

# ***2015 RAMP METERING DEVELOPMENT PLAN***

*May 2016*



**California Department of Transportation**

Division of Traffic Operations  
Office of Traffic Management

Division of Transportation Planning  
Office of Multi-Modal System Planning



# Memorandum

*Serious drought.  
Help save water!*

To: DISTRICT DIRECTORS

Date: June 10, 2016

  
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Subject: **2015 RAMP METERING DEVELOPMENT PLAN**

The California Department of Transportation (Caltrans) Divisions of Traffic Operations and Transportation Planning are pleased to announce the completion of the 2015 Ramp Metering Development Plan (RMDP). The 2015 RMDP was prepared with support from district staff in accordance with Deputy Directive 35 R-1 Ramp Metering.

The 2015 RMDP identifies all ramp meter locations that are currently in operation or are planned for operation within the next ten years. The RMDP is a planning tool for Caltrans to use when working with internal functional units and external partners to identify locations for ramp meters in future capital improvement projects. The 2015 RMDP can be accessed at: [www.dot.ca.gov/hq/traffops/systemops/ramp\\_meter/](http://www.dot.ca.gov/hq/traffops/systemops/ramp_meter/)

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# INTRODUCTION

## **The Purpose of the Ramp Metering Development Plan (RMDP)**

The California Department of Transportation (Caltrans) strives to optimize the performance of the transportation system for travelers. Toward this goal, Caltrans meters freeway entrance ramps (ramp metering) to reduce congestion and travel times.

As required by Caltrans' Deputy Directive 35 R-1 Ramp Metering, each district that currently operates, or expects to operate ramp meters within the next ten years, shall prepare a district Ramp Metering Development Plan (RMDP). The district RMDP contains a list of ramp metering locations currently in operation or planned for operation in the next ten years. Each district works in partnership with its Metropolitan Planning Organizations (MPO's) and Regional Transportation Planning Agencies (RTPA's) to program ramp metering projects and implement the district RMDP. Districts shall update their RMDP every two years.

This 2015 RMDP is a compilation of the districts' RMDPs. The RMDP was prepared by the Division of Traffic Operations, the Division of Transportation Planning, and district staff, in accordance with Deputy Directive 35 R-1. The RMDP shall be updated every two years. This version of the RMDP is an update of the 2013 version, and it supersedes all previous versions. The RMDP will be used as an information tool for working with Caltrans internal functional units and regional and local partner agencies to ensure that ramp metering projects are included in planning and programming documents for implementation.

This RMDP should be incorporated into long range (20-25 year) system plans and documents, such as:

- The District System Management Plans (DSMP) which is a policy planning document that describes how the district envisions the transportation system will be maintained, managed, and developed over the next twenty years and beyond.
- Transportation Concept Reports (TCRs) and Corridor System Management Plans (CSMPs) that evaluate current and projected conditions along a route and communicate the vision of the development of each route in each district.

This document does not commit Caltrans to install or operate ramp meters at the locations listed. Early coordination and consultation with RTPA's, MPO's, and other local agencies ensure a collaborative effort when planning and implementing ramp meters on the State Highway System (SHS).

In addition to improving SHS performance, each ramp metering project should improve safety, access, and mobility for all travelers in California. Caltrans recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system. As with all transportation projects on the SHS, the context of each project location must be considered along with the safety and mobility needs of travelers of all ages and abilities in a manner consistent with Caltrans Deputy Directive 64 R-2 Complete Streets – Integrating the

Transportation System.<sup>1</sup> Highway ramp intersections with local roads are particularly important opportunities for Caltrans to improve pedestrian safety, bicycle safety, and mobility through optimal design and operations. While the Highway Design Manual (HDM) and the Ramp Metering Design Manual (RMDM) are used when developing ramp meter projects, the project team should also reference the Complete Intersections Guide<sup>2</sup> and the districts' system planning products to ensure that the needs of pedestrians and bicyclists are considered when developing ramp meter projects. Each ramp meter project should be designed with consideration for these users.

The RMDP is a comprehensive report that identifies existing and planned ramp metering locations. The ramp meters in the "planned" category should be incorporated into planning and programming documents.

Caltrans' Local Development-Intergovernmental Review (LD-IGR) program works with local jurisdictions to mitigate potential adverse impacts of local development projects to the SHS based on the California Environmental Quality Act (CEQA). Ramp metering can be an appropriate and feasible CEQA based component of an LD-IGR traffic congestion mitigation plan for local development projects. As such, the RMDP can be a resource for district LD-IGR staff and the local communities in identifying potential infrastructure mitigation features for a proposed project.

## **The Ramp Metering Program**

### Ramp Metering Policies

As stated in Deputy Directive 35 R-1, "The California Department of Transportation (Department) is committed to using ramp metering as an effective traffic management strategy to maintain an efficient freeway system, and protect the investment made in constructing freeways by keeping them operating at or near capacity." According to Director's Policy (DP)-08, DP-26, and the California Department of Transportation Strategic Management Plan 2015-2020, Caltrans implements advanced technologies and new processes that combine information, electronic, and communications technologies with management strategies to enhance the intelligent transportation systems (ITS), transportation management systems (TMS), and ramp metering system to produce a coordinated and integrated traffic management system. The implementation of these policies enhances Caltrans' ability to maximize movement capacity for people, goods, and information, while at the same time providing good stewardship of the public's investment in California's transportation infrastructure and minimizing the system's impacts on the environment.

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<sup>1</sