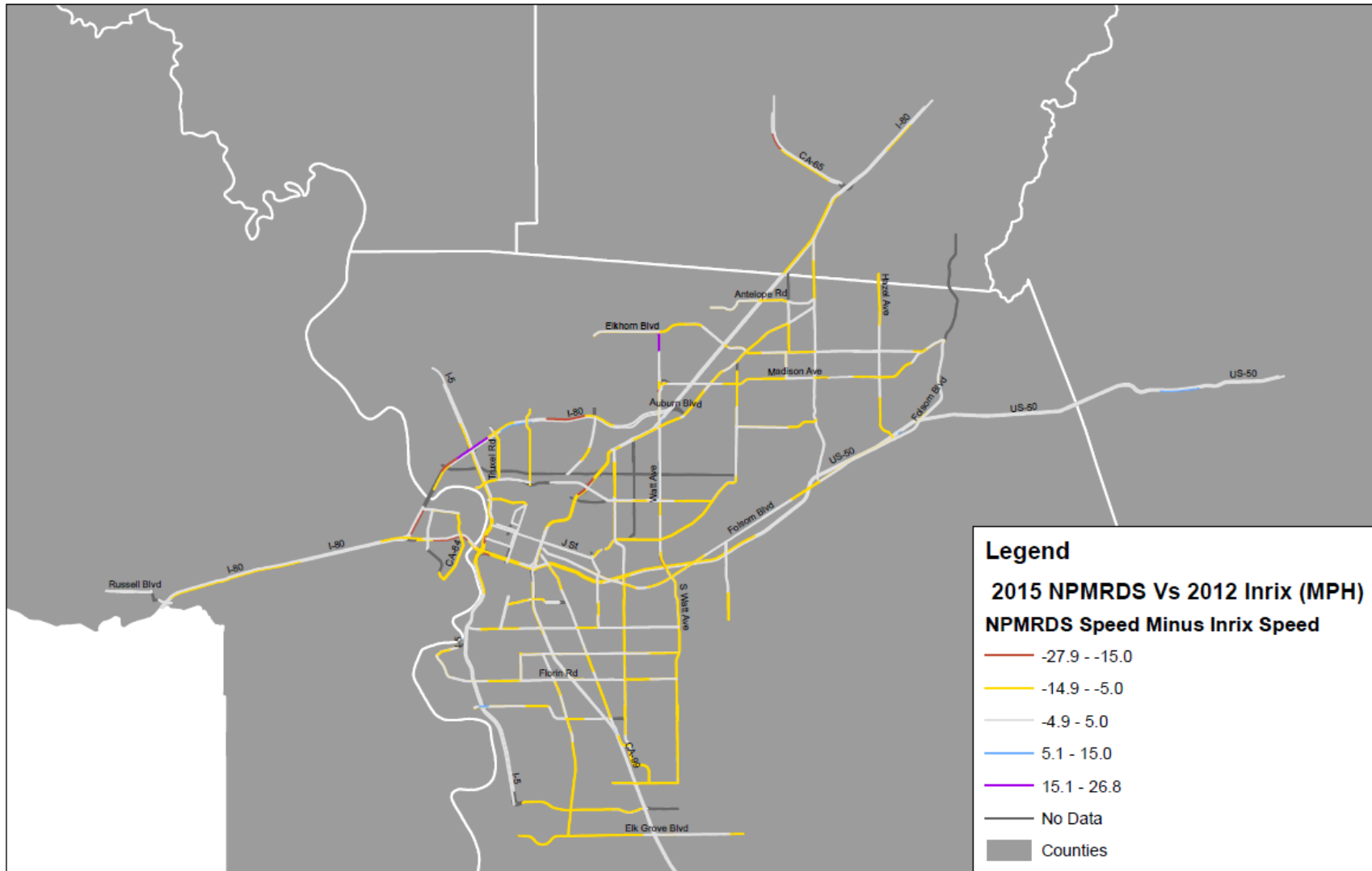
Google Maps traffic information has several limitations for comparison, including:

- While the NPMRDS speeds reflect average speeds for a one- or three-hour period, Google Traffic data are in 15-minute increments. Consequently, the NPMRDS data may be smoothing out those peaks and therefore appear different from Google's 15-minute "peak" speeds.
- Google does not provide the exact speed ranges that correspond to each color band, so traffic speeds that appear as red, or "slow" on Google traffic may have a close speed value to the NPMRDS data but appear as a different color.
- There is no date or seasonal information tied to the "typical" traffic data, so it is impossible to know whether the data can reasonably be compared to 2015 data.
- Google has four speed categories, while SACOG is using five speed categories for the NPMRDS data.

Based on a sample of checks throughout the region and bearing in mind the aforementioned weaknesses with the comparison, NPMRDS speeds are not radically different Google typical traffic speeds. Arterials with NPMRDS speeds of 15-25 MPH generally show up as orange, or Google's second-fastest arterial speed color, while arterials with NPMRDS speeds of <15 MPH correspond to a mix of orange and red Google speed colors.

Figure 4-2 Comparison of 2012 Inrix to 2015 NPMRDS Traffic Speeds, Month of September

Sep 2015 NPMRDS Speed Vs Sep 2012 Inrix Speed, Mon-Fri 3pm-6pm



Negative values = Inrix speeds were faster than NPMRDS speeds
 Positive values = NPMRDS speeds faster than Inrix speeds

Other NPMRDS Data Challenges

1. Off-Peak Weekend Hours for El Dorado and Placer Counties

Due to the relatively high number of tourism trip generators, El Dorado and Placer Counties' peak periods likely differ from the normal Monday-Friday AM and PM peaks experienced in the rest of the region. El Dorado experiences further congestion-related challenges in the City of Placerville, where US-50 transitions from being a limited-access freeway to an arterial with traffic signals and several at-grade intersections.

As an initial attempt to account for El Dorado County congestion, SACOG looked at hourly average traffic speeds on major highways in the county from 4:00-8:00 pm on Friday evenings and for all 24 hours of Saturdays and Sundays during the month of July. The initial analyses indicated little variation in average speeds throughout weekend hours with generally low congestion. However, based on conversations with the El Dorado County Transportation Commission's representative on the Working Group, providing an accurate picture of congestion-related issues faced by Placerville and the county will require a more nuanced look at speeds during specific holiday periods and seasons. To aid in this future analysis SACOG will continue collaborating with both El Dorado County and Placer County staff and refer to local travel studies for those areas.

2. Conclusion

Although there were concerns with the data as described above, based on reasonableness checks performed thus far the data we used appear to be reasonable for purposes of enabling us to identify deficient segments and develop effective strategies to address regional congestion issues. Data issues described above will be considered in future CMP iterations.

3. Long TMC Segments

Several TMC segments were particularly long, most notably two that represent the two directions of Sunrise Blvd south of US-50, which is seven miles long. These long TMC segments make it difficult to pinpoint congested locations that may only affect travel along a small portion of the segment. While this issue only affected a small portion of TMC segments, SACOG staff considers it important to mention as we have omitted the seven-mile segment of Sunrise Blvd due to its length.

4. Caltrans PeMS

For a more apples-to-apples comparison, SACOG is working with Caltrans to obtain historical PeMS speed data for limited access freeways in the SACOG region, specifically comparing PeMS speeds to NPMRDS speeds for 3pm-6pm weekday averages during the month of October 2015. While this comparison will not consider arterial roads, as a sample it will be useful as a reasonableness check.

Chapter 5 Analyze Congestion Problems and Needs

1. Combined Road Performance Metric

To start the process of organizing performance metrics in a way that helps the data inform decisions and action plans, SACOG developed a visualization approach combining congestion and reliability measures and identifies CMP actions appropriate for segments based on these combinations. The potential CMP actions are:

- **Monitor**—all CMP segments will continue to be monitored, which means that basic data for CMP performance measures are collected, aggregated, and analyzed. Monitoring is subject to availability of data for the performance measures.
- **Diagnose/Assess**—For a subset of CMP segments meeting congestion/reliability criteria, diagnosis or assessment of problems contributing to congestion or reliability conditions will be performed. Wherever possible, existing assessments (e.g. traffic studies, CSMPs, etc.) will be used.
- **Improvement Plans**—For a smaller subset of CMP segments meeting more rigorous congestion/reliability criteria, improvement plans to reduce or solve diagnosed problems will be developed or assembled. Again, whenever possible, existing improvement plans will be used.

The matrix in [Table 5-1](#) presents each combination of reliability and congestion thresholds and the CMP actions associated with those combinations. Line color represents reliability level while thickness indicates congestion intensity. As an example, if a road segment's travel speed is more than 65 percent of the free-flow speed and its 80th percentile travel time is less than 1.35 times the 50th percentile travel time, then that segment is both reliable and has low congestion, is indicated by a thin green line, and is identified for monitoring only. The color/thickness scheme shown in Table 5-1 will be used for mapping analysis.

Thresholds for heavy congestion (with observed average speed less than 60 percent of the free-flow speed) and unreliable road segments (with an 80th percentile travel time more than 1.5 times longer than the 50th percentile travel time) are based on thresholds for congestion delay and reliability established in the most recent MAP-21 rule. These thresholds are initial thresholds only, using the MAP-21 thresholds as a starting point. Through experimentation with other data sets and further analyses SACOG staff and partner agencies will review these thresholds and adjust them based on how appropriately they align with region-specific congestion management objectives.

Table 5-1 Matrix of Initial Reliability and Congestion Thresholds***

	Reliable	Moderately Unreliable	Very Unreliable
Congestion Level	LOTTR ² < 1.35	LOTTR 1.35-1.5	LOTTR ≥1.5
Low (≥65% of free-flow ³)	 No Problem	 Low Congestion, Semi-Reliable	 Low Congestion, Unreliable
Med (60-65% of free-flow)	 Medium Congestion, Reliable	 Medium Congestion, Semi-Reliable	 Medium Congestion, Unreliable
High (<60% of free-flow)	 High Congestion, Reliable	 High Congestion, Semi-Reliable	 High Congestion, Unreliable

*LOTTR = Level of travel time reliability, or the 80th percentile travel time / 50th percentile travel time.

**Free-flow speed is the 85th percentile epoch speed between 6pm and 6am.

***DRAFT thresholds shown. Final thresholds will be based on additional analysis and testing.

Table 5-2 below takes the color-thickness combinations in Table 5-1 and helps prioritize segments and corridors for actions. For example, road segments that are uncongested and reliable will be monitored but not require any improvement plan or strategies, while poorly performing segments will be prioritized for improvements or developing strategies for managing their performance.

Table 5-2 Action Matrix for Performance Levels

Performance Level	Actions to Take		
	Monitor	Diagnose/Assess	Improvement Plan
1 	X		
2 	X		
3 	X	X	
4 	X	X	
5 	X	X	
6 	X	X	X
7 	X	X	
8 	X	X	X
9 	X	X	X

² LOTTR = Level of travel time reliability, or the 80th percentile travel time / 50th percentile travel time

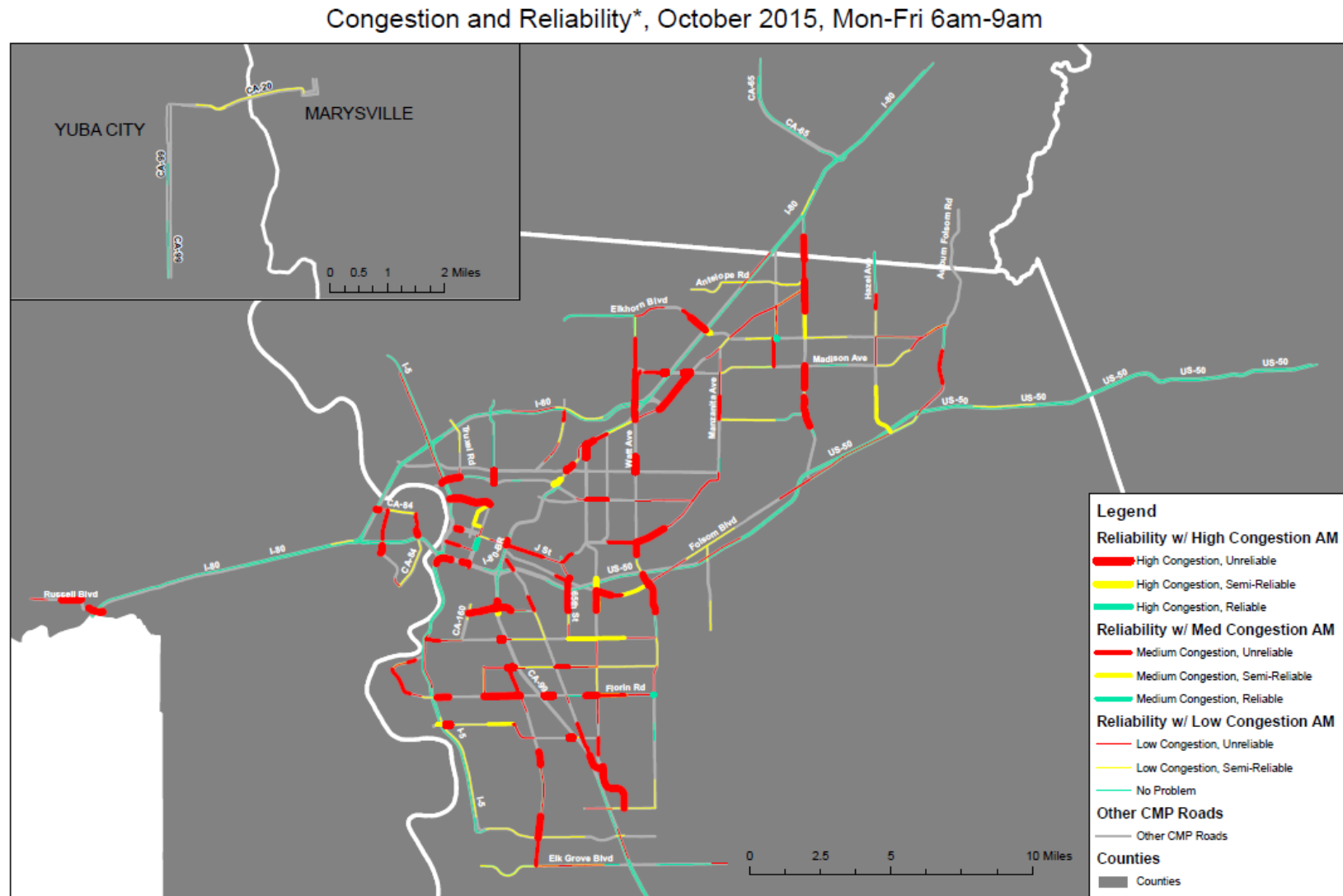
³ Free-flow speed is the 85th percentile epoch speed between 6pm and 6am.

2. Mapping the Combined Metric

The three maps that follow spatially present the visual scheme presented in the matrix in Table 5-1. The first two illustrate the congestion and reliability levels of each CMP road segment, broken out into the AM and PM peak periods.

Following data collection and assessment, SACOG then went on to look at performance metrics to analyze congestion problems and needs, with input from the Working Group. Figure 5-1, 5-2 and 5-3 use the October 2015 data described in Chapter 5 to show combined congestion and reliability metrics for the morning and afternoon peak periods. Figure 5-3, combining AM and PM peak period data, highlights the most deficient CMP segments with both high congestion and poor reliability. It also distinguishes between segments that are both congested and unreliable during just the AM or PM peak periods (colored blue) versus segments that are deficient during both the AM and PM peak period (colored orange).

Figure 5-1 Combined Road Performance Metric, AM Peak

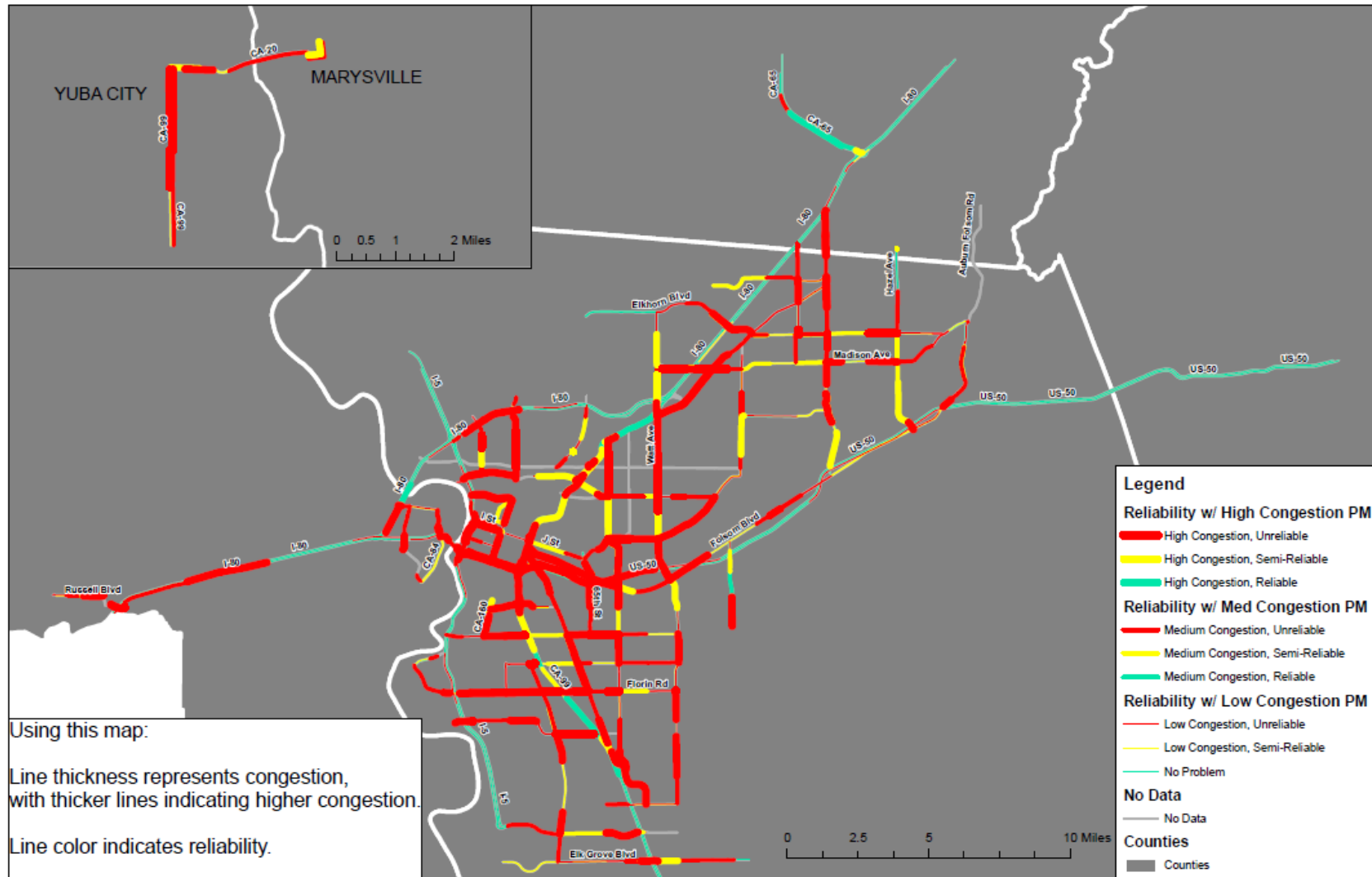


*Congestion = observed speed / unconstrained speed. High congestion threshold is 0.60.

*Reliability = 80th percentile travel time / 50th percentile travel time. Threshold for being unreliable is 1.50.

Figure 5-2 Combined Road Performance Metric, AM Peak

Congestion and Reliability*, October 2015, Mon-Fri 3pm-6pm



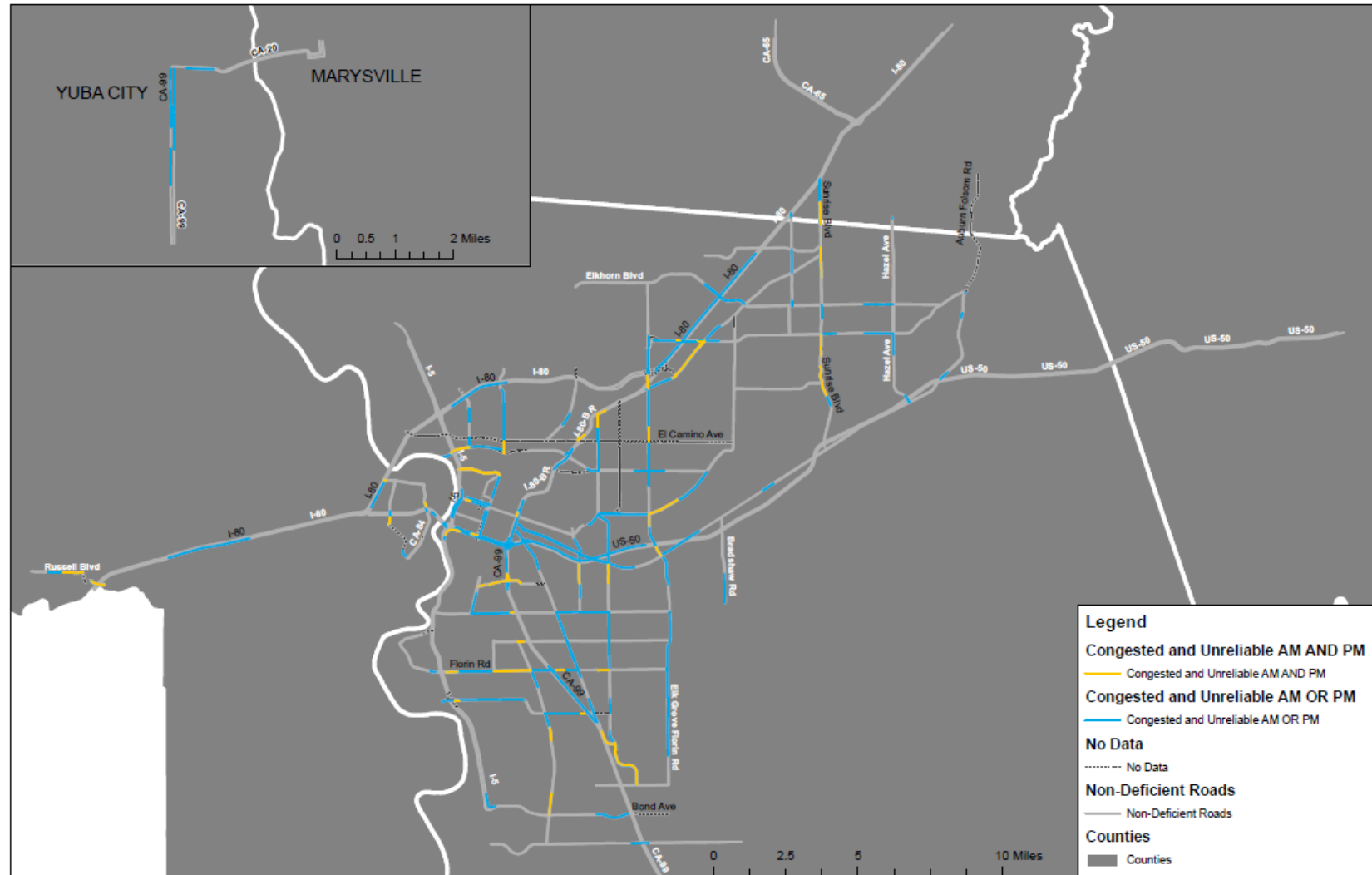
*Congestion = observed speed / unconstrained speed. High congestion threshold is 0.60.

*Reliability = 80th percentile travel time / 50th percentile travel time. Threshold for being unreliable is 1.50.

Updated 3/27/2017

Figure 5-3 Combined Road Performance Metric, AM Peak

Congestion and Reliability*, October 2015, Mon-Fri 6am-9am



*Congestion = observed speed / unconstrained speed. High congestion threshold is 0.60.

*Reliability = 80th percentile travel time / 50th percentile travel time. Threshold for being unreliable is 1.50.

Updated 3/31/2017

3. Draft Deficient Corridor Selection

1. Selection Criteria

Incorporating the aforementioned color matrix, SACOG identified select corridors as deficient based on the following criteria:

- They contain multiple continuous or semi-continuous segments that experience both high congestion and have very unreliable travel times during the AM or PM peak period, per the initial thresholds described in the color matrix in *Table 5-1*; and
- They have CMP priority transit on those segments over a considerable length.

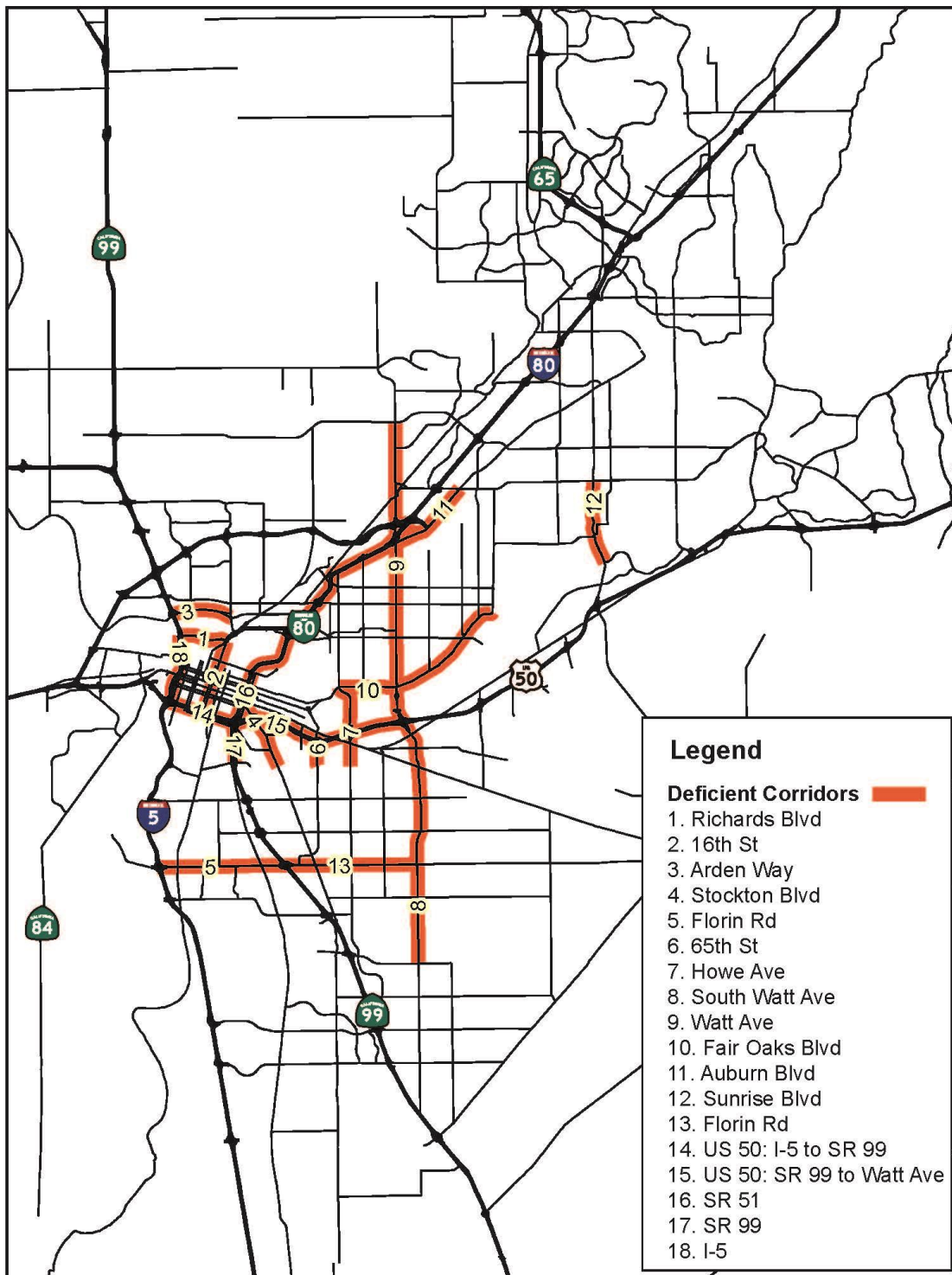
2. Draft Deficient Corridor List

The initial deficient corridors are listed below and mapped out in Figure 5-4. This is an initial list defined by the Working Group based on the above criteria. We will be looking at different strategies that can be identified and assessed for managing congestion and unreliability along these corridors.

1. Richards Blvd: I-5 to 16th St
2. 16th St: Richards Blvd to US 50
3. Garden Highway: I-5 to Northgate Blvd
4. Stockton Blvd: Alhambra Blvd to 14th Ave
5. Florin Rd: I-5 to Franklin Blvd
6. 65th St: Folsom Blvd to 14th Ave
7. Howe Ave/Power Inn Rd: Fair Oaks Blvd to 14th Ave
8. South Watt Ave/ Elk Grove Florin Rd: Folsom Blvd to Calvine Road
9. Watt Ave: Folsom Blvd to Elkhorn Blvd
10. Fair Oaks Blvd: Howe Ave to Manzanita Ave
11. Auburn Blvd: Watt Ave to Madison Ave
12. Sunrise Blvd: Madison Ave to Gold Country Blvd
13. Florin Road: Franklin Blvd to Elk Grove Florin Road/South Watt Ave
14. US 50: I-5 to SR 99
15. US 50: SR 99 to Watt Avenue
16. SR 51: US 50 to I-80
17. SR 99: US 50 to 14th Ave
18. I-5: US 50 to Richards Blvd

Figure 5-4 CMP Deficient Corridor Map

CMP Deficient Corridor Map



3. Corridors for Future Consideration

The Working Group has identified a few more corridors for further consideration. These corridors are either not represented in the identified CMP network or the level of congestion and unreliability, while high, is not as critical as the above identified corridors. These are still of interest to the Working Group, so they are listed as potential corridors as we look at improvement plans either in this round of CMP or in the future rounds.

1. SR 99: 14th Ave to Stockton Blvd
2. I-5: Richards Blvd to I-80
3. SR 99: Lincoln Rd to SR 20
4. Hazel Ave: Folsom Blvd to Placer County Line
5. Greenback Lane: I-80 to Hazel Ave
6. Madison Ave: Watt Ave to Greenback Lane
7. Jackson Road: South Watt Ave to Grant Line Road

4. Other CMP Performance Metrics Results

Appendix 2, Appendix 3, and Appendix 4 contain the measurement results of the other performance metrics defined in Chapter 3, including system-level congestion and reliability metrics, freight route performance, and land use and development data related to CMP.

Chapter 6 Identify and Assess Strategies

CMP Strategy Development

Prior to formally reviewing each individual CMP Deficient Corridor, SACOG coordinated with the CMP Working Group to solicit generalized guidance on those strategies that best match the planning context of those jurisdictions with CMP Deficient Corridors. Based on this interagency consultation, the County and City of Sacramento selected the following list of generalized strategies that achieved the greatest consistency with their current planning initiatives and goals:

Arterials

- Traffic Operations (Both);
- Intelligent Transportation Systems (Both); and,
- Transit (City of Sacramento).
- Single Occupant Vehicle Widening (County of Sacramento);
- Road Dieting (City of Sacramento);
-

For freeways, the CMP Committee (Caltrans) selected the following generalized strategies:

Freeways

- Integrated Corridor Management;
- Managed Lanes (e.g., HOV/HOT lanes, auxiliary lanes, ramp metering); and,
- Regional Transit.

Based on the above guidance relative to the detailed corridor information provided in SACOG's CMP Deficient Corridor Information Sheets (Appendix 6), SACOG identified approximately 5-8 strategies for each deficient corridor. Each strategy was provided a High / Medium / Low emphasis ranking. The ranking denotes the degree of relevance a selected strategy is anticipated to have on a given corridor. Basic criteria used to develop the recommendations is described below.

Strategy Selection Criteria

Given that the purpose of the CMP is to identify actual projects, programs, and strategies, an obvious starting point for CMP strategy development and prioritization is SACOG's MTP/SCS financially constrained project list. For strategies that currently include programmed/planned improvements – these strategies were identified as “High” emphasis. Given that these strategies already have planning traction in the jurisdiction indicates there is ample support for implementation. This includes programmed/planned single occupant vehicle capacity increasing projects. The single occupancy projects wherever proposed, was done after doing a phasing analysis to justify that those projects are needed to support the future land use growth patterns proposed in that area.

Per SACOG's CMP Working Group, ITS, operational and transit Improvements were considered preferred non-SOV capacity increasing strategies for arterial roadways. However, these strategies were only selected if the characteristics of a given corridor was considered conducive to support them. The latter was based on intersection density; intersection control types; and, the degree of existing transit services along the corridor as well as the proposed future services in MTP/SCS. If the corridor characteristics

indicated significant gaps in transit service or active transportation facilities (i.e., bike lanes or sidewalks) – these strategies were identified with “Medium” or “Low” emphasis given that the relative benefit of these strategies to significantly improve corridor operating conditions is likely less than other available strategies. Consistent with the first criteria however, if projects consistent with these strategies are already programmed/planned in SACOG’s MTP/SCS – they were given a “High” emphasis. Road Diets were identified for arterials that carry less than 25,000 ADT (based on Road Diet criteria for identifying candidate roadways). Converting from a one-way to two-way street is specific to the City of Sacramento’s Downtown Grid and therefore only applied to the 16th Street corridor.

Integrated Corridor Management was identified for freeway and arterial corridors if and only if a given corridor has sufficient parallel facilities, signal density and more than ten signalized intersections within the deficient segment. Signal-Connect/Coordination was identified if a corridor has insufficient parallel facilities/capacity and has more than ten signalized intersections within the deficient segment. Adaptive Signal Control was identified if the above two conditions were not met (i.e., insufficient parallel facilities, signal density and less than ten signalized intersections). Traveler Information System – real time transit arrival – was identified if there is ample transit service is already being provided within the corridor or there are programmed/planned transit improvements.

Targeted Travel Demand Management activities encourage a given Transportation Management Agency's (TMA) to focus efforts (promotional and/or survey activity) on participating employees who travel on CMP Deficient Corridors to and from work. TDM was ranked with a “High” emphasis if the sum of TMA employers potentially served by the deficient corridor is greater than 350 and TMA employees are greater than 120,000. A “Medium” emphasis ranking was given if the sum of TMA employers are greater than 200 (but less than 350) and TMA employees are greater than 80,000 (but less than 120,000). A “Low” emphasis ranking was given if TMA employers and total TMA employees is less than 200 and 80,000 respectively. Note that modeling is needed to better determine the demand profile or TMA market for each deficient corridor in the SACOG region. Such an analysis will better determine the anticipated benefit for employer based TDM benefits. Based on the results of such an analysis, TDM emphasis rankings could be modified.

Safety strategies were specifically called out for either highly urban or highly rural corridors. This reflects the typically greater presence of systemic safety risk factors in rural areas (curves, excessive speeds, poor horizontal/vertical sight lines etc.) and urban areas (high volume signalized intersections, pedestrian and bicycle conflicts etc.). If there are already programmed/planned safety improvements - safety strategy was given a “High” emphasis as appropriate.

Intersection Control Evaluation (i.e., evaluation of the most cost-efficient control type – stop control; signal or modern roundabout) was identified as a potential strategy if a given corridor has relatively few key intersections and the area type is less urban.

Strategy Selection

While SACOG generally followed the above criteria to select strategies, the CMP Working Group was provided an opportunity to review and suggest modifications SACOG’s strategy recommendations.

Key Project Selections

As a follow-up to the CMP strategy identification, key projects that support the “High” emphasis strategies considered most effective for potentially improving operations and/or reliability were identified for each

CMP Deficient Corridor. Project selection was typically limited to those improvements currently programmed/planned in SACOG's MTP/SCS. SACOG is currently in the process of updating its regional and local ITS Architecture and Master Plans. ITS and other smart mobility projects proposed along these deficient corridors through the update of the ITS Architecture and Master Plan process will also be used as implementation projects for the deficient corridors.

Congestion Management Strategies by Corridor

The following tables present the strategies developed for each deficient corridor based on working group input and selection criteria described above. The first table provides an at-a-glance overview of how more general strategy types apply to each corridor, with the subsequent tables detailing more specific strategies.

Some strategies refer to "programmed improvements," meaning they are associated with a specific project in the 2016 MTP financially constrained project list. More detail on these projects can be found in each corridor's appropriate profile in Appendix 6.

Table 6-1 Strategy by Corridor Overview

Strategy ID	A	B	C	D	E.1	E.2	F	G.1	G.2	G.3	H	I	J.1	J.2	K
Strategy Type	Demand Management Strategies	Arterial Operational Strategies	Managed Lanes Strategies	Land Use / Growth Management Strategies	Rubber Tire Public Transit Strategies	Passenger Rail Public Transit Strategies	Active Transportation Strategies	ITS Strategies	ITS Strategies (Integrated Corridor Management)	ITS Strategies (Traveler Information Systems)	TSM Strategies	Incident Management Strategies	Safety Improvement Strategies (Rural)	Safety Improvement Strategies (Urban)	SOV Roadway Capacity
Applicability	Arterials / Freeways	Arterials	Freeways	Arterials / Freeways	Arterials / Freeways	Arterials / Freeways	Arterials	Arterials	Arterials / Freeways	Arterials/Freeways	Arterials / Freeways	Arterials / Freeways	Arterials	Arterials	Arterials / Freeways
1. Richards Blvd	L/TBD	L			H		H	H		M				H	H
2. 16th St.	M	H			M		H		H	M	H				
3. Garden HWY	H	H			H		M	H		H				M	
4. Stockton	M	H/L			H		M			H				M	
5. Florin Rd.	L	H			H		M			H				H	
6. 65th St.	M				M			H							H
7. Howe Ave.	H	H			M					M					
8. S Watt Ave	M	H			L		M						M	M	H
9. Watt Ave	H	H			H		M							M	H
10. Fair Oaks Blvd	H	L			M		H	H							
11. Auburn	L	L			H		M	H		H					
12. Sunrise	L	L			H		L	H		H					H
13. Florin Rd.	L				H		H							H	H
14. US 50	H		H		H	H		H	H		M	L			
15. US 50	H		H		H	H		H	H		M	L			
16. SR 51	H		H		H	H		H	H		L	L			
17. SR 99	M		H		H	H		H	H		L	L			
18. I-5	H		H		H	H		H	H		L	L			
Degree of Relevance to a Specific Corridor.	Color Code														
High Relevance															
Medium Relevance															
Low Relevance															
Mix of High / Low Relevance - see Corridor Information Sheet															
Low/To Be Determined															

Table 6-2 Richards Blvd: I-5 to 16th St

Strategy ID	Strategy Type	Improvement Concept	Emphasis (H/M/L)	Comments
K	SOV Capacity Increase	Interchange Improvement	High	I-5/Richards Interchange
G.1	ITS Strategies	Adaptive Signal Control	High	See Programmed Improvement (K) At 9 signalized intersections 16th Street LRT conflict on east end of the corridor is critical
F	Active Transportation Strategies	Convert Class II to Buffered Class IV Bike Lanes	High	ROW permitting See Programmed Improvement (F)
J.2	Safety Improvement Strategies	Systemic Safety Counter Measures	High	Ped/Bike Safety Treatments at intersections and mid-block See Programmed Improvement (J.2)
E.1	Public Transit Strategies	Increase Service Frequency	High	Peak Period Service Frequency increases (candidate routes: 15, any future new routes) See Programmed/Planned Improvements (E.2)
G.3	ITS Strategies	Traveler Information Systems	Medium	Real-time transit arrival at bus stops
A	Demand Management Strategies	Employer-based TDM	Low/TBD	Targeted TMA activity (See TMA Matrix: Sacramento)
B	Operational Strategies	Access Management	Low	Queueing on east end block driveways and side streets
		Road Diet (Reduce from 4 to 2 thru lanes)	Low	Carries less than 25,000 ADT - candidate for consideration

Table 6-3 16th St: Richards Blvd to US 50

Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
G.2	ITS Strategies	Intergrated Corridor Management (Minimum move to Adaptive Signal Control)	High	Connect 16 signalized intersections (E Street to US 50) Connect with Parallel Routes within Downtown Grid
H	TSM Strategies	Parking Management/Pricing	High	See Programmed Improvements (H)
B	Operational Strategies	Emergency Vehicle -Signal Pre-emption Bus - Signal Pre-emption Access Control and Turn Restrictions Road Diet or Convert from 1-way to 2-way ⁴	High	See Programmed Improvements (B)
F	Active Transportation Strategies	Pedestrian Enhancements Bike Parking; Bike Share	High	Focus on Side Street and Alley Acces Points Carries less than 25,000 ADT - candidate for consideration For clear path and pedestrian crossings at key intersections (parallel bike facilities present) See Programmed Improvements (F)
J.2	Safety Improvement Strategies	Systemic Safety Counter Measures	High	Ped/Bike Safety Treatments at intersections and mid-block See Programmed Improvements (J.2)
E.1	Public Transit Strategies	Increase Service Frequency	Medium	Line 29 Peak Period Service Frequency to 15 min
G.3	ITS Strategies	Traveler Information Systems	Medium	Real-time transit arrival at bus stops
A	Demand Management Strategies	Employer-based TDM	Medium	Targeted TMA activity (See TMA Matrix: Sacramento, Point West)

⁴ City of Sacramento found a road diet to not be a feasible strategy at the time of this report but it will be retained as a potential future strategy.

Table 6-4 Garden Highway: I-5 to Northgate Blvd

Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	At 4 signalized intersections
G.3	ITS Strategies	Traveler Information Systems	High	Real-time transit arrival at bus stops
B	Operational Strategies	Bus-Signal Pre-emption	High	At 4 signalized intersections
E.1	Public Transit Strategies	Increase Service Frequency	High	Peak Period Service Frequency increases (candidate routes: 11, 86, 88, future new routes)
				See Planned Improvements (E.1)
				See Planned Parallel Improvement (E.2)
A	Demand Management Strategies	Employer-based TDM	High	Targeted TMA activity (See TMA Matrix: Sacramento, South Natomas, Point West)
F	Active Transportation Strategies	Convert Class II to Buffered Class IV Bike Lanes	Medium	ROW permitting
J.2	Safety Improvement Strategies	Systemic Safety Counter Measures	Medium	Ped/Bike Safety Treatments at intersections and mid-block

Table 6-5 Stockton Blvd: Alhambra Blvd to 14th Ave

Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
B	Operational Strategies	Interconnect and Coordinate Signals Bus-Signal Pre-emption	High	At 16 signalized intersections (E Street to US 50) At 16 signalized intersections (E Street to US 50)
G.3	ITS Strategies	Traveler Information	High	Real-time transit arrival at bus stops
E.1	Public Transit Strategies	Increase Service Frequency	High	Peak Period Service Frequency increases (candidate routes: 51, 38, future new routes)
See Planned Improvements (E.1)				
F	Active Transportation Strategies	Provide Class II Alhambra to 4th Avenue	Medium	ROW Permitting - Fill Class II Gap
J.2	Safety Improvement Strategies	Systemic Safety Counter Measures	Medium	Ped/Bike Safety Treatments at intersections and mid-block
A	Demand Management Strategies	Employer-based TDM	Medium	Targeted TMA activity (See TMA Matrix: Sacramento)
B	Operational Strategies	Road Diet (Reduce from 4 to 2 thru lanes)	Low	Carries less than 25,000 ADT - candidate for consideration

Table 6-6 Florin Rd: I-5 to Franklin Blvd

Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
B	Operational Strategies	Interconnect and Coordinate Signals	High	At 15 signalized intersections
G.3	ITS Strategies	Traveler Information Systems	High	Real-time transit arrival at bus stops
E.1	Public Transit Strategies	Increase Service Frequency	High	Peak Period Service Frequency increases (candidate routes: 81, 54, future new routes)
				See Planned Improvements (E.1)
J.2	Safety Improvement Strategies	Systemic Safety Counter Measures	High	Ped/Bike Safety Treatments at intersections and mid-block
				See Programmed Improvements (J.2)
F	Active Transportation Strategies	Fill Gaps to provide continuous Class II Convert Class III to Class II	Medium	Numerous Locations (see Roadway Characteristics)
A	Demand Management Strategies	Employer-based TDM	Low	Targeted TMA activity as applicable (See TMA Matrix: Sacramento and Power Inn)

Table 6-7 65th St: Folsom Blvd to 14th Ave

Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
K	SOV Capacity Increase	Segment Widening	High	Widen to 5 lanes US 50 - Broadway See Programmed Improvement (K)
G.1	ITS Strategies	Adaptive Signal Control	High	At 6 signalized intersections
E.1	Public Transit Strategies	Increase Service Frequency	Medium	Peak Period Service Frequency increases (candidate routes: 38, 65, 81, future new routes) See Planned Parallel Facility Improvement (E.1)
A	Demand Management Strategies	Employer-based TDM	Medium	Targeted TMA activity (See TMA Matrix: Sacramento, Power Inn)

Table 6-8 Howe Ave/Power Inn Rd: Fair Oaks Blvd to 14th Ave

Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	At 10 signalized intersections "OR"
B	Operational Strategies	Interconnect and Coordinate Signals Bus-Signal Pre-emption	High	Connect and Coordinate 10 signalized intersections at 10 signalized intersections
A	Demand Management Strategies	Employer-based TDM	High	Targeted TMA activity (See TMA Matrix: Sacramento, Power Inn, South Natomas)
G.3	ITS Strategies	Traveler Information Systems	Medium	Real-time transit arrival at bus stops
E.1	Public Transit Strategies	Increase Service Frequency	Medium	Line 26 Peak Period Service Frequency to 15 min

Table 6-9 South Watt Ave/ Elk Grove Florin Rd: Folsom Blvd to Calvine Road

Strategy ID	Strategy Type	Improvement Concept	Emphasis (H/M/L)	Comments
K	SOV Capacity Increase	Segment Widening New Interchanges	High	Widen from 4 to 6 lanes (Elder to Keifer Blvd) Widen from 2 to 4 lanes (Florin to Jackson Road) New Interchange at Watt/Jackson Rd. New Interchange at Watt/Folsom See Planned Improvement (K)
B	Operational Strategies	Signal Connect-Coordination Intersection Channelization (consistent with K)	High	14 Signalized Intersections Intersection Channelization, Signal Timing; Signal Priority (per Strategy K) SSSC Intersections and Signalized Intersections
A	Demand Management Strategies	Employer-based TDM	Medium	Targeted TMA activity (See TMA Matrix: Power Inn, Elk Grove, 50 Corridor)
J.1 - J.2	Safety Improvement Strategies	Systemic Safety Counter Measures	Medium	Ped/Bike Safety Treatments; Splinter Islands at SSSC Intersections Illumination, rumble strips, reflective treatments, ped/bike treatments mid-block
F	Active Transportation Strategies	Either close Class II gaps or convert to Buffered Class IV	Medium	Dependent on Phasing of Strategy K
E.1	Public Transit Strategies	Establish Fixed Route Transit Service	Low	Currently no fixed route service - dependent on future growth.

Table 6-10 Watt Ave: Folsom Blvd to Elkhorn Blvd

Strategy ID	Strategy Type	Improvement Concept	Emphasis (H/M/L)	Comments
K	SOV Capacity Increase	Segment Widening	High	Widen from 4 to 6 lanes (Palm to Don Julio Blvd) Couplet - widen to 6 lanes NB on Watt and SB on 34 St. BRT/Hi Exclusive Lanes
		New Interchange (see also 8-South Watt)		New Interchange at Watt/Folsom
				See Planned Improvement (K)
E.1	Public Transit Strategies	Increase Service Frequency	High	Lines 80, 82, 84, and 86 Peak Period Service Frequency to 30 min
				See Planned Improvement (E.1)
B	Operational Strategies	Signal Connect-Coordination Intersection Channelization (consisten with K)	High	36 Signalized Intersections Intersection Channelization, Signal Timing; Signal Priority (per Strategy K) SSSC Intersections and Signalized Intersections
A	Demand Management Strategies	Employer-based TDM	High	Targeted TMA activity (See TMA Matrix: Power Inn, Point West, McClellen Park)
J.2	Safety Improvement Strategies	Systemic Safety Counter Measures	Medium	Ped/Bike Safety Treatments; Splinter Islands at SSSC Intersections Illumination, rumble strips, reflective treatments, ped/bike treatments mid-block
F	Active Transportation Strategies	Either close Class II gaps or convert to Buffered Class IV	Medium	Dependent on Phasing of Strategy K

Table 6-11 Fair Oaks Blvd: Howe Ave to Manzanita Ave

Strategy ID	Strategy Type	Improvement Concept	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	At 6 signalized intersections
F	Active Transportation Strategies	Class II gaps or convert to Buffered Class IV	High	ROW Permitting
A	Demand Management Strategies	Employer-based TDM	High	Targeted TMA activity (See TMA Matrix: Sacramento, Power Inn, Point West)
E.1	Public Transit Strategies	Establish Fixed Route Transit Service	Medium	Expand Lines 23, 25, and 29 Peak Period Service from Arden to Howe
B	Operational Strategies	Intersection Control Evaluations	Low	Operational Determinations of Control Type (Consider Roundabout Corridor)

Table 6-12 Auburn Blvd: Watt Ave to Madison Ave

Strategy ID	Strategy Type	Improvement Concept	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	At 8 signalized intersections
G.3	ITS Strategies	Traveler Information Systems	High	Real-time transit arrival at bus stops
E.1	Public Transit Strategies	Increase Service Frequency	High	Line 82 Peak Period Service Frequency to 15 min
				See Planned Improvement (E.1)
				See Planned Parallel Facility Improvement (E.1)
F	Active Transportation Strategies	Class II gaps or convert to Buffered Class IV	Medium	ROW Permitting
B	Operational Strategies	Road Diet (Reduce from 4 to 2 thru lanes Intersection Control Evaluation	Low	Carries less than 25,000 ADT - candidate for consideration Operational Determinations of Control Type (Consider Roundabout Corridor)
A	Demand Management Strategies	Employer-based TDM	Low	Targeted TMA activity as applicable (See TMA Matrix: Point West, Sacramento)

Table 6-13 Sunrise Blvd: Madison Ave to Gold Country Blvd

Strategy ID	Strategy Type	Improvement Concept	Emphasis (H/M/L)	Comments
K	SOV Capacity Increase	Segment Widening	High	Widen from 6 to 8 lanes (Madison to Gold Country) See Planned Improvement (K)
G.1	ITS Strategies	Adaptive Signal Control	High	At 6 signalized intersections See Planned Improvement (K)
G.3	ITS Strategies	Traveler Information Systems	High	Real-time transit arrival at bus stops
E.1	Public Transit Strategies	Increase Service Frequency	High	Line 21 Peak Period Service Frequency to 15 min See Planned Improvement (E.1) See Planned Parallel Facility Improvement (E.1)
B	Operational Strategies	Intersection Control Evaluations	Low	Operational Determinations of Control Type (Consider Roundabout Corridor)
F	Active Transportation Strategies	Stripe for Class II	Low	ROW Permitting
A	Demand Management Strategies	Employer-based TDM	Low	Targeted TMA activity as applicable (See TMA Matrix: 50 Corridor)

Table 6-14 Florin Road: Franklin Blvd to Elk Grove Florin Road/South Watt Ave

Strategy ID	Strategy Type	Improvement Concept	Emphasis (H/M/L)	Comments
K	SOV Capacity Increase	Segment Widening	High	Widen from 4 to 6 lanes (Florin Perkins to Elk Grove Florin) See Planned Improvement (K)
F	Active Transportation Strategies	Class II gaps or convert to Buffered Class IV	High	ROW Permitting See Programmed Improvement (F)
J.2	Safety Improvement Strategies	Ped/Bike Safety Treatments	High	Intersections and mid-block See Programmed Improvement (J.2)
E.1	Public Transit Strategies	Expand Transit Service and Increase Service Frequency	High	Peak Period Service Frequency increases (candidate routes: 47, 54, 65, 67, 81, future new routes) See Planned Improvement (E.1)
A	Demand Management Strategies	Employer-based TDM	Low	Targeted TMA activity (See TMA Matrix: Sacramento, Power Inn)

Table 6-15 US 50: I-5 to SR 99

Strategy ID	Strategy Type	Improvement Concept	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	Ramp Termini + 1 service road intersection: 24-hr Operation
G.2	ITS Strategies	Intergrated Corridor Management	High	US 50 Mainline and Parallel System - TMC Coordination
C	Managed Lanes Strategies		High	See Planned Improvement (G.2)
				Aux Lanes; HOV/HOT Lanes; HOV Bypass Lanes at Ramps; Ramp Metering or Improving Existing Meter Rates
				See Planned Bus/Carpool lane connector Improvement (C) See Programmed HOV Improvement (C)
E.1	Rubber Tire Public Transit Strategies	Enhanced Regional Commuter Services	High	Inter-City and Inter-County Services (candidates: El Dorado Transit commuter routes)
E.2	Passenger Rail Public Transit Stragies	Light Rail Extensions or Service Enhancements	High	RT Service Lines
A	Demand Management Strategies	Employer-based TDM	High	See Planned Improvement (E.2)
				Targeted TMA activity (See TMA Matrix: Sacramento, Power Inn, US 50)
H	TSM	Park-and-Ride Lots	Medium	New/Expanded Park-and-Ride Lot Locations
I	Incident Management Strategies	Freeway Service Patrols	Medium	Currently being implemented

Table 6-16 US 50: SR 99 to Watt Avenue

Strategy ID	Strategy Type	Improvement Concept	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	Ramp Termini + 1 service road intersection: 24-hr Operation
G.2	ITS Strategies	Intergrated Corridor Management	High	US 50 Mainline and Parallel System - TMC Coordination
C	Managed Lanes Strategies		High	Aux Lanes; HOV/HOT Lanes; HOV Bypass Lanes at Ramps; Ramp Metering or Improving Existing Meter Rates
				See Programmed Aux-lane Improvement (C)
				See Programmed HOV Improvement (C)
				See Planned Connector Ramp (C)
E.1	Rubber Tire Public Transit Strategies	Enhanced Regional Commuter Services	High	Inter-City and Inter-County Services (candidates: El Dorado Transit commuter routes)
E.2	Passenger Rail Public Transit Stragies	Light Rail Extensions or Service Enhancements	High	See Planned Improvement (E.2)
A	Demand Management Strategies	Employer-based TDM	High	Targeted TMA activity (See TMA Matrix: Sacramento, Power Inn, US 50)
H	TSM	Park-and-Ride Lots	Medium	New/Expanded Park-and-Ride Lot Locations
I	Incident Management Strategies	Freeway Service Patrols	Medium	Currently being implemented

Table 6-17 SR 51: US 50 to I-80

Strategy ID	Strategy Type	Improvement Concept	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	Ramp Termini + 1 service road intersection: 24-hr Operation
G.2	ITS Strategies	Intergrated Corridor Management	High	US 50 Mainline and Parallel System - TMC Coordination
C	Managed Lanes Strategies		High	Aux Lanes; HOV/HOT Lanes; HOV Bypass Lanes at Ramps; Ramp Metering or Improving Existing Meter Rates
				See one (1) Planned Aux-lane Improvement and two (2) Planned Tranistion Lanes (C)
				See five (5) Planned HOV Improvement (C)
				See Two (2) Programmed Transition and Ramp Meter Improvement (C)
E.1	Rubber Tire Public Transit Strategies	Enhanced Regional Commuter Services	High	(candidates: Roseville Transit and Placer County Transit commuter routes)
				See Planned Parallel Facility Improvement (E.1)
E.2	Passenger Rail Public Transit Stragies	Light Rail Extensions or Service Enhancements	High	RT Service Lines
A	Demand Management Strategies	Employer-based TDM	High	Targeted TMA activity (See TMA Matrix: Sacramento, Point West, Placer County TPA, City of Roseville)
I	Incident Management Strategies	Freeway Service Patrols	Medium	Currently being implemented
H	TSM	Park-and-Ride Lots	Medium	

Table 6-18 SR 99: US 50 to 14th Ave

Strategy ID	Strategy Type	Improvement Concept	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	Ramp Termini + 1 service road intersection: 24-hr Operation
G.2	ITS Strategies	Intergrated Corridor Management	High	US 50 Mainline and Parallel System - TMC Coordination
C	Managed Lanes Strategies		High	Aux Lanes; HOV/HOT Lanes; HOV Bypass Lanes at Ramps; Ramp Metering or Improving Existing Meter Rates
				See Programmed Ramp Metering Improvement (C)
E.1	Rubber Tire Public Transit Strategies	Enhanced Regional Commuter Services	High	Inter-City and Inter-County Services (candidates: E-tran commuter routes; South County Transit commuter routes)
				See Planned Parallel Facility Improvement (E.1)
E.2	Passenger Rail Public Transit Stragies	Light Rail Extensions or Service Enhancements	High	RT Service Lines
A	Demand Management Strategies	Employer-based TDM	Medium	Targeted TMA activity (See TMA Matrix: Sacramento, City of Elk Grove
I	Incident Management Strategies	Freeway Service Patrols	Medium	Currently being implemented
H	TSM	Park-and-Ride Lots	Medium	

Table 6-19 I-5: US 50 to Richards Blvd

Strategy ID	Strategy Type	Improvement Concept	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	Ramp Termini + 1 service road intersection: 24-hr Operation
G.2	ITS Strategies	Intergrated Corridor Management	High	US 50 Mainline and Parallel System - TMC Coordination
C	Managed Lanes Strategies		High	Aux Lanes; HOV/HOT Lanes; HOV Bypass Lanes at Ramps; Ramp Metering or Improving Existing Meter Rates
E.1	Rubber Tire Public Transit Strategies	Enhanced Regional Commuter Services	High	Inter-City and Inter-County Services
E.2	Passenger Rail Public Transit Stragies	Light Rail Extensions or Service Enhancements	High	RT Service Lines
A	Demand Management Strategies	Employer-based TDM	High	Targeted TMA activity (See TMA Matrix: Sacramento, South Natomas, North Natomas)
I	Incident Management Strategies	Freeway Service Patrols	Medium	Currently being implemented
H	TSM	Park-and-Ride Lots	Medium	

Chapter 7 Program and Implement Strategies

The CMP implementation plan focusses on demonstrating how SACOG is planning to integrate its Federal CMP into its other regional transportation planning and programming functions. Table 7-1 shows the list of projects that were developed to address the congestion on the deficient corridors. SACOG and the Working Group is committed to implement these projects as part of the CMP implementation plan.

Table 7-1 CMP Implementation Plan Projects

2017 CMP Implementation Plan Projects				
CMP Corridor	Description	County	Lead Agency	Strategy Type
1-Richards	I-5 at Richards Blvd. Interchange: Sacramento, Richards Blvd. and I-5; reconstruct interchange (ult). (HPP #3784)(T15088200)	Sacramento	City of Sacramento	K
1-Richards	North 12th Complete Street Phase 2: In Sacramento, on N. 12th Street from American River to H Street, including Sunbeam Street and one block of Richards Blvd.: Convert westernmost travel lane between Richards and H Street into two-way cycle track and improve connection from Two Rivers Bike Trail to Richards Blvd. Install streetscape and safety improvements, including intersection improvements, traffic control devices, striping, signage, pedestrian islands, dedicated turn lanes, on-street parking, and related streetscape, landscape, and adjacent improvements.	Sacramento	City of Sacramento	F
1-Richards	Adaptive Signal Control	Sacramento	City of Sacramento	G.1
2-16th	16th Street Streetscape: On 16th Street from S Street to N Street, pedestrian improvements including bulb-outs, landscaping and trees, banners, pavement treatments, bike racks, and street furniture, and street lights.	Sacramento	City of Sacramento	B/F
2-16th	Integrated Corridor Management	Sacramento	City of Sacramento	G.2
2-16th	Downtown Signal Improvements: Various downtown corridors bounded by I-5, Broadway, Alhambra Blvd., and C St., including the intersections of North 16th St/Sproule St-Basler St and North 16th St/North B St: Install pedestrian countdown signal heads; replace 8" with 12" vehicle signal heads; install emergency vehicle preemption equipment. (Toll credits) (HSIP7-03-013). Toll Credits for CON	Sacramento	City of Sacramento	G.1
3-Garden Hwy	Adaptive Signal Control	Sacramento	City of Sacramento	G.1
4-Stockton	Interconnect and Coordinate Signals	Sacramento	City of Sacramento	B
4-Stockton	Bus-Signal Pre-emption	Sacramento	City of Sacramento	B
5-Florin	Interconnect and Coordinate Signals	Sacramento	City of Sacramento	B

2017 CMP Implementation Plan Projects				
CMP Corridor	Description	County	Lead Agency	Strategy Type
6-65th	Adaptive Signal Control	Sacramento	City of Sacramento	G.1
7-Howe	Adaptive Signal Control	Sacramento	City of Sacramento	G.1
14-US 50;5-99	Caltrans District 3 Traffic Management Center (TMC): Upgrade Caltrans District 3 TMC to manage US 50, I-80 and other ITS Deployments	Sacramento	Caltrans D3	G.2
14-US 50;5-99	US 50 HOV Lanes (I-5 to Watt Ave.): US 50 HOV Lanes - Construct High Occupancy Vehicle (HOV) lanes on US 50 [project covers PE: from I-5 to 0.8 mile east of Watt Avenue (PM L0.2/R6.1) and CON: from 0.3 mile west of SR 99 to 0.8 mile east of Watt Avenue (PM L2.2/R6.1)]	Sacramento	Caltrans D3	C/K
15-US 50;99-Watt	US 50 65th St.. to Howe Ave. Auxiliary Lane: In the City of Sacramento, US 50, from 65th Street to east of Howe Avenue (PM R2.6/R3.8) - Construct westbound auxiliary lane [project proposes to add/extend US 50 auxiliary lane, which currently begins with the Howe Ave slip entrance, and will be extended to the east to receive traffic from the Howe Ave loop entrance ramp] (Toll Credits). Toll Credits for ENG, ROW, CON	Sacramento	Caltrans D3	C
15-US 50;99-Watt	US 50 HOV Lanes (I-5 to Watt Ave.): US 50 HOV Lanes - Construct High Occupancy Vehicle (HOV) lanes on US 50 [project covers PE: from I-5 to 0.8 mile east of Watt Avenue (PM L0.2/R6.1) and CON: from 0.3 mile west of SR 99 to 0.8 mile east of Watt Avenue (PM L2.2/R6.1)]	Sacramento	Caltrans D3	C
16-SR 51	SR 51 and SR 99 Install Ramp Meters @ Various Locations: In Sacramento County, on SR 51 and SR 99, at various locations - Install ramp meters [CTIPS ID 107-0000-1006] (Toll Credits) [EA 0F351, PPNO 6913] [child project of parent EA 0F350; second child is EA 0F352 PPNO 6913A]. Toll Credits for ENG, ROW	Sacramento	Caltrans D3	C
17-SR 99	SR 51 and SR 99 Install Ramp Meters @ Various Locations: In Sacramento County, on SR 51 and SR 99, at various locations - Install ramp meters [CTIPS ID 107-0000-1006] (Toll Credits) [EA 0F351, PPNO 6913] [child project of parent EA 0F350; second child is EA 0F352 PPNO 6913A]. Toll Credits for ENG, ROW	Sacramento	Caltrans D3	C
18-I 5	I-5 at Richards Blvd. Interchange: Sacramento, Richards Blvd. and I-5; reconstruct interchange (ult). (HPP #3784)(T15088200)	Sacramento	City of Sacramento	K

SACOG Federal CMP Integration Tasks

SACOG is planning to integrate CMP into its MTP/SCS process. As part of the update process, key CMP tasks that will be performed by SACOG include:

CMP Monitoring Schedule – 2-year cycle

SACOG is planning on preparing a CMP monitoring report every two years that includes data collection and system performance monitoring. NPMRDS data will be used primarily to monitor and analyze the system performance.

CMP Update Schedule – 4-year cycle

Every four years, SACOG is planning on doing a major CMP update, where we will be reevaluating the objectives, the performance criteria for identifying deficient corridors, identify and assess strategies as well as evaluating the effectiveness of the strategies.

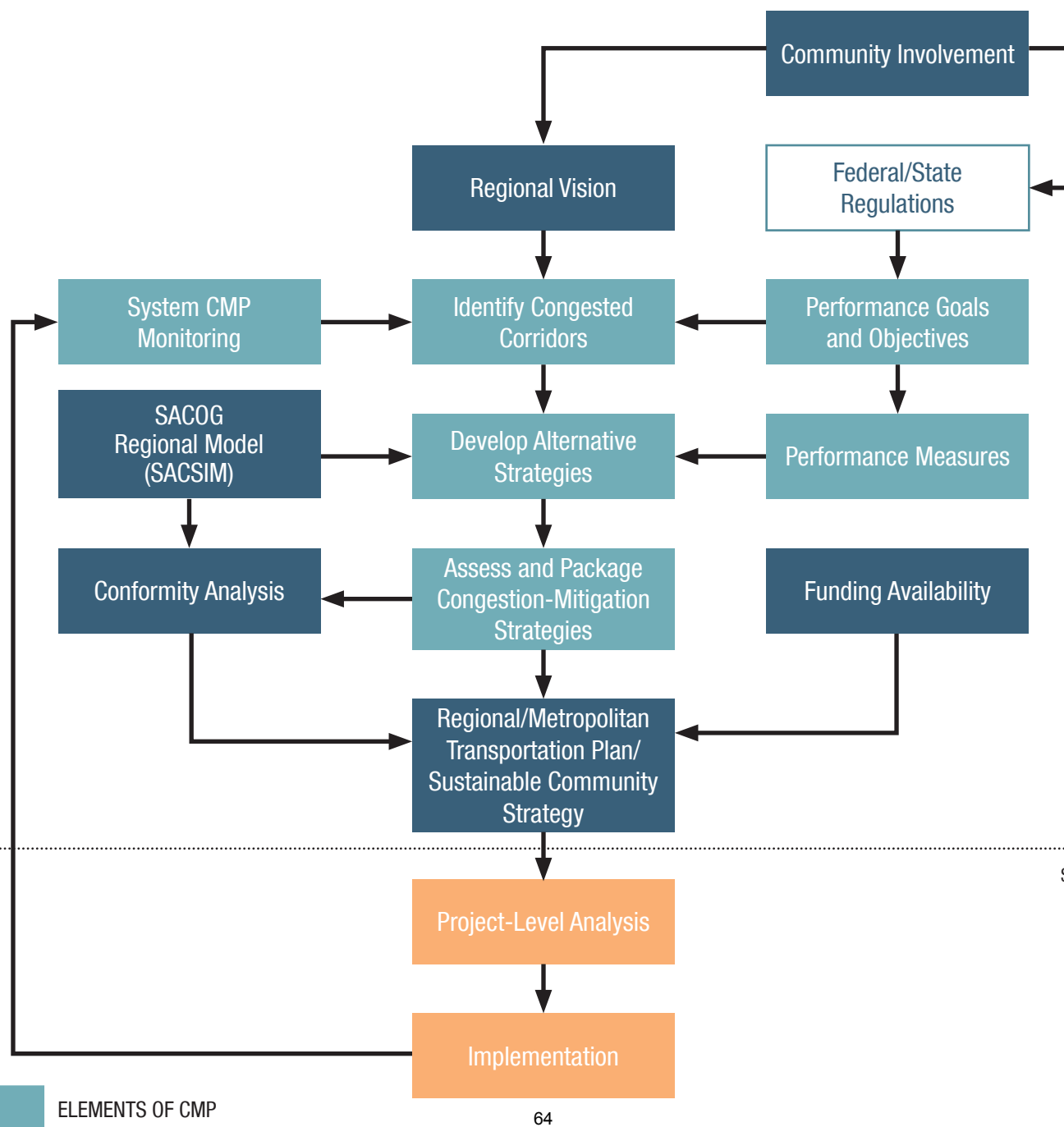
Integration into the MTP/SCS Process

Figure 7-1 shows the elements of SACOG's CMP. Figure 7-2 and Figure 7-3 shows the integration of CMP into SACOG's MTP/SCS process.

Figure 7-1 Elements Of SACOG's Congestion Management Process



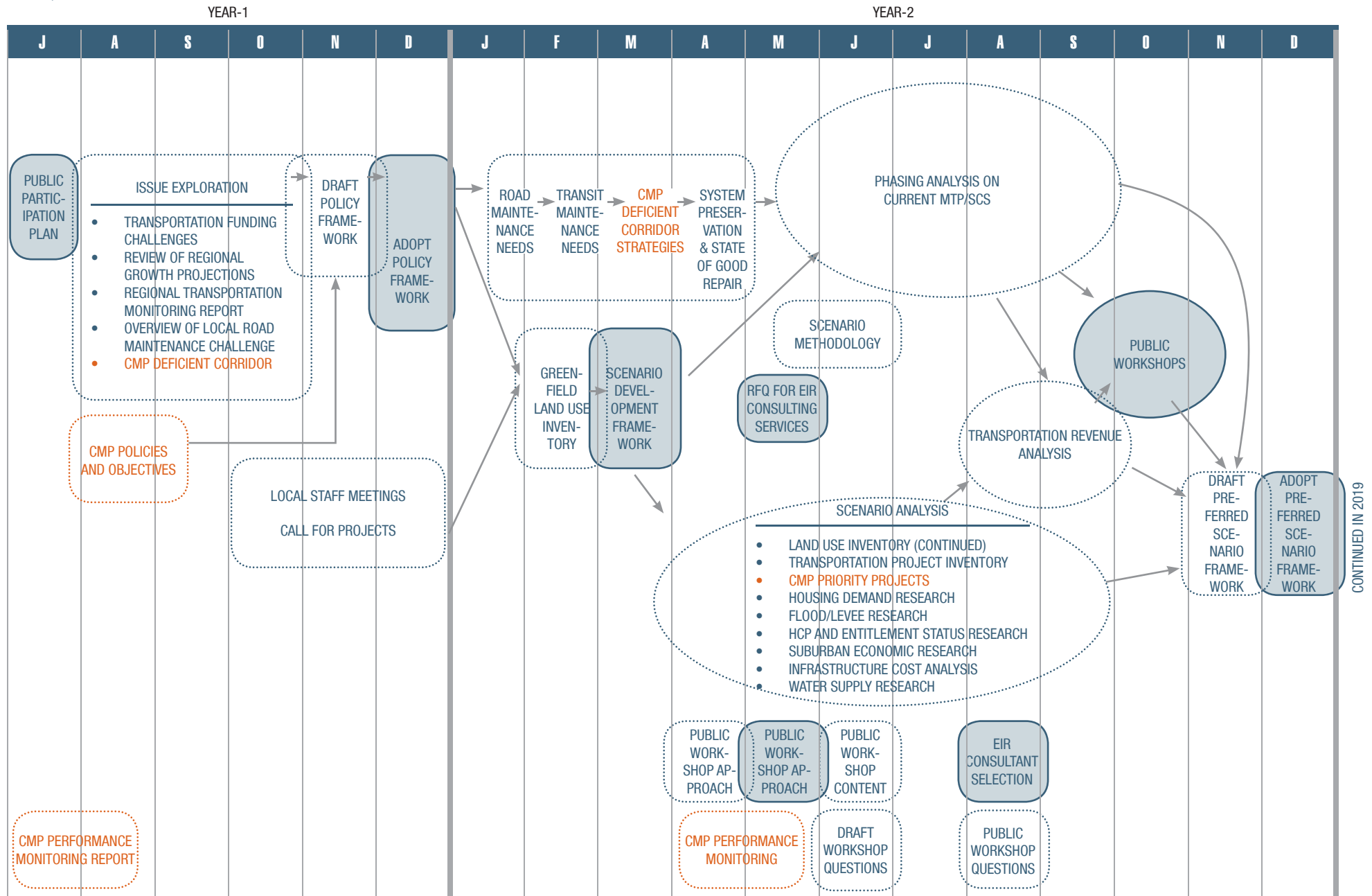
INTEGRATION OF FEDERAL CONGESTION MANAGEMENT PROCESS WITH SACOG's REGIONAL TRANSPORTATION PLANNING PROCESS



SEE THE FOLLOWING PAGE FOR DETAIL

CMP MTP/SCS INTEGRATION PROCESS

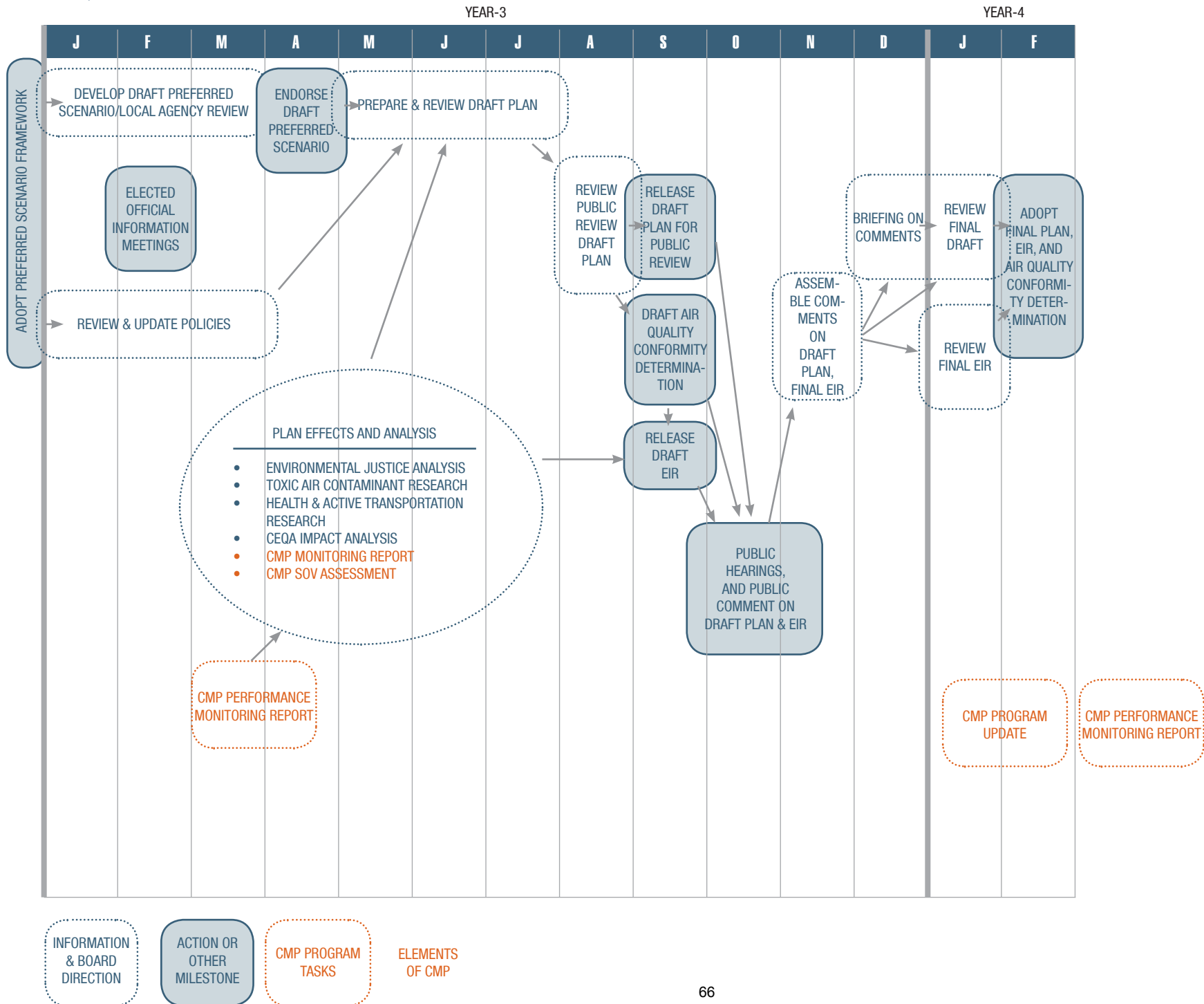
JUNE 30, 2017



CONTINUED IN 2019

CMP MTP/SCS INTEGRATION PROCESS

JUNE 30, 2017



Chapter 8 Evaluate Strategy Effectiveness

As this is the first stand-alone CMP document SACOG has produced, insufficient time has elapsed to implement or adequately assess the effectiveness of the CMP strategies. SACOG plans to monitor the effectiveness of all strategies in this CMP that are implemented between the CMP's publication date and the next iteration. Future effectiveness reports will depend on the phases of implementation of the various strategies and sufficient duration of the strategy for effectiveness to be monitored.

Appendices

Appendix 1 Ridership on CMP Priority Transit Routes

Operator	Route	Direction	Trips 5am- 9am	Trips 3pm- 6pm	2012 Avg Weekday Boardings
El Dorado Transit	Downtown Sacramento Commuter	W	11	0	252
El Dorado Transit	Downtown Sacramento Commuter	E	0	8	252
E-Tran	53	N	3	0	112
E-Tran	53	S	0	3	112
E-Tran	60	N	7	0	190
E-Tran	60	S	0	5	190
Roseville Transit	AM2	W	1	0	20
Roseville Transit	AM4	W	1	0	18
Roseville Transit	AM5	W	1	0	19
Roseville Transit	AM655	W	1	0	NA
Roseville Transit	AM7	W	1	0	19
Roseville Transit	PM2	E	0	1	20
Roseville Transit	PM4	E	0	1	18
Roseville Transit	PM435	E	0	1	NA
Roseville Transit	PM5	E	0	1	19
Roseville Transit	PM7	E	0	1	19
RT	1	W	16	11	1918
RT	1	E	14	12	1918
RT	3	N	4	0	114
RT	3	S	0	4	114
RT	7	N	3	0	74
RT	7	S	0	3	74
RT	15	S	7	6	742
RT	15	N	6	6	742
RT	21	N	10	6	719
RT	21	S	8	6	719
RT	23	E	8	6	1260
RT	23	W	7	10	1260
RT	25	E	5	3	793
RT	25	W	5	6	793
RT	26	N	7	6	568
RT	26	S	6	6	568
RT	30	W	14	12	1057
RT	30	E	12	12	1057

Operator	Route	Direction	Trips 5am- 9am	Trips 3pm- 6pm	2012 Avg Weekday Boardings
RT	51	S	18	15	2595
RT	51	N	15	15	2595
RT	56	E	7	6	1068
RT	56	W	7	6	1068
RT	62	N	7	6	694
RT	62	S	5	6	694
RT	67	N	8	6	725
RT	67	S	6	6	725
RT	68	N	8	6	790
RT	68	S	6	6	790
RT	72	E	9	6	577
RT	72	W	7	6	577
RT	80	N	3	2	633
RT	80	S	4	3	633
RT	81	E	16	11	1687
RT	81	W	7	6	1687
RT	82	N	8	6	913
RT	82	S	6	6	913
RT	84	S	3	3	546
RT	84	N	3	3	546
RT	86	S	9	6	828
RT	86	N	7	7	828
RT	87	S	6	6	692
RT	87	N	5	6	692
RT	88	S	7	6	520
RT	88	N	9	6	520
RT	93	W	5	6	590
RT	93	E	6	6	590
RT	109	W	2	0	55
RT	109	E	0	2	55
Unitrans	A	W	5	6	873
Unitrans	A	E	5	6	873
Unitrans	M	E	4	3	585
Unitrans	M	W	4	3	585
Unitrans	P	CC	5	6	912
Unitrans	Q	C	5	6	1048
Unitrans	W	W	4	6	1550
Unitrans	W	E	4	6	1550

Operator	Route	Direction	Trips 5am- 9am	Trips 3pm- 6pm	2012 Avg Weekday Boardings
Yolobus	230	W	0	3	65
Yolobus	230	E	3	0	65
Yolobus	42A	C	6	3	957
Yolobus	42B	CC	5	3	957
Yolobus	43	E	5	0	134
Yolobus	43	W	0	4	107
Yolobus	43R	W	1	0	27
Yolobus	43R	E	0	1	27
Yolobus	45	E	5	0	117
Yolobus	45	W	0	5	117
Yuba-Sutter Transit	Yuba-Sutter 70 Commuter	S	5	0	155
Yuba-Sutter Transit	Yuba-Sutter 99 Commuter	S	5	0	155
Yuba-Sutter Transit	Yuba-Sutter 70 Commuter	N	0	5	155
Yuba-Sutter Transit	Yuba-Sutter 99 Commuter	N	0	5	155
RT Rail	Gold	W	29	38	11750
RT Rail	Gold	E	33	35	11750
RT Rail	Blue	S	29	38	12416
RT Rail	Blue	N	29	39	12416
Amtrak	Capitol Corridor	N			1032
Amtrak	Capitol Corridor	S			1032

Appendix 2 System Congestion and Reliability

Appendix Table 2-1 Travel Time Reliability Metrics

Time Period - All	LOTTR - Systemwide ⁵		Percent of CMP Directional Miles
6am-9am	Reliable (<1.5)		57.4%
	Unreliable (>=1.5)		35.1%
	No Data	Unreliable with Transit ⁶	15.8%
3pm-6pm	Reliable (<1.5)		7.5%
	Unreliable (>=1.5)		50.1%
	No Data	Unreliable with Transit ⁶	42.5%
			18.7%
			7.5%

Time Period			Percent of CMP Freeway Directional Miles
Freeway	LOTTR - Freeways Only ⁵		
6am-9am	Reliable (<1.5)		87.3%
	Unreliable (>=1.5)		12.7%
	No Data	Unreliable with Transit ⁶	4.5%
3pm-6pm	Reliable (<1.5)		0.0%
	Unreliable (>=1.5)		79.7%
	No Data	Unreliable with Transit ⁶	20.3%
			10.5%
			0.0%

Time Period			Percent of CMP Arterial Directional Miles
Arterial	LOTTR - Arterials Only ⁵		
6am-9am	Reliable (<1.5)		43.1%
	Unreliable (>=1.5)		46.5%
	No Data	Unreliable with Transit ⁶	21.3%
3pm-6pm	Reliable (<1.5)		10.4%
	Unreliable (>=1.5)		36.1%
	No Data	Unreliable with Transit ⁶	53.6%
			22.6%
			10.4%

⁵ LOTTR = level of travel time reliability, which is 80th percentile epoch travel time divided by 50th

⁶ Transit miles that are in HOV lanes are excluded because the HOV lanes theoretically protect transit vehicles from unreliability and congestion

Appendix Table 2-2 Travel Time Reliability Metrics

Time Period	Congestion - Systemwide ⁷		Percent of CMP Directional Miles
6am-9am	Uncongested (≥ 0.6)		84.7%
	Congested (< 0.6)		7.9%
	No Data	Congested w/ Transit ⁸	3.8%
3pm-6pm	Uncongested (≥ 0.6)		70.0%
	Congested (< 0.6)		22.5%
	No Data	Congested w/ Transit ⁸	12.2%
			7.5%

Time Period	Congestion - Freeways Only ⁷		Percent of CMP Freeway Directional Miles
Freeway			
6am-9am	Uncongested (≥ 0.6)		95.6%
	Congested (< 0.6)		4.4%
	No Data	Congested w/ Transit ⁸	0.4%
3pm-6pm	Uncongested (≥ 0.6)		85.5%
	Congested (< 0.6)		14.5%
	No Data	Congested w/Transit ⁸	7.8%
			0.0%

Time Period	Congestion - Arterials Only ⁷		Percent of CMP Arterial Directional Miles
Arterial			
6am-9am	Uncongested (≥ 0.6)		80.6%
	Congested (< 0.6)		9.0%
	No Data	Congested w/ Transit ⁴	5.1%
3pm-6pm	Uncongested (≥ 0.6)		63.8%
	Congested (< 0.6)		25.8%
	No Data	Congested w/Transit ⁸	14.1%
			10.4%

⁷ Congestion level = observed average speed / unconstrained speed

Unconstrained speed is the 85th percentile epoch speed, or speed in the epoch that was faster than 85 percent of epochs for that road segment

⁸ Transit miles that are in HOV lanes are excluded because the HOV lanes theoretically protect transit vehicles from unreliability and congestion

Appendix Figure 3-1 Truck Travel Time Reliability 6am-9am, Oct 2015

Legend

Truck TTR Index 6am-9am

Truck TTR Index 6am-9am

1.03 - 1.35

1.36 - 1.50

1.51 - 3.37

CMP Arterials

— CMP Arterials

Counties

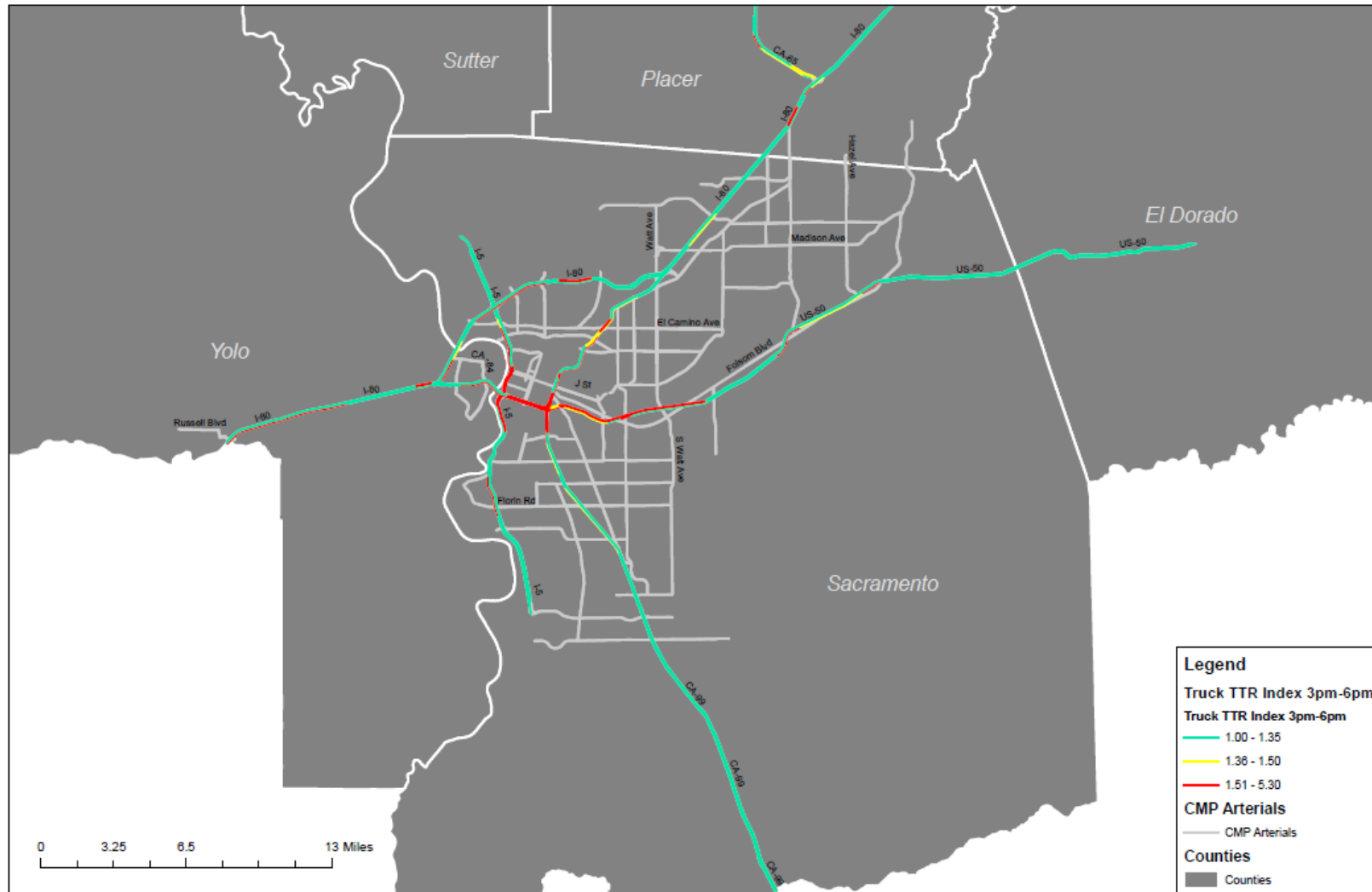
Counties

*Travel Time Reliability Index = 80th percentile travel time / 50th percentile travel time

Updated 3/30/2017

Appendix Figure 3-2 Truck Travel Time Reliability 3pm-6pm, Oct 2015

Truck Travel Time Reliability*, October 2015, 3pm-6pm

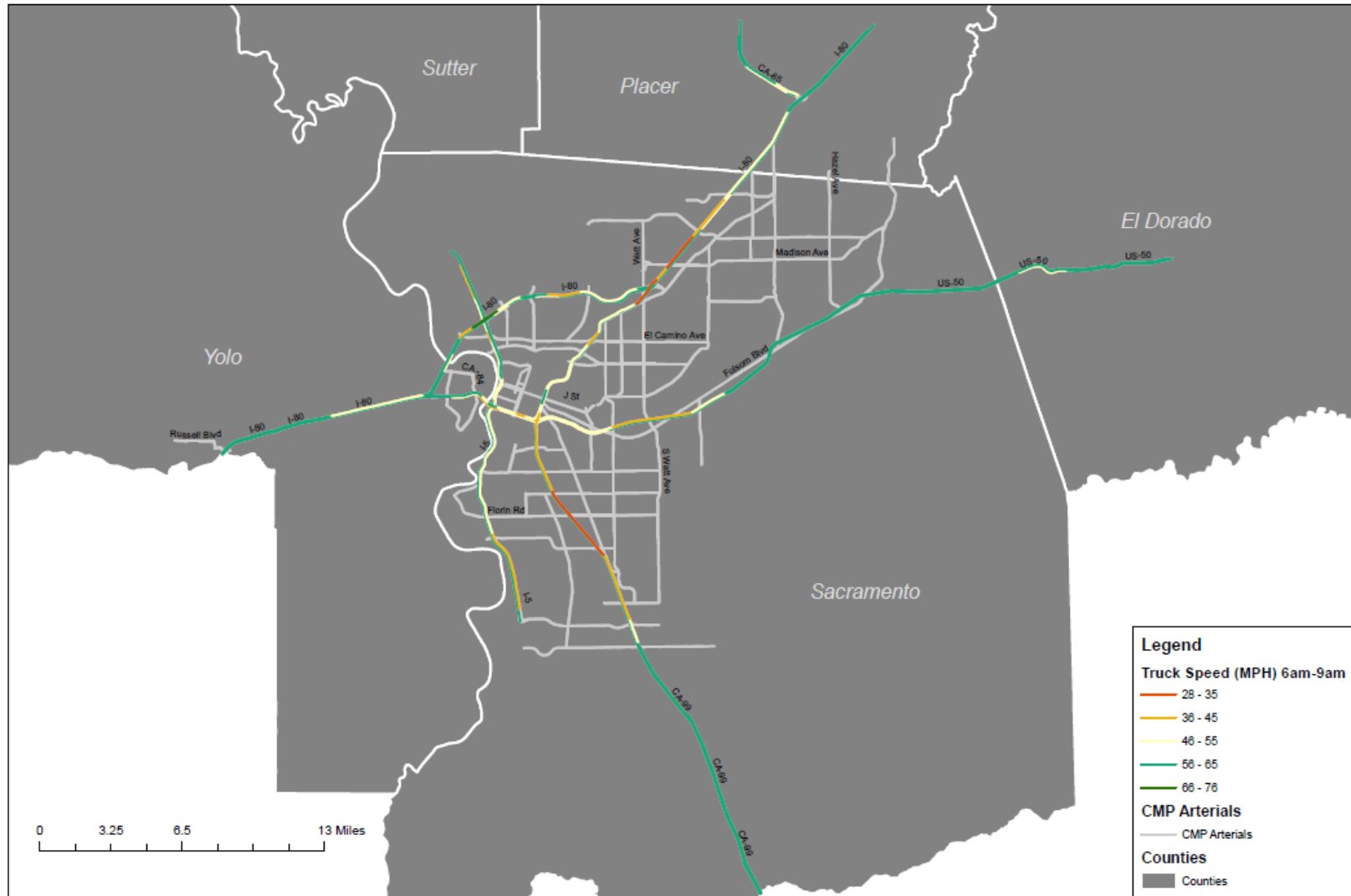


Prepared by Sacramento Area Council of Governments

*Travel Time Reliability Index = 80th percentile travel time / 50th percentile travel time

Updated 3/30/2017

Average Freeway Truck Speeds, October 2015, 6am-9am

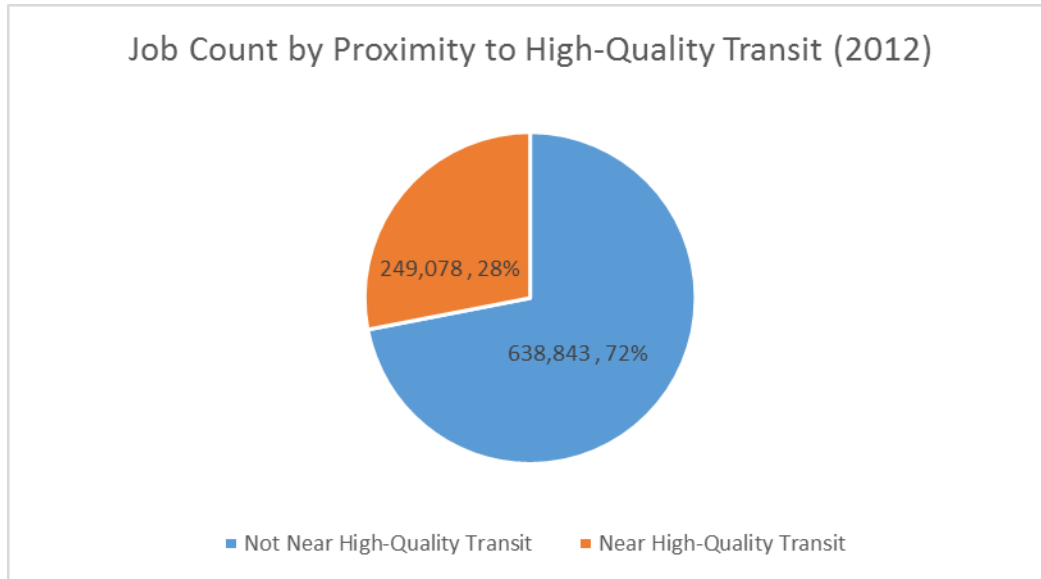


Average Freeway Truck Speeds, October 2015, 3pm-6pm

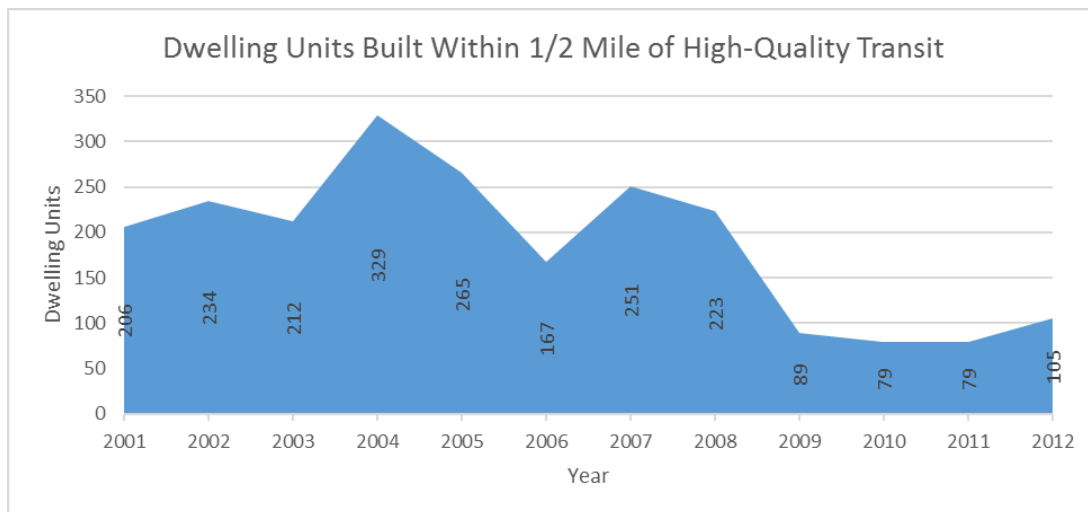


Appendix 4 Jobs and Development Near High-Quality Transit

Appendix Figure 4-1 Job Counts vs. Proximity to Transit



Appendix Figure 4-2 Dwelling Units Built Near High-Quality Transit



Appendix 5 TDM Performance Metrics

Appendix Table 5-1 Overall TDM Performance Metrics

TDM Metric	2016 Value
Count of employers in a Transportation Management Association	1,033
Count of registered vanpools ⁹	76
Commuter Club Members ¹⁰	16,549
Non-SOV commute mode share	24%

Additional TDM Program data, including employment and employer participation totals in each TMA, are provided in Appendix 6.

⁹ Includes vans operated by Enterprise only and is significantly lower than the true number of vanpools operating in the SACOG region. A more complete number will be available once a merger between vRide and Enterprise is completed.

¹⁰ Excludes Commuter Club Members who are not part of a TMA

Appendix 6 Deficient Corridor Information Sheets

The pages that follow contain additional information on the SACOG region's TDM program as well as more detailed traffic and infrastructure data for the 18 deficient corridors identified in the main report body. Specific components include:

1. A "strategy toolbox" describing each of the strategy types considered to address congestion on the deficient corridors
2. Strategy assessment criteria to guide SACOG and Working Group members in selecting strategies from the toolbox so as to best tailor strategies to each deficient corridor.
3. Table of each TMA's employer participation in TDM programs, measured by number of employers and employees within each TMA that engage in TDM programs.
4. Matrix of specific TDM programs and services provided by each TMA in the SACOG region.
5. Overlay of deficient corridors on TMA areas, to roughly gauge which TMAs have the most potential influence on travel demand along each of the deficient corridors.
6. A "deficient corridor coverage assessment", based on the TMA area map, providing a rough quantification of the potential magnitude that each TMA may have on each deficient corridor.
7. 18 corridor summaries, which provide the following information for each of the deficient corridors:
 - a. Traffic counts;
 - b. Transit service;
 - c. Intersection-level physical roadway characteristics, including but not limited to signal characteristics, bike facilities, segment-level transit service, broken out by direction for two-way corridors;
 - d. Strategies, as shown in Chapter 6;
 - e. Projects for the corridor included in the 2016 MTP programmed projects list; and
 - f. Potential influence that each TMA has on the corridor's travel demand.

STRATEGY TOOL BOX

Strategy ID	Strategy Type	Applicability	Strategy Improvement Options
A	Demand Management Strategies	Arterials/Freeways	Employer-based Outreach and SOV Trip Reduction Options, Commuter Benefit Options, Regional Rideshare, 511 Trip Planning; Vanpool Formation; Transit Pricing/Fare Incentives; Bik/Ped Programs and Subsidies; Shuttle Services; Electric Vehicle subsidies; Employee Surveys/Planning. See SACOG TMA Map Relative to Deficient Corridors and TMA
B	Arterial Operational Strategies	Arterials	Intersection Channelization (provision of turn lanes, raised medians, etc), Intersection Control Evaluations, Signal Coordination (includes detection systems); Signal Timing; Signal Priority; One-way/Two-way conversions; Road Diet; Traffic Calming; Access Management (Turn Restrictions; reducing/consolidating driveway access; raised medians/turn channelization).
C	Managed Lanes Strategies	Freeways	Auxiliary Lanes, Ramp Metering, HOV/HOT Lanes, HOV Bypass; Part Time Use of Shoulder; Reversible Lanes; Transition Lanes;
D	Land Use/Growth Management Strategies	Arterials/Freeways	TOD; Incentives for Densification; Land Use Controls; Zoning; Urban Growth Boundaries;
E.1	Rubber Tire Public Transit Strategies	Arterials/Freeways	New Service Lines, Increased Service Frequencies, Realigned Bus Schedules; Bus Rapid Transit,
E.2	Passenger Rail Public Transit Strategies	Arterials/Freeways	Light Rail Expansion; Increased Frequency of Service; Realigned Schedules for Commuters
F	Active Transportation Strategies	Arterials	Sidewalk or Class II/III bikeway gap closures. Converting Class II bikeways to Class IV (buffered); Ped/bike facilities near transit stations/stops; Provisions for bicycles on transit vehicles (bus or rail) and transit stops; Access to Transit; Intersection bulb-outs; mid-block planter islands; pedestrian enhancements, widening sidewalks, a planted buffer; Rectangular rapid flash beacon treatments;
G.1	ITS Strategies	Arterials	Adaptive Signal Control; Traffic sensors/traffic detection; Traffic signal controllers; Fiber Optic or wireless communication system at the intersections; Vehicle detector stations;
G.2	ITS Strategies (Integrated Corridor Management)	Arterials/Freeways	See: C; G.1; Adaptive Signal Control at Ramps +1 Service Street Intersection; Integrated Corridor Management (ICM) Communications equipment to connect all the field devices in the corridor including parallel routes; Video and data information to City/County/Caltrans TMC; Network equipment and software upgrades in local agency TMC to receive the data.
G.3	ITS Strategies (Traveler Information Systems)	Arterials/Freeways	Real Time Transit Vehicle Arrival Information; Variable Message Signs;
H	TSM Strategies	Arterials/Freeways	Park-and-Ride Lots; Expansion of Existing P&R Lots; P&R Amenities; Fringe Lots; Parking Management/Pricing;
I	Incident Management Strategies	Arterials/Freeways	Service Patrols; Part-Time Use of Shoulder
J.1	Safety Improvement Strategies (Rural)	Arterials	Systemic Safety Assessments; HSM Counter Measures for Rural Roadways and Curves
J.2	Safety Improvement Strategies (Urban)	Arterials	Systemic Safety Assessments; HSM Counter Measures for Intersections and Mid-Block - Focus on Ped/Bike
K	SOV Roadway Capacity	Arterials/Freeways	Intersections/Interchanges; Remove Bottlenecks; Lanes; Center Turn Lanes; Gap Closures; Roadway Extensions.



SACOG FEDERAL CMP DEFICIENT CORRIDOR STRATEGY ASSESSMENT CRITERIA

For the strategies – approximately 5-8 strategies for each deficient corridor and provided the H/M/L emphasis/priority. Consider the H/M/L as being the degree of relevance to a specific corridor. Note that project level of detail is inappropriate at this stage. Basic criteria used to develop the recommendations are provided below.

- Programmed and Planned Improvements currently in SACOG's MTP Tier I CIP should dictate priority (High Emphasis).
- Programmed and Planned single occupant vehicle capacity increasing projects are included.
- Per SACOG's CMP Committee - ITS – Operational – Transit Improvements are the preferred strategies unless the existing characteristics of the corridor do not support them. The latter is based on the corridor characteristics relative to intersection density; intersection controls; and, existing transit services.
- If gaps in transit service or active transportation facilities exist on a given corridor – they are included as Medium or Low Emphasis unless projects are already programmed/planned in SACOG's MTP – in which case they are given High Emphasis.
- Integrated Corridor Management is identified for a local arterial corridor if and only if it has sufficient parallel facilities, signal density and more than 10 signalized intersections within the deficient segment.
- Signal-Connect/Coordination is identified if the corridor does not have sufficient parallel facilities and more than 10 signalized intersections within the deficient segment.
- Adaptive Signal Control is identified if the above two conditions are not met (i.e., insufficient parallel facilities, signal density and less than 10 signalized intersections).
- Intersection Control Evaluation is identified if there are relative few key intersections and the application is less urban.
- Traveler Information System – real time transit arrival – is identified if there is ample transit service being provided within the corridor or there are programmed/planned transit improvements.
- Targeted TDM activities encourages TMA's to focus efforts (promotional and/or survey activity) on participating employees who travel on CMP Deficient Corridors to and from work. TDM is shown as High Emphasis if the Total TMA Employers potentially served by the corridor are greater than 350 and TMA Employees are greater than 120,000; Medium Emphasis if TMA Employers are greater than 200 (but less than 350) and TMA Employees are greater than 80,000 (but less than 120,000). Low Emphasis for Total TMA Employers and Total TMA Employees less than 200 and 80,000 respectively. Modeling is needed to determine the Demand Profile for each deficient corridor. Such an analysis will better determine the market for employer based TDM benefits. Based on the results of such an analysis, TDM emphasis priority could be modified.
- Road Diets were identified for arterials that carry less than 25,000 ADT (based on Road Diet criteria for identifying candidate roadways). Converting from one-way to two-way is Downtown Grid specific and applies only to 16th Street.
- Safety strategies are specifically called out for either highly urban or highly rural corridors. This reflects the typically greater presence of systemic safety risk factors in rural areas (curves, excessive speeds, poor horizontal/vertical sight lines etc.) and urban areas (high volume signalized intersections, pedestrian and bicycle conflicts etc.). If there are already programmed/planned safety improvements - safety strategy was given a "High" emphasis as appropriate.



SACOG TMA EMPLOYER PARTICIPATION

TMA-TMO ID	TMA NAME	Employers 2012	Employees 2012	TMA Area sq miles	Number of TMA Employers	Number of TMA Employees	Number of TMA Participants	% of Participants in Participating Employers	% Employers in TMA	% of Employees in TMA	% of TMA Participants
1	50 Corridor TMA	6,927	88,024	89	56	24,436	1,875	7.7%	0.8%	27.8%	2.1%
2	City of Elk Grove	7,246	53,070	1,790	1	6	2	33.3%	0.0%	0.0%	0.0%
3	City of Roseville	2,292	21,035	36	61	6,772	149	2.2%	2.7%	32.2%	0.7%
4	El Dorado County Transportation Commission	138	2,134	4	193	2,560	275	10.7%	139.9%	120.0%	12.9%
5	McClellan Park TMA	1,030	8,645	11	42	1,909	63	3.3%	4.1%	22.1%	0.7%
6	North Natomas TMA	8,525	70,196	1,457	2	15,007	18	0.1%	0.0%	21.4%	0.0%
7	Placer County Transportation Planning Agency	4,514	45,572	20	12	2,824	244	8.6%	0.3%	6.2%	0.5%
8	Point West Area TMA	2,698	32,820	16	99	8,357	158	1.9%	3.7%	25.5%	0.5%
9	Power Inn Alliance	4,358	56,558	42	117	37,212	1,160	3.1%	2.7%	65.8%	2.1%
10	Sacramento TMA	11,447	113,192	68	224	103,579	10,327	10.0%	2.0%	91.5%	9.1%
11	South Natomas TMA	785	8,248	6	195	6,869	829	12.1%	24.8%	83.3%	10.1%
12	Yolo TMA	5,833	85,899	1,023	26	19,048	1,361	7.1%	0.4%	22.2%	1.6%
13	Yuba-Sutter TMA	4,276	41,116	1,252	5	2,589	88	3.4%	0.1%	6.3%	0.2%
	TOTAL TMA areas	60,069	626,509	5,814	1,033	231,168	16,549	7.2%	1.7%	36.9%	2.6%
	Non TMA areas	13,571	273,660								
	Regional Totals	73,640	900,169						1.4%	25.7%	1.8%

Sources: SACOG Employment Inventory 2012; Commuter Club registration June 2016

1 - McClellan park has grown significantly in number of employers and employees between 2012 and 2016.

CURRENT TDM ACTIVITIES

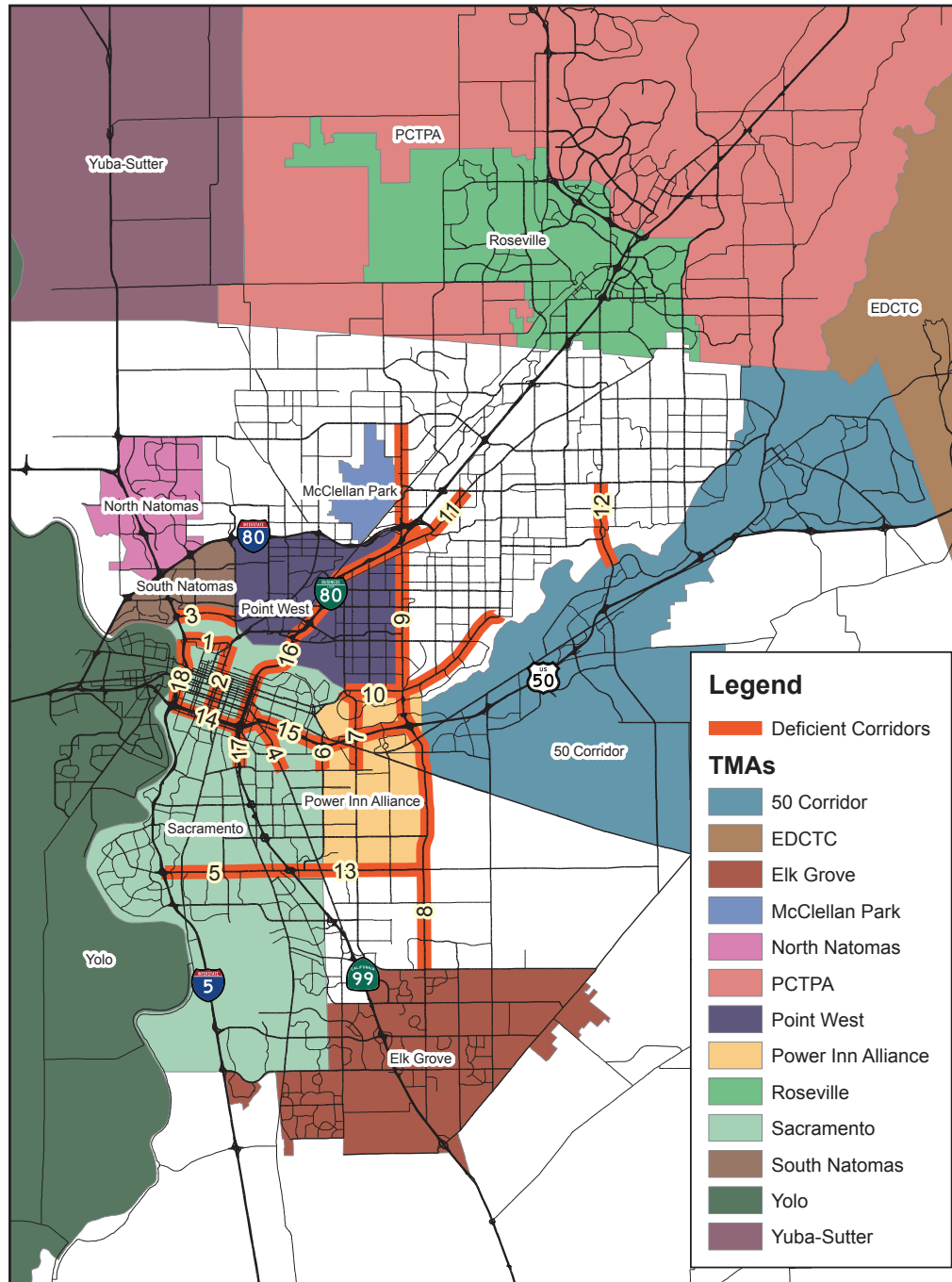
CATEGORY	Program/Activity	SACOG	50 Corridor TMA	McClellan Park TMA	North Natomas TMA	Point West TMA*	Power Inn Alliance	Sac TMA	South Natomas TMA	Yolo TMA	Yuba Sutter TMA	City of Elk Grove**	City of Roseville**	PCTPA**	EDCTC**
Bike/Pedestrian Programs & Projects															
	May is Bike Month: Website, Events and Materials (not staff time)	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Bike Subsidies			x					x	x			x	x	
	Walk Subsidies			x					x						
	Bike/Ped Projects (bike parking, lanes and trails) - Funding that goes beyond jurisdiction/regional funding	x	x		x				x			x	x	x	x
	Walk/Bike to School Education (in schools)		x		x							x	x	x	x
	Bike Education Courses & Programs	x	x	x	x	x	x	x	x	x	x		x	x	x
Electric Vehicle															
	High Efficiency Auto Subsidies (EV and Hybrids)								x						
	Fund EV Charging Infrastructure			x					x					x	
Employer-Based Outreach															
	Employer-Based Marketing (staff time and materials spent on promoting alternative modes, promoting regional programs/services/campaigns, encouraging employers to offer incentives, promoting local programs/services/campaigns)	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Education/Training for Employee Transportation Coordinators (AKA Commute Coordinators)		x	x		x	x	x	x				x	x	
Expanded Transit															
	Shuttle Service			x	x										
Marketing															
	Prize Drawings	x							x	x	x			x	
	Regional TDM program implementation (staff time and materials on convening meetings, managing contracts, procuring materials, coordinating events/campaigns/marketing at regional level)	x													
	Residential Based Marketing (promotion of alternative modes, promoting regional programs/services/campaigns, encouraging alternative modes, promoting local programs/services/campaigns)	x	x	x	x		x	x		x		x	x	x	x
	October is Smart Commute Month: Website, Events & Materials (not staff time)	x	x	x		x	x	x	x	x	x	x	x	x	x
Planning															
	Planning and Studies (Transportation Control Measures parking study, TDM research, Multimodal planning)	x			x		x						x	x	x
Regional Rideshare Programs															
	Commuter Club Database/website (vendor contracts that include enhancing and maintaining Ridematching Tool, database with admin features, and database management)	x	x						x						
	511 Call Center (website is funded separately)	x													
	General regional marketing materials (items branded with 511 and Commuter Club)	x													
	Emergency Ride Home Program (not admin time, just costs of paying for rides)		x	x	x	x	x	x	x	x	x			x	
	Carpool Subsidies								x	x					
Survey															
	Survey and compile data to better understand areas of opportunity and needs for local area	x	x	x	x		x	x					x		
Transit Pricing/Fare Incentive															
	Transit Subsidies			x					x	x					
Vanpool															
	Vanpool Incentive Program	x													
	Vanpool Subsidies		x	x					x	x					

*Partner funding is running low and TMO is in jeopardy of closing

** Partner is not funded by SACOG through an MOU but partner promotes regional campaigns and web tools. Partner also receives informational and promotional materials. City of Elk Grove has the option for a contract but has not had the staff resources to fully launch a local program. Its budget estimates are where resources would go if staff resources were available.

***Total SACOG funding to TMOs is NOT double counted in the regional total

SACOG FEDERAL CMP DEFICIENT CORRIDORS AND TMA AREAS



SACOG TMA DEFICIENT CORRIDOR COVERAGE ASSESSMENT

TMA-TMO ID	TMA-TMO	SACOG MOU	1. Richards Blvd	2. 16th St.	3. Garden HWY	4. Stockton	5. Florin Rd.	6. 65th St.	7. Howe Ave.	8. S Watt Ave	9. Watt Ave	10. Fair Oaks Blvd	11. Auburn	12. Sunrise	13. Florin Rd.	14. US 50	15. US 50	16. SR 51	17. SR 99	18. I-5
1	50 Corridor TMA	Yes																		
2	City of Elk Grove	No																		
3	City of Roseville	No																		
4	El Dorado County Transportation Commission	No																		
5	McClellan Park TMA	Yes																		
6	North Natomas TMA	Yes																		
7	Placer County Transportation Planning Agency	No																		
8	Point West Area TMA	Yes																		
9	Power Inn Alliance	Yes																		
10	Sacramento TMA	Yes																		
11	South Natomas TMA	Yes																		
12	Yolo TMA	Yes																		
13	Yuba-Sutter TMA	Yes																		
TMA Corridor Coverage		Total Employers¹	11,447	14,145	14,930	11,447	11,447	15,805	18,503	18,531	16,835	18,503	2,698	6,927	15,805	22,732	22,732	20,951	18,693	20,757
	Within TMA Area	Total Employees¹	113,192	146,012	154,260	113,192	113,192	169,750	202,570	197,652	178,395	202,570	32,820	88,024	169,750	257,774	257,774	212,619	166,262	191,636
	Directly Connects TMA Area	TMA Employers¹	224	323	518	224	224	341	440	174	383	440	99	56	341	397	397	396	225	421
	Indirect Connectivity to TMA Area	TMA Employees¹	103,579	111,936	118,805	103,579	103,579	140,791	149,148	61,654	142,700	149,148	8,357	24,436	140,791	165,227	165,227	121,532	103,585	125,455
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants¹	10,327	10,485	11,314	10,327	10,327	11,487	11,645	3,037	11,550	11,645	158	1,875	11,487	13,362	13,362	10,878	10,329	11,174

SACOG CORRIDOR STRATEGY SUMMARY

Strategy ID	Strategy Type	Applicability	1. Richards Blvd	2. 16th St.	3. Garden HWY	4. Stockton	5. Florin Rd.	6. 65th St.	7. Howe Ave.	8. S Watt Ave	9. Watt Ave	10. Fair Oaks Blvd	11. Auburn	12. Sunrise	13. Florin Rd.	14. US 50	15. US 50	16. SR 51	17. SR 99	18. I-5
A	Demand Management Strategies	Arterials/Freeways	L/TBD	M	H	M	L	M	H	M	H	H	L	L	L	H	H	H	M	H
B	Arterial Operational Strategies	Arterials	L	H	H	H/L	H		H	H	H	L	L	L						
C	Managed Lanes Strategies	Freeways														H	H	H	H	H
D	Land Use/Growth Management Strategies	Arterials/Freeways																		
E.1	Rubber Tire Public Transit Strategies	Arterials/Freeways	H	M	H	H	H	M	M	L	H	M	H	H	H	H	H	H	H	H
E.2	Passenger Rail Public Transit Strategies	Arterials/Freeways														H	H	H	H	H
F	Active Transportation Strategies	Arterials	H	H	M	M	M			M	M	H	M	L	H					
G.1	ITS Strategies	Arterials	H		H			H				H	H	H		H	H	H	H	H
G.2	ITS Strategies (Integrated Corridor Management)	Arterials/Freeways		H												H	H	H	H	H
G.3	ITS Strategies (Traveler Information Systems)	Arterials/Freeways	M	M	H	H	H		M				H	H						
H	TSM Strategies	Arterials/Freeways		H												M	M	L	L	L
I	Incident Management Strategies	Arterials/Freeways														L	L	L	L	L
J.1	Safety Improvement Strategies (Rural)	Arterials								M										
J.2	Safety Improvement Strategies (Urban)	Arterials	H		M	M	H			M	M				H					
K	SOV Roadway Capacity	Arterials/Freeways	H					H		H	H			H	H					
Degree of Relevance to a Specific Corridor.																				
	High Relevance																			
	Medium Relevance																			
	Low Relevance																			
	Mix of High / Low Relevance - see Corridor Information Sheet																			
	Low/To Be Determine																			

This corridor is a 4-lane arterial that connects I-5 and SR-160. It includes transit service, bike lanes, and sidewalks along most of the street. The deficient section of Richards Boulevard identified in the CMP lies between I-5 to the west and 16th Street to the east. Parallel roadways include Bannon Street/ N B Street and Garden Highway. The corridor is in the Sacramento TMA.

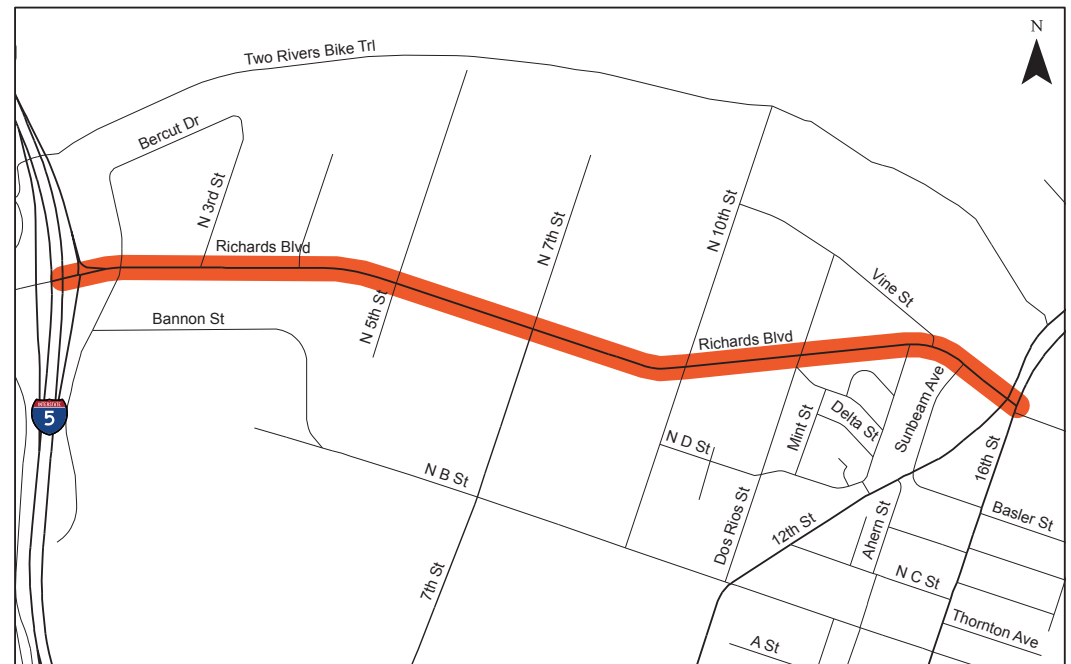
ROADWAY TRAFFIC DATA

From	To	Functional Classification	Base Year Lanes	Base Year Count*	2036 Forecast
Bercut	3Rd	Arterial - High Access Control	4	26,208	37,021
7Th	10Th	Arterial - Moderate Access Control	4	22,293	21,415

*Source: City of Sacramento

TRANSIT SERVICE

Route	AM Headway	PM Headway
11	30 min	30 min
15	30 min	30 min
33	20-30 min	20-30 min



ROADWAY CHARACTERISTICS BY DIRECTION

Eastbound								Westbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present	Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present
I-5 Ramps	2	Signal	II	-	-	N	Y	I-5 Ramps	2	Signal	II	11 & 15	20 - 30 min	N	Y
Bercut Dr	2	Signal	II	11 & 15	20 - 30 min	N	Y	Bercut Dr	2	Signal	-	11, 15, 33*	20 - 30 min	N	Y
N 3rd St	2	Signal	II	11, 15, 33*	20 - 30 min	N	Y	N 3rd St	2	Signal	II	11, 15, 33*	20 - 30 min	N	Y
Sequoia Pacific Blvd	2	Signal	II	11, 15, 33*	20 - 30 min	N	Y	Sequoia Pacific Blvd	2	Signal	II	11, 15, 33*	20 - 30 min	N	Y
N 5th St	2	Signal	II	11, 15, 33*	20 - 30 min	N	Y	N 5th St	2	Signal	II	11, 15, 33*	20 - 30 min	N	Y
N 7th St	2	Signal	II	11, 15, 33*	20 - 30 min	N	Y	N 7th St	2	Signal	II	15 & 33*	20 - 30 min	N	Y
N 8th St	2	SSSC	II	15 & 33*	20 - 30 min	N	Y	N 8th St	2	SSSC	II	15 & 33*	20 - 30 min	N	Y
N 10th St	2	Signal	II	15 & 33*	20 - 30 min	N	Y	N 10th St	2	Signal	II	15 & 33*	20 - 30 min	N	Y
Dos Rios St	2	Signal	II	15 & 33*	20 - 30 min	N	Y	Dos Rios St	2	Signal	II	15 & 33	20 - 30 min	N	Y
Vine St	2	SSSC	II	15 & 33	20 - 30 min	N	Y	Vine St	2	SSSC	II	15 & 33	20 - 30 min	N	Y
Sunbeam Ave	2	SSSC	II	15 & 33	20 - 30 min	N	Y	Sunbeam Ave	2	SSSC	II	15	30 min	N	Y
N 12th St	2	Signal	II	15	30 min	N	Y	N 12th St	2	Signal	II	15	30 min	N	Y

*Route 33: Selected trips



STRATEGY DEVELOPMENT				
Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
K	SOV Capacity Increase	Interchange Improvement	High	I-5/Richards Interchange
				See Programmed Improvement (K)
G.1	ITS Strategies	Adaptive Signal Control	High	
				16th Street LRT conflict on east end of the corridor is critical
F	Active Transportation Strategies	Convert Class II to Buffered Class IV Bike Lanes	High	ROW permitting
				See Programmed Improvement (F)
J.2	Safety Improvement Strategies	Systemic Safety Counter Measures	High	Ped/Bike Safety Treatments at intersections and mid-block
				See Programmed Improvement (J.2)
E.1	Public Transit Strategies	Increase Service Frequency	High	
				See Programmed/Planned Improvements (E.2)
G.3	ITS Strategies	Traveler Information Systems	Medium	Real-time transit arrival at bus stops
A	Demand Management Strategies	Employer-based TDM	Low/TBD	Targeted TMA activity (See TMA Matrix: Sacramento)
B	Operational Strategies	Access Management	Low	Queueing on east end block driveways and side streets
		Road Diet (Reduce from 4 to 2 thru lanes		Carries less than 25,000 ADT - candidate for consideration

PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
SAC18170	I-5 at Richards Blvd. Interchange: Sacramento, Richards Blvd. and I-5; reconstruct interchange (ult). (HPP #3784)(T15088200)	Sacramento	City of Sacramento	2025	\$39,598,000	Programmed	K
SAC24998	North 12th Complete Street Phase 2: In Sacramento, on N. 12th Street from American River to H Street, including Sunbeam Street and one block of Richards Blvd.: Convert westernmost travel lane between Richards and H Street into two-way cycle track and improve connection from Two Rivers Bike Trail to Richards Blvd. Install streetscape and safety improvements, including intersection improvements, traffic control devices, striping, signage, pedestrian islands, dedicated turn lanes, on-street parking, and related streetscape, landscape, and adjacent improvements.	Sacramento	City of Sacramento	2021	\$4,467,000	Programmed	F
REG18023	Dos Rios Light Rail Station: On Blue Line light rail, on the east side of 12th St., south of Richards Blvd.: build new light rail station. The station is part of the redevelopment of Twin Rivers public housing development.	Sacramento	RT	2020	\$23,100,000	Programmed	E.2
REG17935	Green Line: MOS2 & MOS3: Extend rail from Richards Blvd. to Sacramento International Airport	Sacramento	Sacramento Regional Transit District	2021-2036	\$698,286,782	Planned	E.2

TMA-TMO ID	TMA-TMO	SACOG MOU	1. Richards Blvd
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellan Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
	TMA Corridor Coverage	Total Employers ¹	11,447
	Within TMA Area	Total Employees ¹	113,192
	Directly Connects TMA Area	TMA Employers ¹	224
	Indirect Connectivity to TMA Area	TMA Employees ¹	103,579
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants ¹	10,327

This corridor is a one-way arterial on 16th street in the central city area between US 50 and Richards Boulevard. Transit serves part of the corridor, sidewalks are present, and bike lanes are lacking along the corridor. Parallel roadways include I-5, SR-51, and 21st Street. The corridor is in the Sacramento TMA.

ROADWAY TRAFFIC DATA					
From	To	Functional Classification	Base Year Lanes	Base Year Count	2036 Forecast
P St	Q St	Arterial - One Way Low Access Control	3	15,515	22,900
A St	C St	Arterial - One Way Moderate Access Control	4	22,738	28,613

TRANSIT SERVICE		
Route	AM Headway	PM Headway
6	1 hour	1 hour
29	30 min	30 min
RCE	5-25 min	5-30 min
Blue Line LRT	15 min	15 min

RCE = Roseville Commuter Express



PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
SAC24623	16th Street Streetscape: On 16th Street from S Street to N Street, pedestrian improvements including bulb-outs, landscaping and trees, banners, pavement treatments, bike racks, and street furniture, and street lights.	Sacramento	City of Sacramento	2022	\$2,680,000	Programmed	B/F
SAC25017	16th Street Streetscape - H St. to Richards Blvd.: North 16th St./Lincoln Highway, from H St. to Richards Blvd.: Streetscape improvements, including restriping travel lanes to 11 feet, on street parking on both sides, curbs, six foot separated sidewalk, and pedestrian lighting.	Sacramento	City of Sacramento	2021	\$4,001,000	Programmed	B/F
SAC25025	Downtown Signal Improvements: Various downtown corridors bounded by I-5, Broadway, Alhambra Blvd., and C St., including the intersections of North 16th St/Sproule St-Basler St and North 16th St/North B St: Install pedestrian countdown signal heads; replace 8" with 12" vehicle signal heads; install emergency vehicle preemption equipment. (Toll credits) (HSIP7-03-013). Toll Credits for CON	Sacramento	City of Sacramento	2017	\$3,142,600	Programmed	G.1

ROADWAY CHARACTERISTICS BY DIRECTION							
Northbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present
Richards Blvd	4	Signal	-	29*, RCE	5-30 min	N	Y
"Proule Ave/ Basler St"	4	SSSC	-	29*, RCE	5-30 min	N	Y
"McCormack Ave/ Dreher St"	4	SSSC	-	29*, RCE	5-30 min	N	Y
North C St (W & E)	4	SSSC	-	29*, RCE	5-30 min	N	Y
Thornton Ave	4	SSSC	-	29*, RCE	5-30 min	N	Y
North B St	4	Signal	-	29*, RCE	5-30 min	N	Y
North A St	4	SSSC	-	29*, RCE	5-30 min	N	Y
C St	4	Signal	-	29*, RCE	5-30 min	N	Y
Chinatown Alley	4	SSSC	-	29*, RCE	5-30 min	N	Y
D St	4	SSSC	-	29*, RCE	5-30 min	N	Y
Democracy Alley	4	SSSC	-	29*, RCE	5-30 min	N	Y
E St	4	Signal	-	29*, RCE	5-30 min	N	Y
Eggplant Alley	4	SSSC	-	29*, RCE	5-30 min	N	Y
F St	4	Signal	-	29*, RCE	5-30 min	N	Y
Fat Alley	4	SSSC	-	29*, RCE	5-30 min	N	Y
G St	4	Signal	-	29*, RCE	5-30 min	N	Y
Government Alley	4	SSSC	-	29*, RCE	5-30 min	N	Y
H St	4	Signal	-	29*, RCE	5-30 min	Y	Y
H St I St Alley	3	SSSC	-	-	-	Y	Y
I St	3	Signal	-	-	-	Y	Y
Improv Alley	3	SSSC	-	-	-	Y	Y
J St	3	Signal	-	-	-	Y	Y
Jazz Alley	3	SSSC	-	-	-	Y	Y
K St	3	Signal	-	-	-	Y	Y

ROADWAY CHARACTERISTICS BY DIRECTION							
Northbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present
Kayak Alley	3	SSSC	-	-	-	Y	Y
L St	3	Signal	-	-	-	Y	Y
Capitol Ave	3	Signal	-	-	-	Y	Y
Matsui Alley	3	SSSC	-	-	-	Y	Y
N St	3	Signal	-	-	-	Y	Y
Neighbors Alley	3	SSSC	-	-	-	Y	Y
O St	3	SSSC	-	-	-	Y	Y
Opera Alley	3	SSSC	-	-	-	Y	Y
P St	3	Signal	-	6	1 hour	Y	Y
Powerhouse Alley	3	SSSC	-	6	1 hour	Y	Y
Q St	3	Signal	-	6	1 hour	Y	Y
Quill Alley	3	SSSC	-	6	1 hour	Y	Y
R St	3	SSSC	-	6	1 hour	Y	Y
Rice Alley	3	SSSC	-	6	1 hour	Y	Y
S St	3	Signal	-	6	1 hour	Y	Y
Solons Alley	3	SSSC	-	6	1 hour	Y	Y
T St	3	Signal	-	6	1 hour	Y	Y
Tomato Alley	3	SSSC	-	6	1 hour	Y	Y
U St	3	SSSC	-	6	1 hour	Y	Y
Uptown Alley	3	SSSC	-	6	1 hour	Y	Y
V St	3	SSSC	-	6	1 hour	Y	Y
Victorian Alley	3	SSSC	-	6	1 hour	Y	Y
W St	3	Signal	-	6	1 hour	Y	Y
US 50	3	Signal	-	6	1 hour	Y	Y

*Peak Hour Bus Service RCE = Roseville Commuter Express

STRATEGY DEVELOPMENT				
Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
G.2	ITS Strategies	Intergrated Corridor Management	High	Connect 16 signalized intersections (E Street to US 50)
		(Minimum move to Adaptive Signal Control)		Connect with Parallel Routes within Downtown Grid
H	TSM Strategies	Parking Management/Pricing	High	See Programmed Improvements (H)
B	Operational Strategies	Emergency Vehicle -Signal Pre-emption	High	See Programmed Improvements (B)
		Bus - Signal Pre-emption		
		Access Control and Turn Restrictions		Focus on Side Street and Alley Acces Points
		Road Diet or Convert from 1-way to 2-way		Carries less than 25,000 ADT - candidate for consideration
F	Active Transportation Strategies	Pedestrian Enhancements	High	For clear path and pedestrian crossings at key intersections
		Bike Parking; Bike Share		(parallel bike facilities present)
				See Programmed Improvements (F)
J.2	Safety Improvement Strategies	Systemic Safety Counter Measures	High	Ped/Bike Safety Treatments at intersections and mid-block
				See Programmed Improvements (J.2)
E.1	Public Transit Strategies	Increase Service Frequency	Medium	Line 29 Peak Period Service Frequency to 15 min
G.3	ITS Strategies	Traveler Information Systems	Medium	Real-time transit arrival at bus stops
A	Demand Management Strategies	Employer-based TDM	Medium	Targeted TMA activity (See TMA Matrix: Sacramento, Point West)

TMA-TMO ID	TMA-TMO	SACOG MOU	2. 16th St.
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellan Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
	TMA Corridor Coverage	Total Employers ¹	14,145
	Within TMA Area	Total Employees ¹	146,012
	Directly Connects TMA Area	TMA Employers ¹	323
	Indirect Connectivity to TMA Area	TMA Employees ¹	111,936
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants ¹	10,485

This corridor lies on Garden Hwy between I-5 to the west and Northgate Boulevard to the east. The roadway has some transit service, and it generally has one lane in each direction and class II bike lanes. Parallel roadways include W Camino Avenue and Richards Boulevard. The corridor is in the Sacramento and South Natomas TMAs.



ROADWAY CHARACTERISTICS BY DIRECTION															
Eastbound								Westbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present	Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present
I-5	2	Signal	I	11, 86	15-30 min	N	N	I-5	2	Signal	I	11, 86	15-30 min	N	N
Natomas Park Dr	2	Signal	II	11, 86	15-30 min	N	N	Natomas Park Dr	1	Signal	II	11	30 min	N	N
Truxel Rd	1	Signal	II	11	30 min	N	N	Truxel Rd	1	Signal	II	-	-	N	N
Northgate Blvd	2	Signal	II	-	-	N	N	Northgate Blvd	2	Signal	II	-	-	N	N

ROADWAY TRAFFIC DATA					
From	To	Functional Classification	Base Year Lanes	Base Year Count	2036 Forecast
Natomas Park Dr	Truxel Rd	Arterial - High Access Control	2	17,504	14,838
Truxel Rd	Northgate Bl	Arterial - High Access Control	2	21,440	23,542

TRANSIT SERVICE		
Route	AM Headway	PM Headway
11	30 min	30 min
86	15-30 min	30 min

STRATEGY DEVELOPMENT				
Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	At 4 signalized intersections
G.3	ITS Strategies	Traveler Information Systems		Real-time transit arrival at bus stops
B	Operational Strategies	Bus-Signal Pre-emption		At 4 signalized intersections
E.1	Public Transit Strategies	Increase Service Frequency	High	Line 11/86 Peak Period Service Frequency to 15 min
				See Planned Improvements (E.1)
				See Planned Parallel Improvement (E.2)
A	Demand Management Strategies	Employer-based TDM	High	Targeted TMA activity (See TMA Matrix: Sacramento, South Natomas, Point West)
F	Active Transportation Strategies	Convert Class II to Buffered Class IV Bike Lanes	Medium	ROW permitting
J.2	Safety Improvement Strategies	Systemic Safety Counter Measures	Medium	Ped/Bike Safety Treatments at intersections and mid-block

PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
SAC24817	Hi-bus on Arden Way: Develop 9-mile enhanced bus corridor on Arden Way. Include 7 artic buses	Sacramento	Sacramento Regional Transit District	2021-2036	\$20,635,000	Planned	E.1
REG17935	Green Line: MOS2 & MOS3: Extend rail from Richards Blvd. to Sacramento International Airport	Sacramento	Sacramento Regional Transit District	2021-2036	\$698,286,782	Planned	E.2

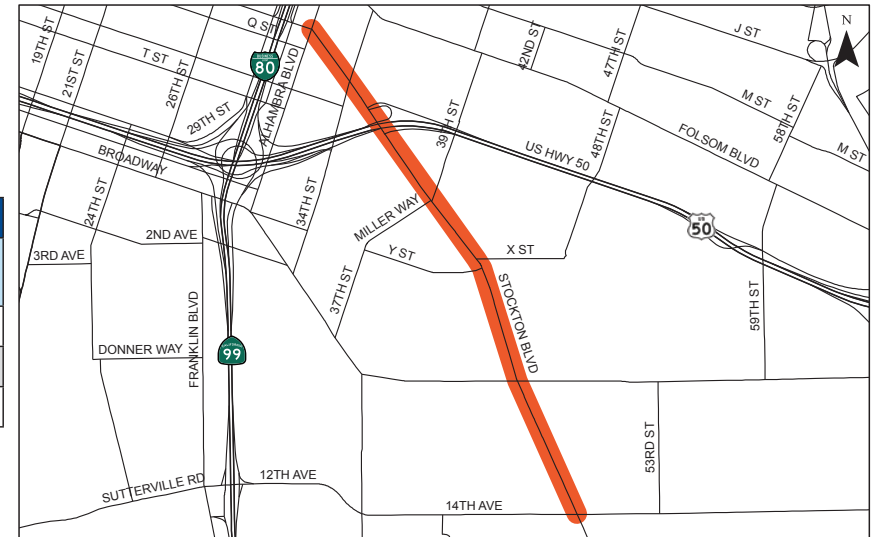
TMA-TMO ID	TMA-TMO	SACOG MOU	3. Garden HWY
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellan Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
	TMA Corridor Coverage	Total Employers ¹	14,930
	Within TMA Area	Total Employees ¹	154,260
	Directly Connects TMA Area	TMA Employers ¹	518
	Indirect Connectivity to TMA Area	TMA Employees ¹	118,805
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants ¹	11,314

This corridor lies on Stockton Boulevard between Alhambra Boulevard to the northwest and 14th Avenue to the southeast. The roadway is a 4-lane arterial with sidewalks, transit service, and some class II bike lane coverage. Parallel roadways include SR-99, US 50/ 65th Street, and Broadway Street. The corridor is in the Sacramento TMA.

ROADWAY TRAFFIC DATA					
From	To	Functional Classification	Base Year Lanes	Base Year Count	2036 Forecast
Alhambra Bl	32Nd St	Arterial - Moderate Access Control	4	14,863	23,136
U St	V St	Arterial - Moderate Access Control	4	24,015	24,946
Parker Av	Roosevelt Av	Arterial - Moderate Access Control	4	17,690	20,040

TRANSIT SERVICE		
Route	AM Headway	PM Headway
109*	30 min	45 min
38	1 hour	1 hour
51	15 min	15 min

*Peak Hour Bus Service



STRATEGY DEVELOPMENT				
Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
B	Operational Strategies	Interconnect and Coordinate Signals	High	At 16 signalized intersections (E Street to US 50)
		Bus-Signal Pre-emption		At 16 signalized intersections (E Street to US 50)
G.3	ITS Strategies	Traveler Information	High	Real-time transit arrival at bus stops
E.1	Public Transit Strategies	Increase Service Frequency	High	Line 109 Peak Period Service Frequency to 15/30 min
				See Planned Improvements (E.1)
F	Active Transportation Strategies	Provide Class II Alhambra to 4th Avenue	Medium	ROW Permitting - Fill Class II Gap
J.2	Safety Improvement Strategies	Systemic Safety Counter Measures	Medium	Ped/Bike Safety Treatments at intersections and mid-block
A	Demand Management Strategies	Employer-based TDM	Medium	Enhanced TMA activity (See TMA Matrix: Sacramento)
B	Operational Strategies	Road Diet (Reduce from 4 to 2 thru lanes)	Low	Carries less than 25,000 ADT - candidate for consideration

PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
SAC24870	Hi-bus on Stockton Blvd: Develop an enhanced bus corridor along 12 miles along Stockton Boulevard between Downtown Sacramento and Cosumnes River College. Include 9 artic buses	Sacramento	Sacramento Regional Transit District	Completion by 2020	\$27,127,000	Planned	E.1

TMA-TMO ID	TMA-TMO	SACOG MOU	4. Stockton
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellan Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
	TMA Corridor Coverage	Total Employers ¹	11,447
	Within TMA Area	Total Employees ¹	113,192
	Directly Connects TMA Area	TMA Employers ¹	224
	Indirect Connectivity to TMA Area	TMA Employees ¹	103,579
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants ¹	10,327

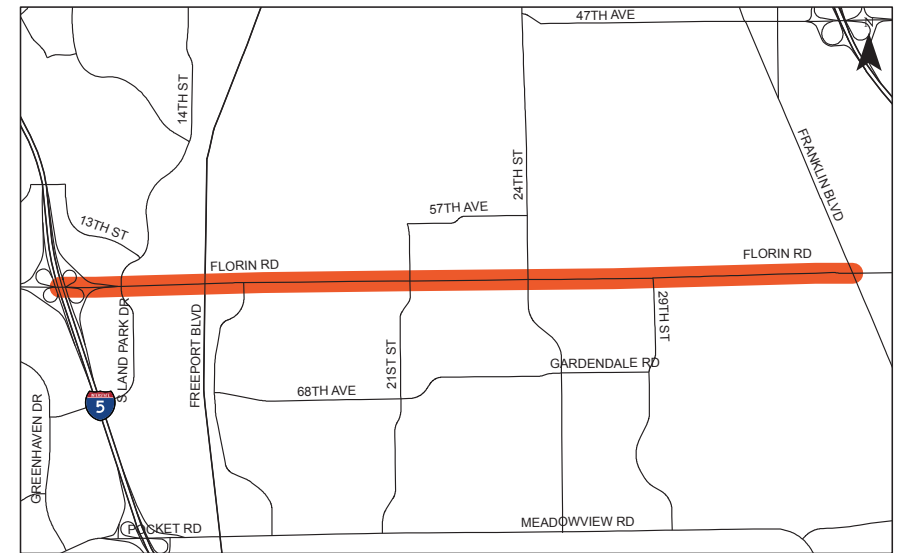
ROADWAY CHARACTERISTICS BY DIRECTION															
Northbound								Southbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present	Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present
Alhambra	2	Signal	-	109*	30-45 min	N	Y	Alhambra	2	Signal	-	109*	30-45 min	N	Y
32nd St	2	SSSC	-	109*	30-45 min	N	Y	32nd St	2	SSSC	-	109*	30-45 min	N	Y
33rd St	2	SSSC	-	109*	30-45 min	N	Y	33rd St	2	SSSC	-	109*	30-45 min	N	Y
34th St	2	Signal	-	109*	30-45 min	N	Y	34th St	2	Signal	-	109*	30-45 min	N	Y
R St	2	SSSC	-	109*	30-45 min	N	N	R St	2	SSSC	-	109*	30-45 min	N	N
US-50	2	Signal	-	109*	30-45 min	N	Y	US-50	2	Signal	-	109*	30-45 min	Y	Y
T St	2	Signal	-	38	1 hour	N	Y	T St	2	Signal	-	109*	30-45 min	Y	Y
T St U St Alley	2	SSSC	-	38	1 hour	N	Y	T St U St Alley	2	SSSC	-	38	1 hour	N	Y
U St	2	SSSC	-	38	1 hour	N	Y	U St	2	SSSC	-	38	1 hour	N	Y
V St	2	SSSC	-	38	1 hour	N	Y	V St	2	SSSC	-	38	1 hour	N	Y
Miller Way/39th St	2	Signal	-	38	1 hour	N	Y	Miller Way/39th St	2	Signal	-	38	1 hour	N	Y
Colonial Way	2	Signal	-	38	1 hour	N	Y	Colonial Way	2	Signal	-	38	1 hour	N	Y
Sherman Way Alley	2	SSSC	-	38	1 hour	N	Y	Sherman Way Alley	2	SSSC	-	38	1 hour	N	Y
Sherman Way	2	Signal	-	38	1 hour	N	Y	Sherman Way	2	Signal	-	38	1 hour	N	Y
42nd St	2	SSSC	-	38	1 hour	N	Y	42nd St	2	SSSC	-	38	1 hour	N	Y
X St	2	Signal	-	38	1 hour	N	Y	X St	2	Signal	-	38	1 hour	N	Y
Y St	2	SSSC	-	38	1 hour	N	Y	Y St	2	SSSC	-	38	1 hour	N	Y
2nd Ave	2	Signal	-	38	1 hour	N	Y	2nd Ave	2	Signal	-	38	1 hour	N	Y
3rd Ave	2	SSSC	-	38	1 hour	N	Y	3rd Ave	2	SSSC	-	38	1 hour	N	Y
4th Ave	2	SSSC	-	38	1 hour	N	Y	4th Ave	2	SSSC	-	38	1 hour	N	Y
Broadway	2	Signal	II	51	15 min	N	Y	Broadway	2	Signal	-	38	1 hour	N	Y
6th Ave	2	SSSC	II	51	15 min	N	Y	6th Ave	2	SSSC	II	51	15 min	N	Y
7th Ave	2	SSSC	II	51	15 min	N	Y	7th Ave	2	SSSC	II	51	15 min	N	Y
7th Ave 8th Ave Alley	2	SSSC	II	51	15 min	N	Y	7th Ave 8th Ave Alley	2	SSSC	II	51	15 min	N	Y
8th Ave	2	Signal	II	51	15 min	N	Y	8th Ave	2	Signal	II	51	15 min	N	Y
8th Ave 9th Ave Alley	2	SSSC	II	51	15 min	N	Y	8th Ave 9th Ave Alley	2	SSSC	II	51	15 min	N	Y
9th Ave	2	SSSC	II	51	15 min	N	Y	9th Ave	2	SSSC	II	51	15 min	N	Y
10th Ave	2	SSSC	II	51	15 min	N	Y	10th Ave	2	SSSC	II	51	15 min	N	Y
11th Ave	2	SSSC	II	51	15 min	N	Y	11th Ave	2	SSSC	II	51	15 min	N	Y
12th Ave	2	SSSC	II	51	15 min	N	Y	12th Ave	2	SSSC	II	51	15 min	N	Y
13th Ave	2	SSSC	II	51	15 min	N	Y	13th Ave	2	SSSC	II	51	15 min	N	Y
14th Ave	2	Signal	II	51	15 min	N	Y	14th Ave	2	Signal	II	51	15 min	N	Y

*Peak Hour Bus Service

The corridor on Florin Road spans from I-5 to the west and Franklin Boulevard to the east. The roadway is a 4-lane arterial with transit service, sidewalks, and some bike facilities. Parallel roadways include Mack Road and Fruitridge Road. The corridor is in the Sacramento TMA.

ROADWAY TRAFFIC DATA					
From	To	Functional Classification	Base Year Lanes	Base Year Count	2036 Forecast
Luther Dr	Munson Wy	Arterial - Moderate Access Control	4	30,018	35,147
Land Park Dr	Freeport Bl	Arterial - Moderate Access Control	4	33,433	35,903

TRANSIT SERVICE		
Route	AM Headway	PM Headway
81	15 min	15 min
54	30 min - 1 hr	30 min - 1 hr



ROADWAY CHARACTERISTICS BY DIRECTION															
Eastbound								Westbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present	Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present
I-5	2	-	-	81	15 min	N	Y	I-5	2	-	-	81	15 min	N	Y
S Land Park Dr	2	Signal	-	81	15 min	N	Y	S Land Park Dr	2	Signal	II	81	15 min	N	Y
Freeport Blvd	2	Signal	II	81	15 min	N	Y	Freeport Blvd	2	Signal	II	81	15 min	N	Y
Amherst St	2	Signal	II	81	15 min	N	Y	Amherst St	2	Signal	III	81	15 min	N	Y
17th St	2	SSSC	III	81	15 min	N	Y	17th St	2	SSSC	III	81	15 min	N	Y
Cromwell Way	2	SSSC	III	81	15 min	N	Y	Cromwell Way	2	SSSC	III	81	15 min	N	Y
21st St	2	Signal	III	81	15 min	N	Y	21st St	2	Signal	-	81	15 min	N	Y
Tamoshanter Way	2	Signal	III	81	15 min	N	Y	Tamoshanter Way	2	Signal	-	81	15 min	N	Y
24th St	2	Signal	-	81	15 min	N	Y	24th St	2	Signal	II	81	15 min	N	Y
25th St	2	SSSC	II	81	15 min	N	Y	25th St	2	SSSC	II	81	15 min	N	Y
Woodbine Ave	2	SSSC	II	81	15 min	N	Y	Woodbine Ave	2	SSSC	II	81	15 min	N	Y
Loma Verde Way	2	SSSC	II	81	15 min	N	Y	Loma Verde Way	2	SSSC	II	81	15 min	N	Y
Indian Ln/29th St	2	Signal	II	81	15 min	N	Y	Indian Ln/29th St	2	Signal	-	54, 81	15 min-1 hr	N	Y
Serenity Dr	2	SSSC	-	54, 81	15 min-1 hr	N	Y	Serenity Dr	2	SSSC	II	54, 81	15 min-1 hr	N	Y
Hisperry Ln	2	SSSC	II	54, 81	15 min-1 hr	N	Y	Hisperry Ln	2	SSSC	II	54, 81	15 min-1 hr	N	Y
Luther Dr	2	Signal	II	54, 81	15 min-1 hr	N	Y	Luther Dr	2	Signal	II	54, 81	15 min-1 hr	N	Y
Munson Way	2	SSSC	II	54, 81	15 min-1 hr	N	Y	Munson Way	2	SSSC	II	54, 81	15 min-1 hr	N	Y
Franklin Blvd	3	Signal	II	54, 81	15 min-1 hr	N	Y	Franklin Blvd	3	Signal	-	81	15 min	N	Y

STRATEGY DEVELOPMENT				
Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
B	Operational Strategies	Interconnect and Coordinate Signals	High	At 15 signalized intersections
G.3	ITS Strategies	Traveler Information Systems		Real-time transit arrival at bus stops
E.1	Public Transit Strategies	Increase Service Frequency	High	Line 54 Peak Period Service Frequency to 15/30 min
				See Planned Improvements (E.1)
J.2	Safety Improvement Strategies	Systemic Safety Counter Measures	High	Ped/Bike Safety Treatments at intersections and mid-block
				See Programmed Improvements (J.2)
F	Active Transportation Strategies	Fill Gaps to provide continuous Class II	Medium	Numerous Locations (see Roadway Characteristics)
		Convert Class III to Class II		
A	Demand Management Strategies	Employer-based TDM	Low	Targeted TMA activity as applicable (See TMA Matrix: Sacramento and Power Inn)

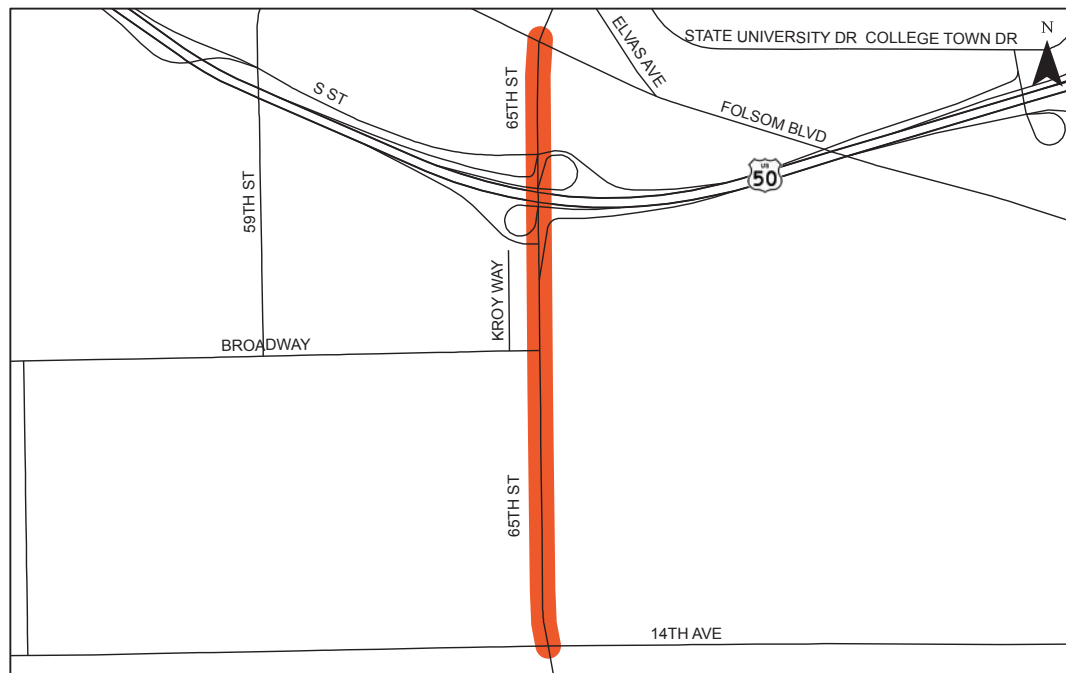
PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
SAC25058	Pedestrian Signal Safety Improvements: Florin Road between Greenhaven Drive and Luther Drive.: Convert from pedestal mounted to mast arms at 7 intersections; Install advanced detection at Florin Rd/24th St, and Florin Rd/Freeport Blvd; Install communications fiber; Install Countdown Ped Heads; and Replace 8" with 12" LED 3 Section Heads.(H8-03-014). Toll Credits for CON	Sacramento	City of Sacramento	2020	\$2,555,400	Programmed	F
SAC24815	Hi-bus on Florin Rd: Develop Hi Bus corridor on Florin Road with enhanced bus from JFK High School to Old Town Florin (8 miles), and BRT from Old Town Florin to Bradshaw (3.5 miles). Include 9 artic buses	Sacramento	Sacramento Regional Transit District	2021-2036	\$34,547,000	Planned	E.1

TMA-TMO ID	TMA-TMO	SACOG MOU	5. Florin Rd.
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellan Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
	TMA Corridor Coverage	Total Employers ¹	11,447
	Within TMA Area	Total Employees ¹	113,192
	Directly Connects TMA Area	TMA Employers ¹	224
	Indirect Connectivity to TMA Area	TMA Employees ¹	103,579
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants ¹	10,327

The deficient corridor on 65th Street lies between Folsom Boulevard to the north and 14th Avenue to the south. Classified as an arterial with 4 lanes, this corridor is served by transit and has sidewalks, but lacks bike lanes. Parallel roadways include Redding Avenue. The corridor is in the Sacramento and Power Inn Alliance TMAs.

TRANSIT SERVICE		
Route	AM Headway	PM Headway
65	1 hour	1 hour
81	15 min	15-30 min

ROADWAY TRAFFIC DATA					
From	To	Functional Classification	Base Year Lanes	Base Year Count	2036 Forecast
9Th Av	San Joaquin St	Arterial - Moderate Access Control	4	25,542	33,403
Broadway	8Th Av	Arterial - Moderate Access Control	4	28,540	36,161
RT 50	4Th Av	Arterial - Moderate Access Control	4	60,428	68,355



ROADWAY CHARACTERISTICS BY DIRECTION															
Northbound								Southbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present	Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present
Folsom Blvd	2	Signal	-	65, 81*	15 min-1 hr	N	Y	Folsom Blvd	2	Signal	-	-	-	N	Y
Q St	2	SSSC	-	65, 81	15 min-1 hr	N	Y	Q St	2	SSSC	-	65, 81*	15 min-1 hr	N	Y
S St/US 50 WB	2	Signal	-	65, 81	15 min-1 hr	N	Y	S St/US 50 WB	2	Signal	-	65, 81	15 min-1 hr	N	Y
US 50 EB	2	Signal	-	65, 81	15 min-1 hr	N	Y	US 50 EB	2	Signal	-	65, 81	15 min-1 hr	N	Y
4th Ave	2	Signal	-	65, 81	15 min-1 hr	N	Y	4th Ave	2	Signal	-	65, 81	15 min-1 hr	N	Y
Broadway	2	Signal	-	65, 81	15 min-1 hr	N	Y	Broadway	2	Signal	-	65, 81	15 min-1 hr	N	Y
Manassero Way	2	SSSC	-	65, 81	15 min-1 hr	N	Y	Manassero Way	2	SSSC	-	65, 81	15 min-1 hr	N	Y
8th Ave	2	SSSC	-	65, 81	15 min-1 hr	N	Y	8th Ave	2	SSSC	-	65, 81	15 min-1 hr	N	Y
San Joaquin St	2	SSSC	-	65, 81	15 min-1 hr	N	Y	San Joaquin St	2	SSSC	-	65, 81	15 min-1 hr	N	Y
9th Ave	2	SSSC	-	65, 81	15 min-1 hr	N	Y	9th Ave	2	SSSC	-	65, 81	15 min-1 hr	N	Y
11th Ave	2	SSSC	-	65, 81	15 min-1 hr	N	Y	11th Ave	2	SSSC	-	65, 81	15 min-1 hr	N	Y
14th Ave	2	Signal	-	81	15-30 min	N	Y	14th Ave	2	Signal	-	65, 81	15 min-1 hr	N	Y

*Transit Routes start/stop at University/65th Street Light Rail Station

STRATEGY DEVELOPMENT				
Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
K	SOV Capacity Increase	Segment Widening	High	Widen to 5 lanes US 50 - Broadway
				See Programmed Improvement (K)
G.1	ITS Strategies	Adaptive Signal Control	High	At 6 signalized intersections
E.1	Public Transit Strategies	Increase Service Frequency	Medium	Line 65 Peak Period Service Frequency to 30 min
				See Planned Parallel Facility Improvement (E.1)
A	Demand Management Strategies	Employer-based TDM	Medium	Targeted TMA activity (See TMA Matrix: Sacramento, Power Inn)

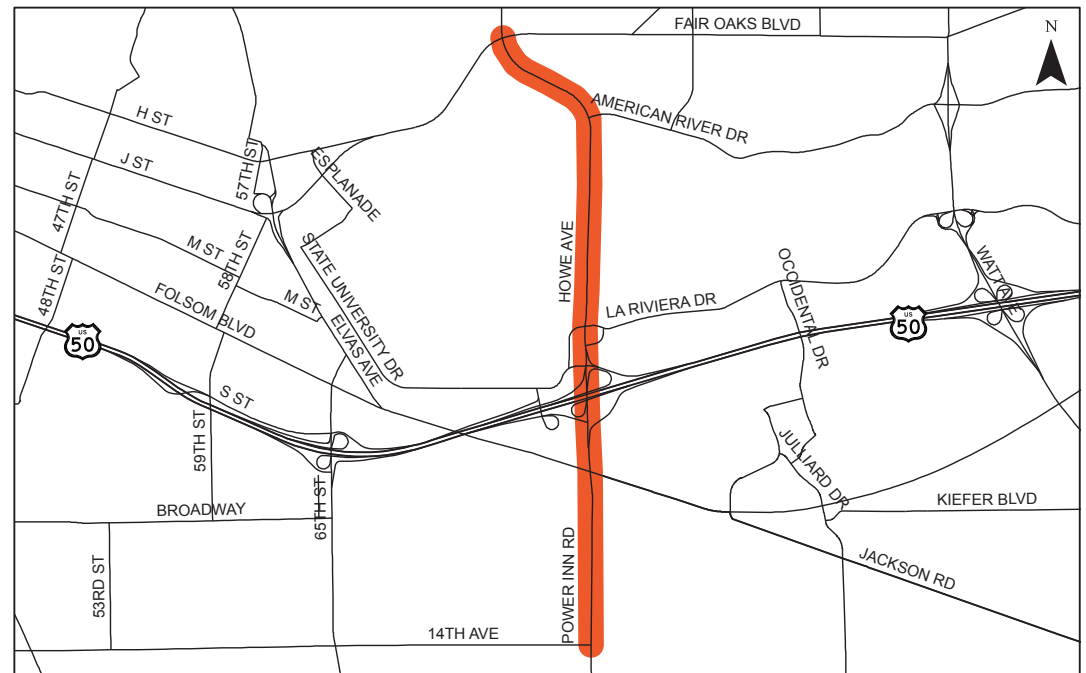
PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
SAC23630	65th St.: Widen: 5 lanes from Hwy. 50 to Broadway.	Sacramento	City of Sacramento	2021-2036	\$4,000,000	Planned	K
SAC24870	Hi-bus on Stockton Blvd: Develop an enhanced bus corridor along 12 miles along Stockton Boulevard between Downtown Sacramento and Cosumnes River College. Include 9 artic buses	Sacramento	Sacramento Regional Transit District	Completion by 2020	\$27,127,000	Planned	E.1

TMA-TMO ID	TMA-TMO	SACOG MOU	6. 65th St.
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellan Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
	TMA Corridor Coverage	Total Employers ¹	15,805
	Within TMA Area	Total Employees ¹	169,750
	Directly Connects TMA Area	TMA Employers ¹	341
	Indirect Connectivity to TMA Area	TMA Employees ¹	140,791
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants ¹	11,487

The Howe Avenue / Power Inn Road deficient corridor spans from Fair Oaks Boulevard in the north to 14th Avenue in the south. The roadway is a 4- to 6-lane arterial featuring one transit route, sidewalks, and intermittent bike lanes. Parallel roadways include Watt Avenue and 65th Street/ Elvas Avenue/ J Street. The corridor is in the Power Inn Alliance TMA.

ROADWAY TRAFFIC DATA					
From	To	Functional Classification	Base Year Lanes	Base Year Count	2036 Forecast
RT 50	Folsom Bl	Arterial - High Access Control	6	60,156	71,800
University Av	American River Dr	Arterial - High Access Control	4	41,032	45,000

TRANSIT SERVICE		
Route	AM Headway	PM Headway
26	30 min	30 min



ROADWAY CHARACTERISTICS BY DIRECTION															
Northbound								Southbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present	Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present
Fair Oaks Blvd	3	Signal	II	-	-	N	Y	Fair Oaks Blvd	3	Signal	-	-	-	N	Y
University Ave	3	Signal	II	-	-	N	Y	University Ave	3	Signal	II	-	-	N	Y
American River Dr	3	Signal	II	26	30 min	N	Y	American River Dr	3	Signal	II	-	-	N	Y
University Park Dr	3	Signal	II	26	30 min	N	Y	University Park Dr	3	Signal	II	26	30 min	N	Y
La Riviera Dr	2	SSSC	II	26	30 min	N	N	La Riviera Dr	3		II	26	30 min	N	Y
"College Town Dr/ US 50 WB"	3	Signal	-	-	-	N	N	"College Town Dr/ US 50 WB"	4	Signal	II	26	30 min	N	Y
US 50 EB	3	Signal	-	-	-	N	N	US 50 EB	3	Signal	-	-	-	N	Y
Folsom Blvd	3	Signal	II	-	-	N	Y	Folsom Blvd	3	Signal	-	-	-	N	Y
Cucamonga Ave	3	Signal	II	-	-	N	Y	Cucamonga Ave	3	Signal	II	-	-	N	Y
Ramona Ave	3	Signal	II	-	-	N	Y	Ramona Ave	3	Signal	II	-	-	N	Y
14th Ave	3	Signal	II	-	-	N	Y	14th Ave	2	Signal	II	-	-	N	Y

STRATEGY DEVELOPMENT				
Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	At 10 signalized intersections
				"OR"
B	Operational Strategies	Interconnect and Coordinate Signals	High	Connect and Coordinate 10 signalized intersections
		Bus-Signal Pre-emption		At 10 signalized intersections
A	Demand Management Strategies	Employer-based TDM	High	Targeted TMA activity (See TMA Matrix: Sacramento, Power Inn, South Natomas)
G.3	ITS Strategies	Traveler Information Systems	Medium	Real-time transit arrival at bus stops
E.1	Public Transit Strategies	Increase Service Frequency	Medium	Line 26 Peak Period Service Frequency to 15 min

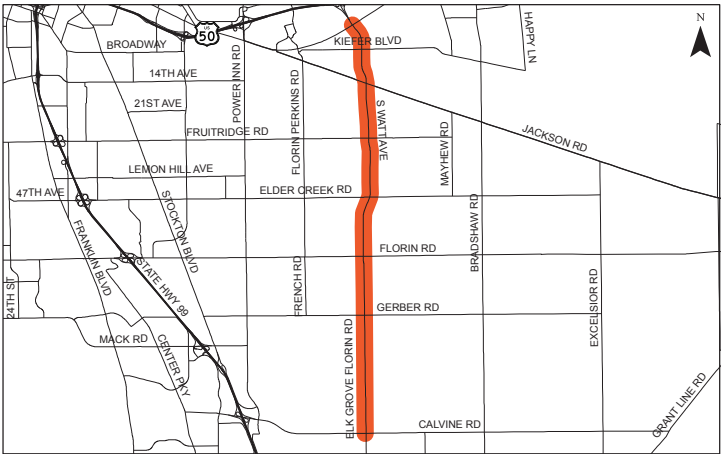
PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
SAC24723	Complete Street Rehabilitation - Power Inn Rd.: Power Inn Rd., from Folsom Blvd. to Alpine Ave.: Pavement rehabilitation and complete streets improvements. (Toll Credits for PE and CON) T15145400. Toll Credits for ENG, CON	Sacramento	City of Sacramento	2017	\$2,597,989	Programmed	F

TMA-TMO ID	TMA-TMO	SACOG MOU	7. Howe Ave.
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellan Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
	TMA Corridor Coverage	Total Employers ¹	18,503
	Within TMA Area	Total Employees ¹	202,570
	Directly Connects TMA Area	TMA Employers ¹	440
	Indirect Connectivity to TMA Area	TMA Employees ¹	149,148
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants ¹	11,645

The deficient corridor on South Watt Avenue / Elk Grove Florin Road lies between Folsom Boulevard to the north and Calvine Road to the south. The corridor is a 4- to 6-lane arterial with bike lanes in some locations, sidewalks, and no transit service. Parallel roadways include Power Inn Way and Bradshaw Road. The corridor is in the Power Inn and 50 Corridor TMAs.

ROADWAY TRAFFIC DATA					
From	To	Functional Classification	Base Year Lanes	Base Year Count	2036 Forecast
Folsom Bl	S/O Intersection	Arterial - High Access Control	6	46,775	85,636
Florin Rd	N/O Intersection	Arterial - Moderate Access Control	2	19,308	33,365

TRANSIT SERVICE		
Route	AM Headway	PM Headway
72	30 min	30 min



Strategy Development				
Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
K	SOV Capacity Increase	Segment Widening	High	Widen from 4 to 6 lanes (Elder to Keifer Blvd)
				Widen from 2 to 4 lanes (Florin to Jackson Road)
		New Interchanges		New Interchange at Watt/Jackson Rd.
				New Interchange at Watt/Folsom
				See Planned Improvement (K)
B	Operational Strategies	Signal Connect-Coordination	High	14 Signalized Intersections
		Intersection Channelization (consisten with K)		Intersection Channelization, Signal Timing; Signal Priority (per Strategy K)
				SSSC Intersections and Signalized Intersections
A	Demand Management Strategies	Employer-based TDM	Medium	Targeted TMA activity (See TMA Matrix: Power Inn, Elk Grove, 50 Corridor)
J.1 - J.2	Safety Improvement Strategies	Systemic Safety Counter Measures	Medium	Ped/Bike Safety Treatments; Splinter Islands at SSSC Intersections
				Illumination, rumble strips, reflective treatments, ped/bike treatments mid-block
F	Active Transportation Strategies	Either close Class II gaps or convert to Buffered Class IV	Medium	Dependent on Phasing of Strategy K
E.1	Public Transit Strategies	Establish Fixed Route Transit Service	Low	Currently no fixed route service - dependent on future growth.

ROADWAY CHARACTERISTICS BY DIRECTION															
Northbound								Southbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present	Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present
Folsom Blvd	3	Signal	II	72	30 min	N	Y	Folsom Blvd	3	Signal	II	72	30 min	N	Y
Reith Ct	3	Signal	II	72	30 min	N	Y	Reith Ct	3	Signal	II	72	30 min	N	Y
Autumnwood Dr	3	SSSC	II	72	30 min	N	Y	Autumnwood Dr	3	-	II	72	30 min	N	Y
Kiefer Blvd	3	Signal	II	-	-	N	Y	Kiefer Blvd	3	Signal	II	72	30 min	N	Y
Frederick Ave	3	SSSC	II	-	-	N	Y	Frederick Ave	2	-	II	-	-	N	Y
Alderson Ave	3	SSSC	II	-	-	N	Y	Alderson Ave	2	-	II	-	-	N	Y
Canberra Dr	3	Signal	II	-	-	N	Y	Canberra Dr	2	Signal	II	-	-	N	Y
Jackson Rd	2	Signal	II	-	-	N	Y	Jackson Rd	2	Signal	II	-	-	N	Y
Fruitridge Rd	2	Signal	II	-	-	N	Y	Fruitridge Rd	2	Signal	II	-	-	N	Y
Osage Ave	1	SSSC	II	-	-	N	Y	Osage Ave	1	SSSC	II	-	-	N	Y
Alder Ave	1	SSSC	II	-	-	N	Y	Alder Ave	1	SSSC	II	-	-	N	Y
43rd Ave	1	SSSC	II	-	-	N	Y	43rd Ave	1	SSSC	II	-	-	N	Y
Elder Creek Rd	1	Signal	II	-	-	N	Y	Elder Creek Rd	1	Signal	II	-	-	N	Y
Bandy Rd	1	SSSC	II	-	-	N	Y	Bandy Rd	1	SSSC	II	-	-	N	Y
Florin Rd	2	Signal	II	-	-	N	Y	Florin Rd	2	Signal	II	-	-	N	Y
McCoy Ave	1	SSSC	II	-	-	N	Y	McCoy Ave	1	SSSC	II	-	-	N	Y
Gerber Rd	2	Signal	-	-	-	N	Y	Gerber Rd	2	Signal	II	-	-	N	Y
Tiogawoods Dr	2	Signal	-	-	-	N	Y	Tiogawoods Dr	3	Signal	-	-	-	N	Y
Leland Ave	2	SSSC	-	-	-	N	Y	Leland Ave	3	-	-	-	-	N	Y
Meeker Ln	2	SSSC	-	-	-	N	Y	Meeker Ln	3	-	-	-	-	N	Y
Casselman Rd	2	SSSC	-	-	-	N	Y	Casselman Rd	3	SSSC	-	-	-	N	Y
Carlisle Ave	3	SSSC	-	-	-	N	Y	Carlisle Ave	3	SSSC	-	-	-	N	Y
Lemas Rd	3	SSSC	-	-	-	N	Y	Lemas Rd	3	SSSC	-	-	-	N	Y
Vintage Park Dr	3	Signal	II	-	-	N	Y	Vintage Park Dr	3	Signal	-	-	-	N	Y
Bridalsmith Dr	3	SSSC	II	-	-	N	Y	Bridalsmith Dr	3	SSSC	II	-	-	N	Y
Strawbridge Dr	3	SSSC	II	-	-	N	Y	Strawbridge Dr	3	-	II	-	-	N	Y
Brittany Park Dr	3	Signal	II	-	-	N	Y	Brittany Park Dr	3	Signal	II	-	-	N	Y
Boulder Glen Way	3	SSSC	II	-	-	N	Y	Boulder Glen Way	2	-	II	-	-	N	Y
Cobble Crest Dr	3	SSSC	II	-	-	N	Y	Cobble Crest Dr	2	-	II	-	-	N	Y
Robbins Rd	3	Signal	II	-	-	N	Y	Robbins Rd	2	Signal	II	-	-	N	Y
Calvine Rd	3	Signal	-	-	-	N	Y	Calvine Rd	2	Signal	II	-	-	N	Y

PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
SAC24884	Jackson Hwy (SR 16) @ Watt Ave.: Construct a new roadway grade separation interchange at the intersection of Jackson Hwy and Watt Ave.	Sacramento	Sacramento County	Completion after 2036	\$25,000,000	Planned	K
SAC23540	S. Watt Ave.: Widen: 6 lanes from Elder Creek Rd. to Fruitridge Rd.	Sacramento	Sacramento County	2021-2036	\$20,000,000	Planned	K
SAC23860	S. Watt Ave. / Elk Grove Florin Rd.: Widen: 6 lanes from Fruitridge Rd. to Kiefer Blvd.	Sacramento	Sacramento County	2021-2036	\$10,000,000	Planned	K
SAC24259	S. Watt Ave. / Elk Grove Florin Rd.: Widen: 6 lanes from Folsom Blvd. to Calvine Rd.	Sacramento	Sacramento County	Completion after 2036	\$3,250,000	Planned	K
SAC19290	South Watt Avenue Widening: Widen South Watt Avenue from Florin Road to Jackson Road (Route 16) from 2 to 4 lanes	Sacramento	Sacramento County	2021-2036	\$18,871,917	Planned	K
SAC24352	Watt Ave.: Construct New Interchange: Watt Ave. / Folsom Blvd.	Sacramento	Sacramento County	Completion after 2036	\$7,500,000	Planned	K

TMA-TMO ID	TMA-TMO	SACOG MOU	8. S Watt Ave
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellan Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
	TMA Corridor Coverage	Total Employers ¹	18,531
	Within TMA Area	Total Employees ¹	197,652
	Directly Connects TMA Area	TMA Employers ¹	174
	Indirect Connectivity to TMA Area	TMA Employees ¹	61,654
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants ¹	3,037

The deficient corridor on Watt Avenue lies between Folsom Boulevard to the south and Elkhorn Boulevard to the north. The corridor is a 6-lane arterial with transit service, sidewalks, and bike lanes in some locations. Parallel roadways include Fulton Avenue. The corridor is in the Power Inn Alliance, Point West, and McClellan Park TMAs.

ROADWAY TRAFFIC DATA					
From	To	Functional Classification	Base Year Lanes	Base Year Count	2036 Forecast
American River Bridge	N/O Bridge	Arterial - High Access Control	6	90,494	115,446
Marconi Ave	N/O Intersection	Arterial - High Access Control	6	46,319	57,257
Don Julio Blvd	N/O Intersection	Arterial - High Access Control	6	30,309	50,954

TRANSIT SERVICE		
Route	AM Headway	PM Headway
84	1 hour	1 hour
80	1 hour	1 hour
22	1 hour	1 hour
82	30 min	30 min
1	15 min	15-20 min
26	30 min	30 min
93	30-55 min	30 min
19	1 hour	1 hour



STRATEGY DEVELOPMENT				
Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
K	SOV Capacity Increase	Segment Widening	High	Widen from 4 to 6 lanes (Palm to Don Julio Blvd)
				Couplet - widen to 6 lanes NB on Watt and SB on 34 St. BRT/Hi Exclusive Lanes
		New Interchange (see also 8-South Watt)		New Interchange at Watt/Folsom
				See Planned Improvement (K)
E.1	Public Transit Strategies	Increase Service Frequency	High	See Planned Improvement (E.1)
B	Operational Strategies	Signal Connect-Coordination	High	36 Signalized Intersections
		Intersection Channelization (consisten with K)		Intersection Channelization, Signal Timing; Signal Priority (per Strategy K)
				SSSC Intersections and Signalized Intersections
A	Demand Management Strategies	Employer-based TDM	High	Targeted TMA activity (See TMA Matrix: Power Inn, Point West, McClellan Park)
J.2	Safety Improvement Strategies	Systemic Safety Counter Measures	Medium	Ped/Bike Safety Treatments; Splinter Islands at SSSC Intersections
				Illumination, rumble strips, reflective treatments, ped/bike treatments mid-block
F	Active Transportation Strategies	Either close Class II gaps or convert to Buffered Class IV	Medium	Dependent on Phasing of Strategy K

ROADWAY CHARACTERISTICS BY DIRECTION															
Northbound								Southbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Head-ways	On-Street Parking	Sidewalk Present	Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Head-ways	On-Street Parking	Sidewalk Present
Elkhorn Blvd	3	Signal	-	19 & 80	1 hour	N	Y	Elkhorn Blvd	3	Signal	II	19 & 80	1 hour	N	Y
Milton Way	3	SSSC	-	19 & 80	1 hour	N	Y	Milton Way	3	SSSC	II	19 & 80	1 hour	N	Y
Van Owen St	2	Signal	-	19 & 80	1 hour	N	Y	Van Owen St	2	Signal	II	19 & 80	1 hour	N	Y
Channing Dr	2	SSSC	-	19 & 80	1 hour	N	Y	Channing Dr	2	SSSC	II	19 & 80	1 hour	N	Y
Larry Way	2	SSSC	-	19 & 80	1 hour	N	Y	Larry Way	2	SSSC	II	19 & 80	1 hour	N	Y
Grattan way	2	SSSC	-	19 & 80	1 hour	N	Y	Grattan way	2	SSSC	-	19 & 80	1 hour	N	Y
Clara Way	2	SSSC	-	19 & 80	1 hour	N	Y	Clara Way	2	SSSC	-	19 & 80	1 hour	N	Y
Bolivar Ave	2	Signal	-	19 & 80	1 hour	N	Y	Bolivar Ave	2	Signal	-	19 & 80	1 hour	N	Y
Don Julio Blvd	2	Signal	II	19, 80, 84	1 hour	N	Y	Don Julio Blvd	3	Signal	-	19, 80, 84	1 hour	N	Y
Freedom Park Dr	3	Signal	II	19, 80, 84	1 hour	N	Y	Freedom Park Dr	3	Signal	II	19, 80, 84	1 hour	N	Y
Karl Dr	3	Signal	II	19, 80, 84	1 hour	N	Y	Karl Dr	3	Signal	II	19, 80, 84	1 hour	N	Y
Karen Ln	3	SSSC	II	19, 80, 84	1 hour	N	Y	Karen Ln	3	SSSC	II	19, 80, 84	1 hour	N	Y
Shopping Center Dwy	3	Signal	II	19, 26, 80, 84	30 min-1 hr	N	Y	Shopping Center Dwy	3	Signal	II	19, 80, 84	1 hour	N	Y
N Haven Dr	3	SSSC	II	19, 26, 80, 84	30 min-1 hr	N	Y	N Haven Dr	3	SSSC	II	19, 80, 84	30 min-1 hr	N	Y
James St/ A St	3	Signal	II	19, 26, 80, 84	30 min-1 hr	N	Y	James St/ A St	3	Signal	II	19, 26, 80, 84	30 min-1 hr	N	Y
McClellan Dr	3	SSSC	II	19, 26, 80, 84	30 min-1 hr	N	Y	McClellan Dr	3		II	19, 26, 80, 84	30 min-1 hr	N	Y
Palm Ave	3	Signal	II	19, 26, 80, 84	30 min-1 hr	N	Y	Palm Ave	3	Signal	II	19, 26, 80, 84	30 min-1 hr	N	Y
Wings Way	3	SSSC	II	19, 26, 80, 84	30 min-1 hr	N	Y	Wings Way	3	-	II	19, 26, 80, 84	30 min-1 hr	N	Y
Airbase Dr	3	Signal	II	19, 26, 80, 87, 93	30 min-1 hr	N	Y	Airbase Dr	3	Signal	II	19, 26, 80, 84	30 min-1 hr	N	Y
Peacekeeper Way/ Poplar Blvd	2	Signal	-	19, 26, 80, 87, 93	30 min-1 hr	N	N	Peacekeeper Way/ Poplar Blvd	3	Signal	II	19, 26, 80, 84, 93	19, 26, 80, 87, 93	N	Y
Roseville Rd	3	Signal	-	19, 26, 80, 87, 93	30 min-1 hr	N	Y	Roseville Rd	3	Signal	-	19, 26, 80, 84, 93	19, 26, 80, 87, 93	N	N
Myrtle Ave	3	Signal	-	19, 26, 80, 87, 93	30 min-1 hr	N	Y	Myrtle Ave	3	Signal	-	19, 26, 80, 84, 93	19, 26, 80, 87, 93	N	Y
Winona Way	3	Signal	-	19, 26, 80, 87, 93	30 min-1 hr	N	Y	Winona Way	3	Signal	-	19, 26, 80, 84, 93	19, 26, 80, 87, 93	N	Y
Oakdell Ave	3	SSSC	-	19, 26, 80, 87, 93	30 min-1 hr	N	Y	Oakdell Ave	3		-	19, 26, 80, 84, 93	19, 26, 80, 87, 93	N	Y
Margaret Way	3	Signal	-	19, 26, 80, 87, 93	30 min-1 hr	N	Y	Margaret Way	3	Signal	-	19, 26, 80, 84, 93	19, 26, 80, 87, 93	N	Y
US 80 WB	3	Signal	-	1, 26, 80, 84	15 min-1 hr	N	Y	US 80 WB	3	Signal	-	19, 26, 80, 84, 93	19, 26, 80, 87, 93	N	Y
US 80 EB	3	Signal	-	1, 26, 80, 84	15 min-1 hr	N	Y	US 80 EB	3	Signal	-	26, 80, 84	30 min	N	Y
Longview Dr	3	Signal	-	1, 26, 80, 84	15 min-1 hr	N	Y	Longview Dr	3	Signal	-	26, 80, 84	30 min	N	Y

ROADWAY CHARACTERISTICS BY DIRECTION															
Northbound								Southbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present	Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present
Business 80 WB	3	-	-	1, 26, 80, 84	15 min-1 hr	N	Y	Business 80 WB	3	-	-	26, 80, 84	30 min	N	Y
Business 80 EB	3	-	-	1, 26, 80, 84	15 min-1 hr	N	Y	Business 80 EB	3	-	-	26, 80, 84	30 min	N	Y
Auburn Blvd	3	Signal	-	80, 86	1 hour	N	Y	Auburn Blvd	3	Signal	-	26, 80, 84	30 min	N	Y
Lerwick Rd	3	SSSC	-	80, 86	1 hour	N	Y	Lerwick Rd	3	SSSC	-	80, 84	1 hour	N	Y
Edison Ave	3	Signal	II	80, 86	1 hour	N	Y	Edison Ave	3	Signal	-	80, 84	1 hour	N	Y
Sierra View Ln	3	-	II	80, 86	1 hour	N	Y	Sierra View Ln	3	SSSC	II	80, 84	1 hour	N	Y
West Way	3	SSSC	II	80, 86	1 hour	N	Y	West Way	3	-	II	80, 84	1 hour	N	Y
Pottern Ln	3	SSSC	II	80, 86	1 hour	N	Y	Pottern Ln	3	SSSC	II	80, 84	1 hour	N	Y
William Way	3	SSSC	II	80, 86	1 hour	N	Y	William Way	3	-	II	80, 84	1 hour	N	Y
Harmony Ln	3	-	II	80, 86	1 hour	N	Y	Harmony Ln	3	SSSC	II	80, 84	1 hour	N	Y
Shady Ln	3	-	II	80, 86	1 hour	N	Y	Shady Ln	3	SSSC	II	80, 84	1 hour	N	Y
Whitney Ave	3	Signal	II	80, 82, 84	30 min-1 hr	N	Y	Whitney Ave	3	-	II	80, 82, 84	1 hour	N	Y
Club Ln	3	SSSC	II	80, 82, 84	30 min-1 hr	N	Y	Club Ln	3	SSSC	II	80, 82, 84	30 min-1 hr	N	Y
Lynne Way	3	SSSC	II	80, 82, 84	30 min-1 hr	N	Y	Lynne Way	3	-	II	80, 82, 84	30 min-1 hr	N	Y
Pope Ave	3	SSSC	II	80, 82, 84	30 min-1 hr	N	Y	Pope Ave	3	-	II	80, 82, 84	30 min-1 hr	N	Y
Lynne Way	3	SSSC	II	80, 82, 84	30 min-1 hr	N	N	Lynne Way	3	SSSC	II	80, 82, 84	30 min-1 hr	N	Y
Robertson Ave	3	SSSC	II	80, 82, 84	30 min-1 hr	N	Y	Robertson Ave	3	SSSC	II	80, 82, 84	30 min-1 hr	N	N
Greenvview Ln	3	SSSC	II	80, 82, 84	30 min-1 hr	N	Y	Greenvview Ln	3	-	II	80, 82, 84	30 min-1 hr	N	Y
Marconi Ave	3	Signal	II	80, 82, 84	30 min-1 hr	N	Y	Marconi Ave	3	Signal	II	80, 82, 84	30 min-1 hr	N	Y
Ben Lomond Dr	3	-	II	80, 82, 84	30 min-1 hr	N	Y	Ben Lomond Dr	3	SSSC	II	80, 82, 84	30 min-1 hr	N	Y
Chenu Ave	3	Signal	II	80, 82, 84	30 min-1 hr	N	Y	Chenu Ave	3	Signal	II	80, 82, 84	30 min-1 hr	N	Y
St. Mathews Dr	3	-	II	80, 82, 84	30 min-1 hr	N	Y	St. Mathews Dr	3	SSSC	II	80, 82, 84	30 min-1 hr	N	Y
Kentfield Dr	3	Signal	II	80, 82, 84	30 min-1 hr	N	Y	Kentfield Dr	3	Signal	II	80, 82, 84	30 min-1 hr	N	Y
Balmoral Dr	3	-	II	80, 82, 84	30 min-1 hr	N	Y	Balmoral Dr	3	SSSC	II	80, 82, 84	30 min-1 hr	N	Y
El Camino Ave	3	Signal	II	80, 82, 84	30 min-1 hr	N	Y	El Camino Ave	3	Signal	II	80, 82, 84	30 min-1 hr	N	Y
County Club Plaza	3	Signal	II	80, 82, 84	30 min-1 hr	N	Y	County Club Plaza	3	Signal	-	80, 82, 84	30 min-1 hr	N	Y
Butano Dr	3	Signal	II	-	-	N	Y	Butano Dr	3	Signal	-	22	1 hour	N	Y
Cody Way	3	SSSC	II	-	-	N	N	Cody Way	3	-	II	22	1 hour	N	Y
Maryal Dr	3	SSSC	II	-	-	N	Y	Maryal Dr	3	SSSC	II	22	1 hour	N	N
Cottage Way	3	Signal	II	-	-	N	Y	Cottage Way	3	Signal	II	22	1 hour	N	Y
Arden Creek Rd	3	SSSC	II	-	-	N	Y	Arden Creek Rd	3	SSSC	II	-	-	N	Y
Maplewood Ln	3	SSSC	II	-	-	N	Y	Maplewood Ln	3	-	II	-	-	N	Y
Alta Arden Expy	3	Signal	II	-	-	N	Y	Alta Arden Expy	3	Signal	II	-	-	N	Y
Arden Way	3	Signal	II	80, 84	1 hour	N	Y	Arden Way	3	Signal	II	80, 84	1 hour	N	Y
Barrington Rd	2	-	II	80, 84	1 hour	N	Y	Barrington Rd	2	SSSC	II	80, 84	1 hour	N	Y
El Rincon Way	2	SSSC	II	80, 84	1 hour	N	Y	El Rincon Way	2	SSSC	II	80, 84	1 hour	N	Y
Hyde Way	2	SSSC	II	80, 84	1 hour	N	Y	Hyde Way	2	SSSC	II	80, 84	1 hour	N	Y
Las Pasas Way	2	SSSC	II	80, 84	1 hour	N	Y	Las Pasas Way	2	SSSC	II	80, 84	1 hour	N	Y

Roadway Characteristics continued on next page

Roadway Characteristics by Direction															
Northbound								Southbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Head-ways	On-Street Parking	Sidewalk Present	Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Head-ways	On-Street Parking	Sidewalk Present
San Ysidro Way/ Hurley Way	2	Signal	II	80, 84	1 hour	N	Y	San Ysidro Way/ Hurley Way	2	Signal	II	80, 84	1 hour	N	Y
Los Alamos Way	2	SSSC	II	80, 84	1 hour	N	Y	Los Alamos Way	2	-	II	80, 84	1 hour	N	Y
Aldenridge Dr/ Bodega Ct	2	SSSC	II	80, 84	1 hour	N	Y	"Aldenridge Dr/ Bodega Ct"	2	SSSC	II	80, 84	1 hour	N	Y
Humboldt Way	2	-	II	80, 84	1 hour	N	Y	Humboldt Way	2	SSSC	II	80, 84	1 hour	N	Y
Bodega Ct	2	SSSC	II	80, 84	1 hour	N	Y	Bodega Ct	2		II	80, 84	1 hour	N	Y
Windsor Dr	2	-	II	80, 84	1 hour	N	Y	Windsor Dr	2	SSSC	II	80, 84	1 hour	N	Y
Buena Vista Dr	2	SSSC	II	80, 84	1 hour	N	Y	Buena Vista Dr	2	-	II	80, 84	1 hour	N	Y
Mayfair Dr	2	SSSC	II	80, 84	1 hour	N	Y	Mayfair Dr	2	SSSC	II	80, 84	1 hour	N	Y
Tembrook D	2	-	II	80, 84	1 hour	N	Y	Tembrook D	2	SSSC	II	80, 84	1 hour	N	Y
La Habra Way	2	SSSC	II	80, 84	1 hour	N	Y	La Habra Way	2	SSSC	II	80, 84	1 hour	N	Y
Northrop Ave	2	Signal	II	80, 84	1 hour	N	Y	Northrop Ave	2	Signal	II	80, 84	1 hour	N	Y
El Encino Way	2	SSSC	II	80, 84	1 hour	N	Y	El Encino Way	2	SSSC	II	80, 84	1 hour	N	Y
Adams Rd	2	SSSC	II	80, 84	1 hour	N	Y	Adams Rd	2	SSSC	II	80, 84	1 hour	N	Y
Barberry Ln	2	-	II	80, 84	1 hour	N	N	Barberry Ln	2	SSSC	II	80, 84	1 hour	N	Y
San Lucas Way	2	SSSC	II	80, 84	1 hour	N	Y	San Lucas Way	2	SSSC	II	80, 84	1 hour	N	N
Cosmos Ave	2	-	II	80, 84	1 hour	N	Y	Cosmos Ave	2	SSSC	II	80, 84	1 hour	N	Y
La Brea Way	3	SSSC	-	80, 85	1 hour	N	Y	La Brea Way	3	-	II	80, 85	1 hour	N	Y
Fair Oaks Blvd	3	Signal	II	80, 84	1 hour	N	Y	Fair Oaks Blvd	3	Signal	II	80, 84	1 hour	N	Y
American River Dr	3	-	-	80, 84	1 hour	N	Y	American River Dr	3	-	-	80, 84	1 hour	N	Y
La Riviera Dr	3	-	-	84	1 hour	N	Y	La Riviera Dr	3	-	-	80, 84	1 hour	N	Y
US 50 WB	3	Signal	-	84	1 hour	N	Y	US 50 WB	3	Signal	-	84	1 hour	N	Y
US 50 EB	3	Signal	-	84	1 hour	N	Y	US 50 EB	3	Signal	-	84	1 hour	N	Y
Folsom Blvd	3	Signal	II	-	-	N	Y	Folsom Blvd	3	Signal	II	84	1 hour	N	Y

PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
SAC24352	Watt Ave.: Construct New Interchange: Watt Ave. / Folsom Blvd.	Sacramento	Sacramento County	Completion after 2036	\$7,500,000	Planned	K
SAC24585	Watt Ave.: Widen: 6 lanes from I-80 to Palm Ave. Don Julio Blvd.	Sacramento	Sacramento County	2021-2036	\$16,250,000	Planned	K
SAC15750	Watt Avenue Couplet: In Sacramento County, Watt Ave: Between Palm Ave. Don Julio Blvd. and Antelope Rd. Elkhorn Blvd. widen to 6 lanes; 3 lanes north bound on Watt Ave and 3 lanes southbound on 34th St; smart growth st. with proposed BRT/Hi Bus - exclusive lanes.	Sacramento	Sacramento County	2021-2036	\$15,600,000	Planned	E.1/K
SAC24812	Hi-bus on Watt Ave: Develop a 12.5 mile Hi Bus corridor on Watt Avenue between Watt/Manlove station to Placer County Line. Include 9 artic buses	Sacramento	Sacramento Regional Transit District	Completion by 2020	\$56,804,000	Planned	E.1

TMA-TMO ID	TMA-TMO	SACOG MOU	9. Watt Ave
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellan Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
	TMA Corridor Coverage	Total Employers ¹	16,835
	Within TMA Area	Total Employees ¹	178,395
	Directly Connects TMA Area	TMA Employers ¹	383
	Indirect Connectivity to TMA Area	TMA Employees ¹	142,700
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants ¹	11,550

This corridor is on Fair Oaks Boulevard between Howe Avenue to the west and Manzanita Avenue to the east. The roadway is a 4- to 6-lane arterial with sidewalks, some bike lanes, and no transit service. Parallel roadways include Arden Way. The corridor is in the Power Inn Alliance and Point West TMAs.



ROADWAY TRAFFIC DATA					
From	To	Functional Classification	Base Year Lanes	Base Year Count	2036 Forecast
University Ave	E/O Intersection	Arterial - High Access Control	6	33,420	34,031
Watt Ave	W/O Intersection	Arterial - Moderate Access Control	4	28,269	31,511
Watt Ave	E/O Intersection	Arterial - High Access Control	4	39,270	45,377

TRANSIT SERVICE		
Route	AM Headway	PM Headway
29*	30 min	30 min
23	25-30 min	15-50 min
25	30 min-1 hour	30 min-1 hour

*Peak Hour Bus Service

PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
SAC24749	Fair Oaks Blvd. Bicycle and Pedestrian Mobility Project: Fair Oaks Blvd. between Howe Ave. and Munroe St., Develop Fair Oaks Master Plan, Design and construct two traffic signals within the project limits.	Sacramento	Sacramento County	2019	\$1,600,011	Programmed	F

ROADWAY CHARACTERISTICS BY DIRECTION															
Eastbound								Westbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present	Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Head-ways	On-Street Parking	Sidewalk Present
Howe Ave	3	Signal	-	-	-	N	Y	Howe Ave	3	Signal	-	-	-	N	Y
University Ave	3	SSSC	-	-	-	N	Y	University Ave	3	SSSC	-	-	-	N	Y
Fulton Ave	3	-	-	-	-	N	Y	Fulton Ave	3	SSSC	-	-	-	N	Y
Monroe St	3	Signal	-	-	-	N	Y	Monroe St	2	Signal	II	-	-	N	Y
Sierra Ln	2	SSSC	II	-	-	N	Y	Sierra Ln	2	SSSC	II	-	-	N	Y
Bret Harte Rd	2	SSSC	II	-	-	N	Y	Bret Harte Rd	2	SSSC	II	-	-	N	Y
Crocker Rd	2	SSSC	II	-	-	N	Y	Crocker Rd	2	SSSC	II	-	-	N	Y
"Hopkins Rd/ Hawthorn Rd"	2	SSSC	II	-	-	N	Y	"Hopkins Rd/ Hawthorn Rd"	2	SSSC	II	-	-	N	Y
Drake Cir	2	SSSC	II	-	-	N	Y	Drake Cir	2	SSSC	II	-	-	N	Y
Morse Ave	2	SSSC	II	-	-	N	Y	Morse Ave	2	SSSC	-	-	-	N	Y
Hopkins Rd	2	SSSC	-	-	-	N	Y	Hopkins Rd	2	SSSC	-	-	-	N	Y
Crocker Rd	2	SSSC	-	-	-	N	Y	Crocker Rd	2	SSSC	-	-	-	N	Y
Lawson Way	2	SSSC	-	-	-	N	Y	Lawson Way	2	SSSC	-	-	-	N	Y
Larch Ln	2	SSSC	-	-	-	N	Y	Larch Ln	2	SSSC	-	-	-	N	Y
Ross Way	2	SSSC	-	-	-	N	Y	Ross Way	2	SSSC	-	-	-	N	Y
Watt Ave	2	Signal	-	-	-	N	Y	Watt Ave	2	Signal	II	-	-	N	Y
La Brea Way	2		II	-	-	N	Y	La Brea Way	2	SSSC	II	-	-	N	Y
Park Fair Dr	2	SSSC	II	-	-	N	Y	Park Fair Dr	2		II	-	-	N	Y
San Lucas Way	2		II	-	-	N	Y	San Lucas Way	2	SSSC	II	-	-	N	Y
"Coronado Blvd/ Rodante Way"	2	SSSC	II	-	-	N	Y	"Coronado Blvd/ Rodante Way"	2	SSSC	II	-	-	N	Y
Kevington Ct	2	SSSC	II	-	-	N	Y	Kevington Ct	2	SSSC	II	-	-	N	Y
"San Ramon Way/ Wilhaggin Dr"	2	Signal	II	-	-	N	Y	"San Ramon Way/ Wilhaggin Dr"	2	Signal	II	-	-	N	Y
Lake Wilhaggin Dr	2	SSSC	II	-	-	N	Y	Lake Wilhaggin Dr	2		II	-	-	N	Y
Los Molinos Way	2	SSSC	II	-	-	N	Y	Los Molinos Way	2	SSSC	II	-	-	N	Y
Estates Dr	2	SSSC	II	-	-	N	Y	Estates Dr	2		II	-	-	N	Y
"El Chorro Way/ Walnut Glen Ct"	2	SSSC	II	-	-	N	Y	"El Chorro Way/ Walnut Glen Ct"	2	SSSC	II	-	-	N	Y
Cortland Dr	2	SSSC	II	-	-	N	Y	Cortland Dr	2	SSSC	II	-	-	N	Y
Treehouse Ln	2	SSSC	II	-	-	N	Y	Treehouse Ln	2		II	-	-	N	Y
Fallen Lead Way	2		II	-	-	N	Y	Fallen Lead Way	2	SSSC	II	-	-	N	Y
Columbia Dr	2	SSSC	II	-	-	N	Y	Columbia Dr	2		II	-	-	N	Y
Eastern Ave	2	Signal	II	-	-	N	Y	Eastern Ave	2	Signal	II	-	-	N	Y
Baytree Pl	2	SSSC	II	-	-	N	Y	Baytree Pl	2		II	-	-	N	Y
Robin Ln	2	SSSC	II	-	-	N	Y	Robin Ln	2	SSSC	II	-	-	N	Y
7 Oaks Ln	2	SSSC	II	-	-	N	Y	7 Oaks Ln	2	SSSC	II	-	-	N	Y
Tuscan Ln	2	SSSC	II	-	-	N	Y	Tuscan Ln	2	SSSC	II	-	-	N	Y

ROADWAY CHARACTERISTICS BY DIRECTION															
Eastbound								Westbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present	Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Head-ways	On-Street Parking	Sidewalk Present
Saverien Dr	2	Signal	II	-	-	N	Y	Saverien Dr	2	Signal	-	-	-	N	Y
Via Savona Ln	2	SSSC	-	-	-	N	Y	Via Savona Ln	2	SSSC	-	-	-	N	Y
Mariemont Ave	2	SSSC	-	-	-	N	Y	Mariemont Ave	2	SSSC	-	-	-	N	Y
Stewart Rd/ Gordon Ln	2	SSSC	-	-	-	N	Y	Stewart Rd/ Gordon Ln	2	SSSC	II	-	-	N	Y
Carter Rd	2	SSSC	II	-	-	N	Y	Carter Rd	2	SSSC	II	-	-	N	Y
Arden Hills Ln/ O'Donnell Dr	2	Signal	II	-	-	N	Y	Arden Hills Ln/ O'Donnell Dr	2	Signal	II	-	-	N	Y
Medison Ave/ Lantern Ct	2	SSSC	II	-	-	N	Y	Medison Ave/ Lantern Ct	2	SSSC	II	-	-	N	Y
Genessee Ct	2	SSSC	II	-	-	N	Y	Genessee Ct	2	SSSC	II	-	-	N	Y
Jacob Ln	2	SSSC	II	-	-	N	Y	Jacob Ln	2	SSSC	-	-	-	N	Y
Del Dayo Dr	2	SSSC	-	-	-	N	Y	Del Dayo Dr	2	SSSC	-	-	-	N	Y
Day Dr	2	SSSC	-	-	-	N	Y	Day Dr	2	SSSC	-	-	-	N	Y
Menol Ave	2	SSSC	-	-	-	N	Y	Menol Ave	2	SSSC	-	-	-	N	Y
Jardin Ln	2	SSSC	-	-	-	N	Y	Jardin Ln	2	SSSC	-	-	-	N	Y
Elsdon Cir	2	SSSC	-	-	-	N	Y	Elsdon Cir	2	SSSC	-	-	-	N	Y
Paloma Ave	2	SSSC	-	-	-	N	Y	Paloma Ave	2	SSSC	-	-	-	N	Y
Garfield Place	2	SSSC	-	-	-	N	Y	Garfield Place	2	SSSC	-	-	-	N	Y
Arden Way	2	Signal	-	-	-	N	Y	Arden Way	2	Signal	-	29*	30 min	N	Y
Walnut Ave	2	Signall	-	29*	30 min	N	Y	Walnut Ave	2	Signall	-	29*	30 min	N	Y
Marione Dr	2	SSSC	-	29*	30 min	N	Y	Marione Dr	2	SSSC	-	29*	30 min	N	Y
Fairchild Dr	2	SSSC	-	29*	30 min	N	Y	Fairchild Dr	2	SSSC	-	29*	30 min	N	Y
Westminster Ct	2	SSSC	-	29*	30 min	N	Y	Westminster Ct	2	SSSC	-	29*	30 min	N	Y
McKenzie Glen Ct	2	SSSC	-	29*	30 min	N	Y	McKenzie Glen Ct	2	SSSC	-	29*	30 min	N	Y
Cenacle Ln	2	SSSC	-	29*	30 min	N	Y	Cenacle Ln	2	SSSC	-	29*	30 min	N	Y
Marchita Way	2	SSSC	-	29*	30 min	N	Y	Marchita Way	2	SSSC	-	29*	30 min	N	Y
Ansley Ct	2	SSSC	-	29*	30 min	N	Y	Ansley Ct	2	SSSC	-	29*	30 min	N	Y
Homewood Way	2	SSSC	-	29*	30 min	N	Y	Homewood Way	2	SSSC	-	29*	30 min	N	Y
Garfield Ave	2	Signal	-	29*	30 min	N	Y	Garfield Ave	2	Signal	-	29*	30 min	N	Y
Marywood Ct	2	SSSC	-	29*	30 min	N	Y	Marywood Ct	2	SSSC	-	29*	30 min	N	Y
Seabler PI	2	SSSC	-	29*	30 min	N	Y	Seabler PI	2	SSSC	-	29*	30 min	N	Y
Sheffield Dr/ Elena Ln	2	SSSC	-	29*	30 min	N	Y	Sheffield Dr/ Elena Ln	2	SSSC	-	29*	30 min	N	Y
Claremont Rd	2	SSSC	-	29*	30 min	N	Y	Claremont Rd	2	SSSC	-	29*	30 min	N	Y
Van Ufford Ln	2	SSSC	-	29*	30 min	N	Y	Van Ufford Ln	2	SSSC	-	29*	30 min	N	Y
Hillcrest Way	2	SSSC	-	29*	30 min	N	Y	Hillcrest Way	2	SSSC	-	29*	30 min	N	Y
Oak Ave	2	SSSC	-	29*	30 min	N	Y	Oak Ave	2		-	29*	30 min	N	Y
Twin Gardens Rd	2		-	29*	30 min	N	Y	Twin Gardens Rd	2	SSSC	-	29*	30 min	N	Y

ROADWAY CHARACTERISTICS BY DIRECTION															
Eastbound								Westbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present	Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Head-ways	On-Street Parking	Sidewalk Present
Frontier Way	2	SSSC	-	29*	30 min	N	Y	Frontier Way	2	SSSC	-	29*	30 min	N	Y
Wedgewood Ave	2	SSSC	-	29*	30 min	N	Y	Wedgewood Ave	2	SSSC	-	29*	30 min	N	Y
El Camino Ave/ Van Alstine Ave	2	SSSC	-	29*	30 min	N	Y	El Camino Ave/ Van Alstine Ave	2	SSSC	-	23, 29*	15 min-50 min	N	Y
Topp Ct	2	SSSC	-	23, 29*	15 min-50 min	N	Y	Topp Ct	2	SSSC	-	23, 29*	15 min-50 min	N	Y
Kenneth Ave	2	SSSC	-	23, 29*	15 min-50 min	N	Y	Kenneth Ave	2	SSSC	-	23, 29*	15 min-50 min	N	Y
Marconi Ave/ Palm Dr	2	Signal	-	23, 29*	15 min-50 min	N	Y	Marconi Ave/ Palm Dr	2	Signal	-	23, 25	15 min-1 hr	N	Y
Llyod Way	2	SSSC	-	23, 25	15 min-1 hr	N	Y	Llyod Way	2	SSSC	-	23, 25	15 min-1 hr	N	Y
Robertson Ave	2	SSSC	-	23, 25	15 min-1 hr	N	Y	Robertson Ave	2	SSSC	-	23, 25	15 min-1 hr	N	Y
Angelina Ave/ Stanley Ave	2	Signal	-	23, 25	15 min-1 hr	N	Y	Angelina Ave/ Stanley Ave	2	Signal	-	23, 25	15 min-1 hr	N	Y
North Ave	2	SSSC	-	23, 25	15 min-1 hr	N	Y	North Ave	2	SSSC	-	23, 25	15 min-1 hr	N	Y
Landis Ln	2	Signal	-	23, 25	15 min-1 hr	N	Y	Landis Ln	2	Signal	-	23, 25	15 min-1 hr	N	Y
Grant Ave	2	Signal	-	23, 25	15 min-1 hr	N	Y	Grant Ave	2	Signal	-	23, 25	15 min-1 hr	N	Y
Engle Rd	2	Signal	-	23, 25	15 min-1 hr	N	Y	Engle Rd	2	Signal	-	23, 25	15 min-1 hr	N	Y
Shirley Ave	3	SSSC	-	23, 25	15 min-1 hr	N	Y	Shirley Ave	3		-	23, 25	15 min-1 hr	N	Y
Sutter Ave	3	Signal	-	23, 25	15 min-1 hr	N	Y	Sutter Ave	3	Signal	-	23, 25	15 min-1 hr	N	Y
Gibbons Dr	3	SSSC	-	23, 25	15 min-1 hr	N	Y	Gibbons Dr	3	SSSC	-	23, 25	15 min-1 hr	N	Y
Don Way	3	SSSC	-	23, 25	15 min-1 hr	N	Y	Don Way	3	SSSC	-	23, 25	15 min-1 hr	N	Y
Manzanita Ave	3	Signal	-	23, 25	15 min-1 hr	N	Y	Manzanita Ave	3	Signal	-	23, 25	15 min-1 hr	N	Y

STRATEGY DEVELOPMENT				
Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	At 6 signalized intersections
F	Active Transportation Strategies	Class II gaps or convert to Buffered Class IV		ROW Permitting
				See Programmed Improvement (F)
A	Demand Management Strategies	Employer-based TDM	High	Targeted TMA activity (See TMA Matrix: Sacramento, Power Inn, Point West)
E.1	Public Transit Strategies	Establish Fixed Route Transit Service	Medium	Expand Lines 23, 25, and 29 Peak Period Service from Arden to Howe
B	Operational Strategies	Intersection Control Evaluations	Low	Operational Determinations of Control Type (Consider Roundabout Corridor)

TMA-TMO ID	TMA-TMO	SACOG MOU	10. Fair Oaks Blvd
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellan Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
	TMA Corridor Coverage	Total Employers ¹	16,835
	Within TMA Area	Total Employees ¹	178,395
	Directly Connects TMA Area	TMA Employers ¹	383
	Indirect Connectivity to TMA Area	TMA Employees ¹	142,700
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants ¹	11,550

This deficient corridor is on Auburn Boulevard between Watt Avenue to the southwest and Madison Avenue to the northeast. The roadway is a 4-lane major collector with transit service. Bike lanes and transit are present, but with some gaps. Parallel roadways include I-80.

ROADWAY TRAFFIC DATA					
From	To	Functional Classification	Base Year Lanes	Base Year Count	2036 Forecast
Watt Ave	E/O Intersection	Major Collector	4	19,376	21,285
State Route 244	N/O Intersection	Major Collector	4	31,259	42,011

TRANSIT SERVICE		
Route	AM Headway	PM Headway
1	15 min	15-20 min
82	30 min	30 min



STRATEGY DEVELOPMENT				
Strategy Type		Improvement Concepts	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	At 8 signalized intersections
G.3	ITS Strategies	Traveler Information Systems	High	Real-time transit arrival at bus stops
E.1	Public Transit Strategies	Increase Service Frequency	High	Line 82 Peak Period Service Frequency to 15 min
				See Planned Improvement (E.1)
				See Planned Parallel Facility Improvement (E.1)
F	Active Transportation Strategies	Class II gaps or convert to Buffered Class IV	Medium	ROW Permitting
B	Operational Strategies	Road Diet (Reduce from 4 to 2 thru lanes	Low	Carries less than 25,000 ADT - candidate for consideration
		Intersection Control Evaluation		Operational Determinations of Control Type (Consider Roundabout Corridor)
A	Demand Management Strategies	Employer-based TDM	Low	Targeted TMA activity as applicable (See TMA Matrix: Point West, Sacramento)

ROADWAY CHARACTERISTICS BY DIRECTION															
Eastbound								Westbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present	Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present
Watt Ave	2	Signal	II	-	-	N	Y	Watt Ave	2	Signal	II	1	15-20 min	N	Y
Amandale Ln	2	SSSC	II	1	15-20 min	N	Y	Amandale Ln	2	SSSC	II	1	15-20 min	N	N
Bridge Rd	2	SSSC	II	1	15-20 min	N	Y	Bridge Rd	2	SSSC	II	1	15-20 min	N	N
Pasadena Ave	2	SSSC	II	1	15-20 min	N	Y	Pasadena Ave	2	SSSC	II	1	15-20 min	N	N
Beresford Way	2	SSSC	II	1	15-20 min	N	Y	Beresford Way	2	SSSC	II	1	15-20 min	N	N
Brule Ct	2	SSSC	II	1	15-20 min	N	Y	Brule Ct	2	SSSC	II	1	15-20 min	N	N
Norris Ave	2	Signal	II	1	15-20 min	N	Y	Norris Ave	2	Signal	II	1	15-20 min	N	N
Winding Way	2	Signal	II	1	15-20 min	N	Y	Winding Way	2	Signal	II	1	15-20 min	N	N
Business 80 Off Ramp	2	Signal	II	1	15-20 min	N	Y	Business 80 Off Ramp	2	Signal	II	1	15-20 min	N	N
Kitty Ln	2	SSSC	II	1	15-20 min	N	Y	Kitty Ln	2	SSSC	II	1	15-20 min	N	Y
Jones Rd	2	SSSC	II	1	15-20 min	N	Y	Jones Rd	2	SSSC	II	1	15-20 min	N	Y
Orange Grove Ave	2	Signal	II	1	15-20 min	N	Y	Orange Grove Ave	2	Signal	II	82	30 min	N	Y
Aldona Ln	2	SSSC	II	82	30 min	N	Y	Aldona Ln	2	SSSC	II	82	30 min	N	Y
Pasadena Ave	2	SSSC	II	82	30 min	N	Y	Pasadena Ave	2	SSSC	II	82	30 min	N	Y
Myrtle Ave	2	Signal	II	82	30 min	N	Y	Myrtle Ave	2	Signal	-	-	-	N	Y
College Oak Dr	2	Signal	-	1	15-20 min	N	Y	College Oak Dr	2	Signal	-	1	15-20 min	N	Y
Madison Ave	2	Signal	-	1	15-20 min	N	Y	Madison Ave	2	Signal	-	1	15-20 min	N	Y

PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
SAC24813	Hi-bus on Auburn Blvd: Develop an enhanced bus corridor along 6.5 miles along Auburn Boulevard between Watt/I-80 and Citrus Heights. Include 5 artic buses. (precursor to LRT to Citrus Heights).	Sacramento	Sacramento Regional Transit District	Completion by 2020	\$14,700,000	Planned	E.1
SAC24814	Hi-bus on El Camino Ave: Develop an enhanced bus corridor along 15.5 miles Sunrise Mall to the Royal Oaks station. Include 11 artic buses	Sacramento	Sacramento Regional Transit District	2021-2036	\$34,315,000	Planned	E.1

TMA-TMO ID	TMA-TMO	SACOG MOU	11. Auburn
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellan Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
	TMA Corridor Coverage	Total Employers ¹	2,698
	Within TMA Area	Total Employees ¹	32,820
	Directly Connects TMA Area	TMA Employers ¹	99
	Indirect Connectivity to TMA Area	TMA Employees ¹	8,357
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants ¹	158

The deficient corridor on Sunrise Boulevard lies between Madison Avenue to the north and Gold Country Boulevard to the south. The roadway has 3 lanes in each direction, is served by transit, includes sidewalks, and lacks bike lanes. The corridor is in the 50 Corridor TMA.

ROADWAY TRAFFIC DATA					
From	To	Functional Classification	Base Year Lanes	Base Year Count	2036 Forecast
Sunset Ave	N/O Intersection	N/A	N/A	45,695	49,689
Winding Way	N/O Intersection	N/A	N/A	49,711	52,453
American River Bridge	S/O Bridge	N/A	N/A	74,400	90,403

N/A = Not Available

TRANSIT SERVICE		
Route	AM Headway	PM Headway
21	30 min	30 min



STRATEGY DEVELOPMENT				
Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
K	SOV Capacity Increase	Segment Widening	High	Widen from 6 to 8 lanes (Madison to Gold Country) See Planned Improvement (K)
G.1	ITS Strategies	Adaptive Signal Control	High	At 6 signalized intersections See Planned Improvement (K)
G.3	ITS Strategies	Traveler Information Systems	High	Real-time transit arrival at bus stops
E.1	Public Transit Strategies	Increase Service Frequency	High	Line 21 Peak Period Service Frequency to 15 min See Planned Improvement (E.1) See Planned Parallel Facility Improvement (E.1)
B	Operational Strategies	Intersection Control Evaluations	Low	Operational Determinations of Control Type (Consider Roundabout Corridor)
F	Active Transportation Strategies	Stripe for Class II	Low	ROW Permitting
A	Demand Management Strategies	Employer-based TDM	Low	Targeted TMA activity as applicable (See TMA Matrix: 50 Corridor)

ROADWAY CHARACTERISTICS BY DIRECTION															
Eastbound								Westbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present	Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present
Madison Ave	3	Signal	-	21	30 min	N	Y	Madison Ave	3	Signal	-	21	30 min	N	Y
Wildridge Dr	3	Signal	-	21	30 min	N	Y	Wildridge Dr	3	Signal	-	21	30 min	N	Y
Sunrise Ridge Dr	3	SSSC	-	21	30 min	N	Y	Sunrise Ridge Dr	3	SSSC	-	21	30 min	N	Y
Cavali Way	3	SSSC	-	21	30 min	N	Y	Cavali Way	2	SSSC	-	21	30 min	N	Y
Suncrest Way	3	SSSC	-	21	30 min	N	Y	Suncrest Way	3	-	-	21	30 min	N	Y
Sunset Ave	3	Signal	-	21	30 min	N	Y	Sunset Ave	3	Signal	-	21	30 min	N	Y
Via Roma Dr	3	SSSC	-	21	30 min	N	Y	Via Roma Dr	3	SSSC	-	21	30 min	N	Y
Archer Ave	3	SSSC	-	21	30 min	N	Y	Archer Ave	3	SSSC	-	21	30 min	N	Y
Winding Way	3	Signal	-	21	30 min	N	Y	Winding Way	3	Signal	-	21	30 min	N	Y
California Ave	3	SSSC	-	21	30 min	N	Y	California Ave	3	SSSC	-	21	30 min	N	Y
Fair Oaks Blvd	3	Signal	-	21	30 min	N	Y	Fair Oaks Blvd	3	Signal	-	21	30 min	N	Y
Canyon Dr	3	SSSC	-	21	30 min	N	Y	Canyon Dr	3		-	21	30 min	N	Y
Howard St	3	-	-	21	30 min	N	Y	Howard St	3	SSSC	-	21	30 min	N	Y
Gold Country Blvd	3	Signal	-	-	-	N	Y	Gold Country Blvd	3	Signal	-	21	30 min	N	Y

PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
SAC24261	Sunrise Blvd.: Widen: from Madison Ave. to Gold Country Blvd. ITS Strategies and partial grade separation at Fair Oaks Blvd and transit enhancements	Sacramento	Sacramento County	Completion after 2036	\$6,162,807	Planned	E.1/K
SAC24818	Hi-bus on Sunrise South: Develop 8-mile enhanced bus corridor on Sunrise Blvd. Include 6 artic buses	Sacramento	Sacramento Regional Transit District	2021-2036	\$18,085,000	Planned	E.1
SAC24814	Hi-bus on El Camino Ave: Develop an enhanced bus corridor along 15.5 miles Sunrise Mall to the Royal Oaks station. Include 11 artic buses	Sacramento	Sacramento Regional Transit District	2021-2036	\$34,315,000	Planned	E.1

TMA-TMO ID	TMA-TMO	SACOG MOU	12. Sunrise
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellan Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
	TMA Corridor Coverage	Total Employers ¹	6,927
	Within TMA Area	Total Employees ¹	88,024
	Directly Connects TMA Area	TMA Employers ¹	56
	Indirect Connectivity to TMA Area	TMA Employees ¹	24,436
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants ¹	1,875

The deficient corridor on Florin Road spans from Franklin Boulevard in the west to Elk Grove Florin Road / South Watt Avenue to the east. The roadway is a 4- to 6-lane arterial with some transit service, sidewalks, and bike lanes in some areas. Parallel roadways include 47th Avenue/ Elder Creek Road. The corridor is in the Sacramento and Power Inn Alliance TMAs

ROADWAY TRAFFIC DATA					
From	To	Functional Classification	Base Year Lanes	Base Year Count	2036 Forecast
State Route 99	E/O Intersection	Arterial - High Access Control	6	64,998	74,385
Franklin Blvd	E/O Intersection	Arterial - High Access Control	6	39,542	44,363
Stockton Blvd	W/O Intersection	Arterial - High Access Control	6	33,314	41,086
Power Inn Rd	W/O Intersection	Arterial - High Access Control	4	26,929	34,821
Florin Perkins Rd	W/O Intersection	Arterial - Moderate Access Control	4	18,823	28,448



TRANSIT SERVICE		
Route	AM Headway	PM Headway
47	1 hour - 1 hour 15 min	1 hour - 1 hour 15 min
51	12-25 min	12-25 min
55	30 min	30 min
65	1 hour	1 hour
67	30 min	30 min
81	15 min	15-30 min
51	12-25 min	12-25 min

TMA-TMO ID	TMA-TMO	SACOG MOU	13. Florin Rd.
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellen Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
TMA Corridor Coverage		Total Employers ¹	15,805
		Total Employees ¹	169,750
		TMA Employers ¹	341
		TMA Employees ¹	140,791
		TMA Participants ¹	11,487

¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas

PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
SAC24578	Florin Rd.: Widen: 6 lanes from Florin Perkins to Elk Grove-Florin	Sacramento	Sacramento County	Completion after 2036	\$500,000	Planned	K
SAC25060	Florin Road Safety Improvements: Florin Rd between Franklin Blvd and Power Inn Rd (excluding the segment at the SR-99 interchange): Install bicycle lanes, upgrade traffic signals to accommodate bicycles at all intersections, construct ADA improvements, install roadway lighting for a segment of Florin Rd. (H8-03-016)	Sacramento	Sacramento County	2020	\$3,637,400	Programmed	F/J.2
SAC24753	Old Florin Town Streetscape Phase 2: Florin Rd. out to Power Inn Rd. to the west and Florin Perkins Rd/ French Rd. to the east.: Augment phase 1 of the streetscape by installing continuous separated sidewalks, bicycle lanes, improved transit facilities, median channelization, and improved street lighting. (CMAQ Emission Reductions in kg/day: 0.02 ROG, 0.02 NOx 13, 0.01 PM10)	Sacramento	Sacramento County	2018	\$4,516,947	Programmed	F
SAC24815	Hi-bus on Florin Rd: Develop Hi Bus corridor on Florin Road with enhanced bus from JFK High School to Old Town Florin (8 miles), and BRT from Old Town Florin to Bradshaw (3.5 miles). Include 9 artic buses	Sacramento	Sacramento Regional Transit District	2021-2036	\$34,547,000	Planned	E.1

STRATEGY DEVELOPMENT				
Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
K	SOV Capacity Increase	Segment Widening	High	Widen from 4 to 6 lanes (Florin Perkins to Elk Grove Florin)
				See Planned Improvement (K)
F	Active Transportation Strategies	Class II gaps or convert to Buffered Class IV	High	ROW Permitting
				See Programmed Improvement (F)
J.2	Safety Improvement Strategies	Ped/Bike Safety Treatments	High	Intersections and mid-block
				See Programmed Improvement (J.2)
E.1	Public Transit Strategies	Expand Transit Service and Increase Service Frequency	High	Line 47, 65, 81 Peak Period Service Frequency to 15 min
				See Planned Improvement (E.1)
A	Demand Management Strategies	Employer-based TDM	Low	Targeted TMA activity (See TMA Matrix: Sacramento, Power Inn)

Roadway Characteristics by Direction															
Eastbound								Westbound							
Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present	Intersection w/	Number of Thru Lanes	Control Type	Bike Path (Class)	Transit Routes	Peak Headways	On-Street Parking	Sidewalk Present
Franklin Ave	3	Signal	-	81	15-30 min	N	Y	Franklin Ave	3	Signal	-	47, 65, 81	15-75 min	N	Y
Lincolnshire Dr	3	-	-	47, 65, 81	15-75 min	N	Y	Lincolnshire Dr	3	SSSC	-	47, 65, 81	15-75 min	N	Y
Bowing Dr	3	Signal	-	47, 65, 81	15-75 min	N	Y	Bowing Dr	3	Signal	-	47, 65, 81	15-75 min	N	Y
East Pkwy	3	Signal	-	47, 65, 81	15-75 min	N	Y	East Pkwy	3	Signal	-	47, 65, 81	15-75 min	N	Y
99 SB Ramps	3	-	-	47, 65, 81	15-75 min	N	Y	99 SB Ramps	3	-	-	47, 65, 81	15-75 min	N	Y
99 NB Ramps	3	-	-	47, 65, 81	15-75 min	N	Y	99 NB Ramps	3	-	-	47, 65, 81	15-75 min	N	Y
55th St	3	Signal	-	47, 65, 81	15-75 min	N	Y	55th St	3	Signal	-	47, 65, 81	15-75 min	N	Y
65th St	3	Signal	-	47, 55 65, 81	15-75 min	N	Y	65th St	3	Signal	-	47, 51, 55	21-75 min	N	Y
E Southgate DR	3	SSSC	-	47, 51, 55	21-75 min	N	Y	E Southgate DR	3	SSSC	-	47, 51, 55	21-75 min	N	Y
Florin Mall Dr	3	Signal	-	47, 51, 55	21-75 min	N	Y	Florin Mall Dr	3	Signal	-	47, 51	21-75 min	N	Y
Fawn Way	3	SSSC	-	47, 51	21-75 min	N	Y	Fawn Way	3	SSSC	-	47, 51	21-75 min	N	Y
Stockton Blvd	3	Signal	-	47, 51	21-75 min	N	Y	Stockton Blvd	3	Signal	-	65	1 hour	N	Y
Lindale Dr	3	Signal	-	65	1 hour	N	Y	Lindale Dr	2	Signal	-	65	1 hour	N	Y
Chandler Dr	2	SSSC	-	65	1 hour	N	Y	Chandler Dr	2	SSSC	II	5	1 hour	N	Y
Rimrock Dr	2	SSSC	II	65	1 hour	N	Y	Rimrock Dr	2	SSSC	II	65	1 hour	N	Y
Palmerhouse Dr	2	Signal	II	65	1 hour	N	Y	Palmerhouse Dr	2	Signal	II	-	-	N	Y
Chris Ave	2		II	-	-	N	Y	Chris Ave	2	SSSC	II	-	-	N	Y
Celia Ave	2	SSSC	II	-	-	N	Y	Celia Ave	2	SSSC	II	-	-	N	Y
Strand St	2	SSSC	II	-	-	N	Y	Strand St	2	SSSC	II	-	-	N	Y
Franusich Ave	2	SSSC	II	-	-	N	Y	Franusich Ave	2	SSSC	II	-	-	N	Y
Power Inn Rd	3	Signal	II	-	-	N	Y	Power Inn Rd	3	Signal	-	-	-	N	Y
Kara Dr	2	Signal	-	-	-	N	Y	Kara Dr	2	Signal	-	-	-	N	Y
Bacchini Ave	2	SSSC	-	-	-	N	Y	Bacchini Ave	2	SSSC	-	-	-	N	Y
Prichard Rd	2	Signal	-	-	-	N	Y	Prichard Rd	2	Signal	-	-	-	N	Y
Tokay Ave	2	SSSC	-	-	-	N	Y	Tokay Ave	2	SSSC	-	-	-	N	Y
Reese Rd	2	SSSC	-	-	-	N	Y	Reese Rd	2	SSSC	-	-	-	N	Y
Frasinette Rd	2	SSSC	-	-	-	N	Y	Frasinette Rd	2	-	-	-	-	N	Y
McComber St	2	Signal	-	-	-	N	Y	McComber St	2	Signal	-	-	-	N	Y
Simon St	2	SSSC	-	-	-	N	Y	Simon St	2	SSSC	-	-	-	N	Y
Kingsley St	2	SSSC	-	-	-	N	Y	Kingsley St	2	SSSC	-	-	-	N	Y
Edith St	2	SSSC	-	-	-	N	Y	Edith St	2	SSSC	-	-	-	N	Y
Florin Perkins Rd	2	Signal	-	-	-	N	Y	Florin Perkins Rd	2	Signal	-	-	-	N	Y
Fletcher Farms Dr	2	SSSC	-	-	-	N	Y	Fletcher Farms Dr	2	SSSC	-	-	-	N	Y
Garder Ave	2	SSSC	-	-	-	N	Y	Garder Ave	2	SSSC	-	-	-	N	Y
Buffy Ln	2	SSSC	-	-	-	N	Y	Buffy Ln	2	SSSC	-	-	-	N	Y
Elk Grove Florin Rd	2	Signal	-	-	-	N	Y	Elk Grove Florin Rd	2	Signal	-	-	-	N	Y



This deficient corridor is a 10-lane freeway on US 50 between I-5 to the west and SR-99 to the east. Parallel roadways include Broadway Street. The corridor is in the Sacramento TMA.

ROADWAY TRAFFIC DATA					
From	To	Functional Classification	Base Year Lanes	Base Year Count	2036 Forecast
16th ramps	E/O RAMP	Freeway	10	256,000	296,102

TRANSIT SERVICE		
Route	AM Headway	PM Headway
Yolobus 39	30-60 min	30-60 min
El Dorado Commuter	5-15 min	2-45 min
Gold Line LRT	15 min	15 min

STRATEGY DEVELOPMENT				
Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	Ramp Termini + 1 service road intersection: 24-hr Operation
G.2	ITS Strategies	Integrated Corridor Management	High	US 50 Mainline and Parallel System - TMC Coordination
				See Planned Improvement (G.2)
C	Managed Lanes Strategies		High	Aux Lanes; HOV/HOT Lanes; HOV Bypass Lanes at Ramps; Ramp Metering or Improving Existing Meter Rates
				See Planned Bus/Carpool lane connector Improvement (C)
				See Programmed HOV Improvement (C)
E.1	Rubber Tire Public Transit Strategies	Enhanced Regional Commuter Services	High	Inter-City and Inter-County Services
E.2	Passenger Rail Public Transit Strategies	Light Rail Extensions or Service Enhancements	High	RT Service Lines
				See Planned Improvement (E.2)
A	Demand Management Strategies	Employer-based TDM	High	Targeted TMA activity (See TMA Matrix: Sacramento, Power Inn, US 50)
H	TSM	Park-and-Ride Lots	Medium	New/Expanded/Enhanced Park-and-Ride Lot Locations
I	Incident Management Strategies	Freeway Service Patrols	Medium	Currently being implemented

PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
CAL20625	Caltrans District 3 Traffic Management Center (TMC): Upgrade Caltrans District 3 TMC to manage US 50, I-80 and other ITS Deployments	Sacramento	Caltrans D3	Completion by 2020	\$1,500,000	Planned	G.2
CAL18801	I-5/US 50 Riverfront Interchange Reconstruction: Reconstruct I-5/US50 Riverfront Interchange, including bus/carpool lane connectors	Sacramento	Caltrans D3	Completion after 2036	\$100,000,000	Planned	C/K
CAL20606	U.S. 50 / SR 99 / SR 51 Oak Park Interchange Reconstruction: U.S. 50 / SR 99 / SR 51 Oak Park Interchange Reconstruction: includes: bus/carpool lane freeway to freeway connectors.	Sacramento	Caltrans D3	Completion after 2036	\$10,000,000	Planned	C/K
CAL18838	US 50 HOV Lanes (I-5 to Watt Ave.): US 50 HOV Lanes - Construct High Occupancy Vehicle (HOV) lanes on US 50 [project covers PE: from I-5 to 0.8 mile east of Watt Avenue (PM L0.2/R6.1) and CON: from 0.3 mile west of SR 99 to 0.8 mile east of Watt Avenue (PM L2.2/R6.1)]	Sacramento	Caltrans D3	2030	\$70,251,000	Programmed	C/K
SAC24977	Amtrak-Folsom Limited Stop Service: Enhance light rail capacity on the Gold Line to the city of Folsom, light rail system modifications that will give RT the capacity to provide limited stop express service.	Sacramento	Sacramento Regional Transit District	Completion by 2020	\$12,000,000	Planned	E.2

TMA-TMO ID	TMA-TMO	SACOG MOU	14. US 50
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellan Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
	TMA Corridor Coverage	Total Employers ¹	22,732
	Within TMA Area	Total Employees ¹	257,774
	Directly Connects TMA Area	TMA Employers ¹	397
	Indirect Connectivity to TMA Area	TMA Employees ¹	165,227
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants ¹	13,362



This deficient corridor is an 8-lane freeway on US 50 between SR-99 to the west and Watt Avenue to the east. Parallel roadways include Folsom Boulevard. The corridor is in the Sacramento and Power Inn Alliance TMA's.

ROADWAY TRAFFIC DATA					
From	To	Functional Classification	Base Year Lanes	Base Year Count	2036 Forecast
Stockton Blvd	E/O Ramp	Freeway	8	214,000	271,055
Jct. Rte. 16	E/O Ramp	Freeway	8	179,000	227,278

TRANSIT SERVICE		
Route	AM Headway	PM Headway
El Dorado Commuter	5-15 min	2-45 min
Gold Line LRT	15 min	15 min

STRATEGY DEVELOPMENT				
Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	Ramp Termini + 1 service road intersection: 24-hr Operation
G.2	ITS Strategies	Intergrated Corridor Management		US 50 Mainline and Parallel System - TMC Coordination
C	Managed Lanes Strategies		High	Aux Lanes; HOV/HOT Lanes; HOV Bypass Lanes at Ramps; Ramp Metering or Improving Existing Meter Rates
				See Programmed Aux-lane Improvement C
				See Programmed HOV Improvement (C)
				See Planned Connector Ramp (C)
E.1	Rubber Tire Public Transit Strategies	Enhanced Regional Commuter Services	High	Inter-City and Inter-County Services
E.2	Passenger Rail Public Transit Stragies	Light Rail Extensions or Service Enhancements	High	
				See Planned Improvement (E.2)
A	Demand Management Strategies	Employer-based TDM	High	Targeted TMA activity (See TMA Matrix: Sacramento, Power Inn, US 50)
H	TSM	Park-and-Ride Lots	Medium	New/Expanded/Enhanced Park-and-Ride Lot Locations
I	Incident Management Strategies	Freeway Service Patrols	Medium	Currently being implemented

PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
CAL20705	US 50 65th St.. to Howe Ave. Auxiliary Lane: In the City of Sacramento, US 50, from 65th Street to east of Howe Avenue (PM R2.6/R3.8) - Construct westbound auxiliary lane [project proposes to add/extend US 50 auxiliary lane, which currently begins with the Howe Ave slip entrance, and will be extended to the east to receive traffic from the Howe Ave loop entrance ramp] (Toll Credits). Toll Credits for ENG, ROW, CON	Sacramento	Caltrans D3	2020	\$3,930,000	Programmed	C
CAL18838	US 50 HOV Lanes (I-5 to Watt Ave.): US 50 HOV Lanes - Construct High Occupancy Vehicle (HOV) lanes on US 50 [project covers PE: from I-5 to 0.8 mile east of Watt Avenue (PM L0.2/R6.1) and CON: from 0.3 mile west of SR 99 to 0.8 mile east of Watt Avenue (PM L2.2/R6.1)]	Sacramento	Caltrans D3	2030	\$70,251,000	Programmed	C
CAL20641	US 50 Transition Lane: US 50 Westbound Transition Lane from Stockton Blvd off-ramp to Rt-51 connector on-ramp. Realign and add acceleration taper to Stockton loop off ramp	Sacramento	Caltrans D3	Completion after 2036	\$6,000,000	Planned	C
SAC24977	Amtrak-Folsom Limited Stop Service: Enhance light rail capacity on the Gold Line to the city of Folsom, light rail system modifications that will give RT the capacity to provide limited stop express service.	Sacramento	Sacramento Regional Transit District	Completion by 2020	\$12,000,000	Planned	C

TMA-TMO ID	TMA-TMO	SACOG MOU	15. US 50
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellan Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
	TMA Corridor Coverage	Total Employers ¹	22,732
	Within TMA Area	Total Employees ¹	257,774
	Directly Connects TMA Area	TMA Employers ¹	397
	Indirect Connectivity to TMA Area	TMA Employees ¹	165,227
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants ¹	13,362

This deficient corridor is a 6- to 7-lane freeway on SR-51 (Business 80) from US 50 in the southwest to I-80 in the northeast. Parallel roadways include SR-160/ del Paso Boulevard/ I-80. The corridor is in the Sacramento and Point West TMAs.



ROADWAY TRAFFIC DATA					
From	To	Functional Classification	Base Year Lanes	Base Year Count	2036 Forecast
E Street	N/O Ramp	Freeway	6	165,000	176,191
Arden Way	N/O Ramp	Freeway	7	161,000	202,591
El Camino Ave	N/O Ramp	Freeway	7	148,000	182,969
Fulton Ave	N/O Ramp	Freeway	6	162,000	175,148
Marconi Ave	N/O Ramp	Freeway	6	129,000	152,894
P St	N/O Ramp	Freeway	7	154,000	184,251

TRANSIT SERVICE		
Route	AM Headway	PM Headway
38	1 hour	1 hour
67	30 min	30 min
68	30 min	30 min
RCE	5-25 min	5-30 min
GSCE	40-60 min	1 hour
Blue Line LRT	15 min	15 min

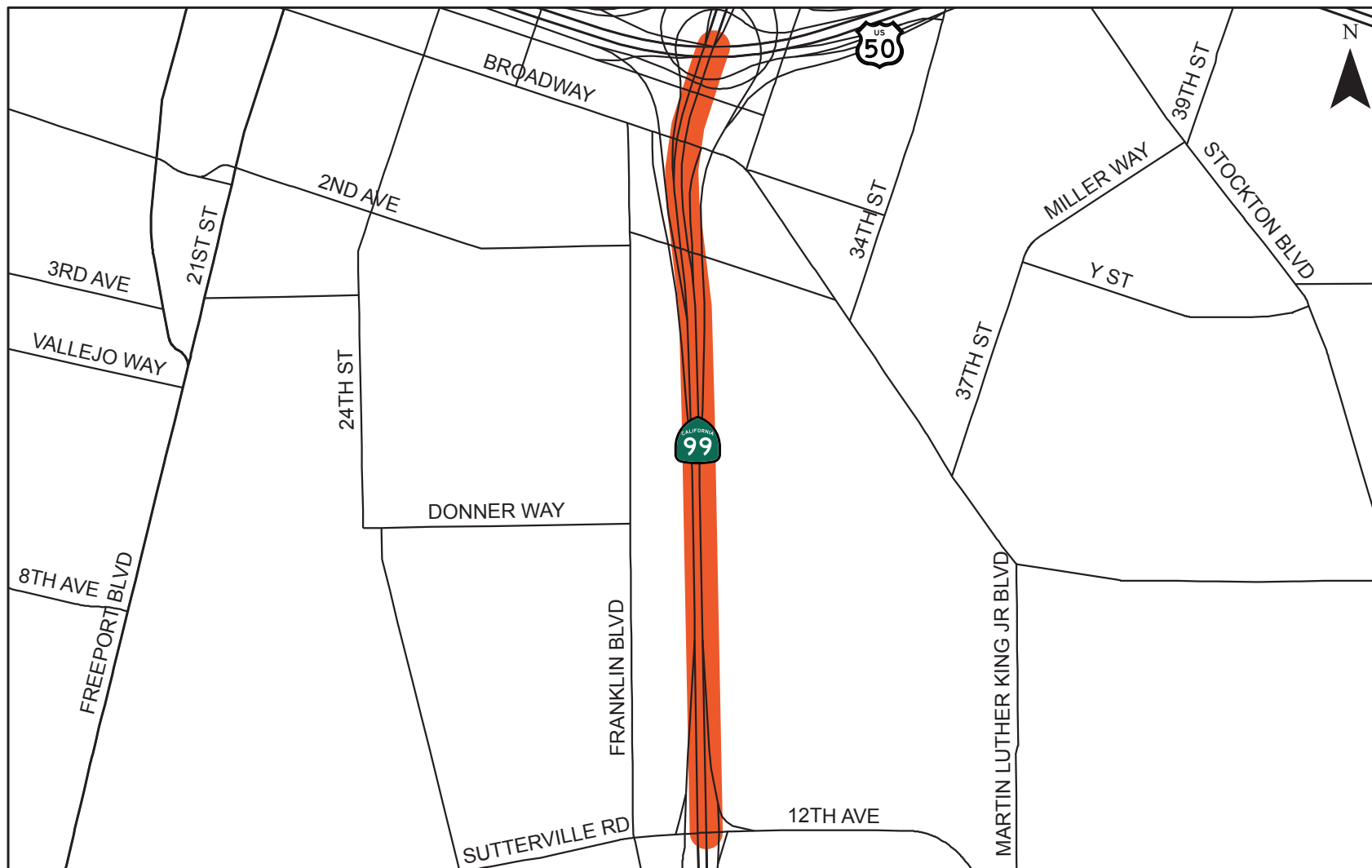
RCE = Roseville Commuter Express
GSCE = Galt-Sacramento Com. Expr.

STRATEGY DEVELOPMENT				
Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	Ramp Termini + 1 service road intersection: 24-hr Operation
G.2	ITS Strategies	Intergrated Corridor Management	High	US 50 Mainline and Parallel System - TMC Coordination
C	Managed Lanes Strategies		High	Aux Lanes; HOV/HOT Lanes; HOV Bypass Lanes at Ramps; Ramp Metering or Improving Existing Meter Rates
				See one (1) Planned Aux-lane Improvement and two (2) Planned Tranistion Lanes (C)
				See five (5) Planned HOV Improvement (C)
				See Two (2) Programmed Transition and Ramp Meter Improvement (C)
E.1	Rubber Tire Public Transit Strategies	Enhanced Regional Commuter Services	High	Inter-City and Inter-County Services
				See Planned Parallel Facility Improvement (E.1)
E.2	Passenger Rail Public Transit Stragies	Light Rail Extensions or Service Enhancements	High	RT Service Lines
A	Demand Management Strategies	Employer-based TDM	High	Enhanced TMA activity (See TMA Matrix: Sacramento, Point West, Placer County TPA, City of Roseville)
I	Incident Management Strategies	Freeway Service Patrols	Medium	Currently being implemented
H	TSM	Park-and-Ride Lots	Medium	

I-80 in the SACOG Region is one of 26 Statewide ICM Corridors identified by Caltrans

PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
CAL20642	Capital City Freeway (SR 51) widening over the American River: Bridge Widening: Widen SR51 over the American River NB and SB, to 4 lanes plus a bus carpool lane in both directions. New Class I bike path next to the freeway.	Sacramento	Caltrans D3	2021-2036	\$131,000,000	Planned	F/K
CAL20595	SR 51 Auxiliary Lane: SR 51 Auxiliary Lane: SB, from Exposition Blvd. to E St. Includes bridge replacements for the following locations: B Street Underpass (#24-0023), A Street Overcrossing (#24-0131) and Elvas Underpass (#24-0031). The project cost includes temporary bridge costs for the B Street and Elvas Underpasses.	Sacramento	Caltrans D3	2021-2036	\$84,200,000	Planned	C
CAL20597	SR 51 Transition Lane: Construct a transition lane on SR 51 SB from Exposition Blvd. slip off-ramp to Exposition Blvd. loop on-ramp.	Sacramento	Caltrans D3	Completion after 2036	\$12,500,000	Planned	C
CAL20502	SR 51 and SR 99 Install Ramp Meters @ Various Locations: In Sacramento County, on SR 51 and SR 99, at various locations - Install ramp meters [CTIPS ID 107-0000-1006] (Toll Credits) [EA 0F351, PPNO 6913] [child project of parent EA 0F350; second child is EA 0F352 PPNO 6913A]. Toll Credits for ENG, ROW	Sacramento	Caltrans D3	2020	\$23,580,000	Programmed	C
CAL20594	SR 51 Auxiliary Lane: SR 51: Widen structure over Arden Way to 8 lanes plus 2 bus/carpool lanes and construct a Transition Lane: NB, from SR160 off ramp to Arden Way on ramp	Sacramento	Caltrans D3	2021-2036	\$46,000,000	Planned	C/K
CAL20592	SR 51 Transition Lane: SR 51 Transition Lane: NB, from the Elvas Underpass to Exposition Blvd.	Sacramento	Caltrans D3	2021-2036	\$7,500,000	Planned	C
CAL20501	SR 51 NB Transition Lane and Local Roadway Improvements: On SR 51 (Capital City Freeway), close E Street northbound onramp and extend the northbound transition lane from near E Street on-ramp to just south of Elvas Underpass near the American River. Modify intersection at E Street and 30th Street. Also build local roadway improvements on 30th St. [CTIPS ID 107-0000-0940]. PS&E is not yet funded.	Sacramento	Caltrans D3	2022	\$8,300,000	Programmed	C
CAL20543	SR 51 Median Barrier: In Sacramento on SR 51 (Capital City Freeway) at 0.1 mile north of Arden Way undercrossing (Bridge #24-115R) - Construct concrete median barrier (PM 4.1/4.4) [CTIPS ID 107-0000-0996] (Toll credits for PE, ROW, CON). Toll Credits for ENG, ROW, CON	Sacramento	Caltrans D3	2017	\$2,730,000	Programmed	J.2
CAL20632	SR 51 Bus/Carpool Lanes: J Street to Arden: Bus/Carpool Lanes: J Street to Arden in both directions	Sacramento	Caltrans D3	2021-2036	\$100,000,000	Planned	C
CAL20691	SR 51 Bridge Deck Replacement (G13 Contingency Project): In the City of Sacramento at the American River Bridge #24-0003 (PM 2.6/3.0) - Widen and replace bridge deck (G13 Contingency Project) (Toll Credits). Toll Credits for ENG, ROW, CON	Sacramento	Caltrans D3	2028	\$137,250,000	Programmed	K
CAL20606	U.S. 50 / SR 99 / SR 51 Oak Park Interchange Reconstruction: U.S. 50 / SR 99 / SR 51 Oak Park Interchange Reconstruction: includes: bus/carpool lane freeway to freeway connectors.	Sacramento	Caltrans D3	Completion after 2036	\$10,000,000	Planned	C/K
NA	Bus/Carpool Lanes: Arden to I-80 in both directions	Sacramento	Caltrans D3	Completion after 2036	\$265,000,000	Planned	C
SAC24814	Hi-bus on El Camino Ave: Develop an enhanced bus corridor along 15.5 miles Sunrise Mall to the Royal Oaks station. Include 11 artic buses	Sacramento	Sacramento Regional Transit District	2021-2036	\$34,315,000	Planned	E.1

TMA-TMO ID	TMA-TMO	SACOG MOU	16. SR 51
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellan Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
	TMA Corridor Coverage	Total Employers ¹	20,951
	Within TMA Area	Total Employees ¹	212,619
	Directly Connects TMA Area	TMA Employers ¹	396
	Indirect Connectivity to TMA Area	TMA Employees ¹	121,532
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants ¹	10,878



This deficient corridor is a 7-lane freeway on SR-99 from US 50 in the north to 12th Avenue to the south. Parallel roadways include Franklin Boulevard. The corridor is in the Sacramento TMA.

ROADWAY TRAFFIC DATA					
From	To	Functional Classification	Base Year Lanes	Base Year Count	2036 Forecast
12Th Ave	N/O Ramp	Freeway	7	219,000	250,356

TRANSIT SERVICE		
Route	AM Headway	PM Headway
GSCE	40-60 min	1 hour

GSCE = Galt-Sacramento Com. Expr.

STRATEGY DEVELOPMENT				
Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	Ramp Termini + 1 service road intersection: 24-hr Operation
G.2	ITS Strategies	Intergrated Corridor Management	High	US 50 Mainline and Parallel System - TMC Coordination
C	Managed Lanes Strategies		High	Aux Lanes; HOV/HOT Lanes; HOV Bypass Lanes at Ramps; Ramp Metering or Improving Existing Meter Rates
				See Programmed Ramp Metering Improvement (C)
E.1	Rubber Tire Public Transit Strategies	Enhanced Regional Commuter Services	High	
				See Planned Parallel Facility Improvement (E.1)
E.2	Passenger Rail Public Transit Stragies	Light Rail Extensions or Service Enhancements	High	RT Service Lines
A	Demand Management Strategies	Employer-based TDM	Medium	Enhanced TMA activity (See TMA Matrix: Sacramento, City of Elk Grove
I	Incident Management Strategies	Freeway Service Patrols	Medium	Currently being implemented
H	TSM	Park-and-Ride Lots	Medium	

PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
CAL20502	SR 51 and SR 99 Install Ramp Meters @ Various Locations: In Sacramento County, on SR 51 and SR 99, at various locations - Install ramp meters [CTIPS ID 107-0000-1006] (Toll Credits) [EA 0F351, PPNO 6913] [child project of parent EA 0F350; second child is EA 0F352 PPNO 6913A]. Toll Credits for ENG, ROW	Sacramento	Caltrans D3	2020	\$23,580,000	Programmed	C
SAC24870	Hi-bus on Stockton Blvd: Develop an enhanced bus corridor along 12 miles along Stockton Boulevard between Downtown Sacramento and Cosumnes River College. Include 9 artic buses	Sacramento	Sacramento Regional Transit District	Completion by 2020	\$27,127,000	Planned	E.1

TMA-TMO ID	TMA-TMO	SACOG MOU	17. SR 99
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellan Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
	TMA Corridor Coverage	Total Employers ¹	18,693
	Within TMA Area	Total Employees ¹	166,262
	Directly Connects TMA Area	TMA Employers ¹	225
	Indirect Connectivity to TMA Area	TMA Employees ¹	103,585
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants ¹	10,329

This deficient corridor is a 7- to 8-lane freeway on I-5 from US 50 in the south to Richards Boulevard in the north. Parallel roadways include 16th Street. The corridor is in the Sacramento TMA.



ROADWAY TRAFFIC DATA					
From	To	Functional Classification	Base Year Lanes	Base Year Count	2036 Forecast
I Street	N/O Ramp	Freeway	8	195,000	246,532
P Street	N/O Ramp	Freeway	7	181,000	233,227

TRANSIT SERVICE		
Route	AM Headway	PM Headway
3	15-30 min	15 min
7	30 min	15 min
15	30 min	30 min
Yolobus 39	30-60 min	30-60 min
Yolobus 42	1 hour	1 hour
86	15-30 min	30 min
88	30 min	30 min
E-Tran 53	15-20 min	30-35 min

*Peak Hour Bus Service

STRATEGY DEVELOPMENT				
Strategy ID	Strategy Type	Improvement Concepts	Emphasis (H/M/L)	Comments
G.1	ITS Strategies	Adaptive Signal Control	High	Ramp Termini + 1 service road intersection: 24-hr Operation
G.2	ITS Strategies	Intergrated Corridor Management	High	US 50 Mainline and Parallel System - TMC Coordination
C	Managed Lanes Strategies		High	Aux Lanes; HOV/HOT Lanes; HOV Bypass Lanes at Ramps; Ramp Metering or Improving Existing Meter Rates
E.1	Rubber Tire Public Transit Strategies	Enhanced Regional Commuter Services	High	Inter-City and Inter-County Services
E.2	Passenger Rail Public Transit Stragies	Light Rail Extensions or Service Enhancements	High	RT Service Lines
				See Planned Improvement (E.2)
A	Demand Management Strategies	Employer-based TDM	High	Enhanced TMA activity (See TMA Matrix: Sacramento, South Natomas, North Natomas)
I	Incident Management Strategies	Freeway Service Patrols	Medium	Currently being implemented
H	TSM	Park-and-Ride Lots	Medium	

PROGRAMMED AND PLANNED PROJECTS ON ROADWAY							
Project	Description	County	Lead Agency	Completion Year	Total Cost	Status	Strategy Type
SAC18170	I-5 at Richards Blvd. Interchange: Sacramento, Richards Blvd. and I-5; reconstruct interchange (ult). (HPP #3784)(T15088200)	Sacramento	City of Sacramento	2025	\$39,598,000	Programmed	K
REG17935	Green Line: MOS2 & MOS3: Extend rail from Richards Blvd. to Sacramento International Airport	Sacramento	Sacramento Regional Transit District	2021-2036	\$698,286,782	Planned	F/J.2

TMA-TMO ID	TMA-TMO	SACOG MOU	18. I-5
1	50 Corridor TMA	Yes	
2	City of Elk Grove	No	
3	City of Roseville	No	
4	El Dorado County Transportation Commission	No	
5	McClellan Park TMA	Yes	
6	North Natomas TMA	Yes	
7	Placer County Transportation Planning Agency	No	
8	Point West Area TMA	Yes	
9	Power Inn Alliance	Yes	
10	Sacramento TMA	Yes	
11	South Natomas TMA	Yes	
12	Yolo TMA	Yes	
13	Yuba-Sutter TMA	Yes	
	TMA Corridor Coverage	Total Employers ¹	20,757
	Within TMA Area	Total Employees ¹	191,636
	Directly Connects TMA Area	TMA Employers ¹	421
	Indirect Connectivity to TMA Area	TMA Employees ¹	125,455
¹ Reflects only Within (Green) and Directly Connecting (Blue) TMA Areas		TMA Participants ¹	11,174

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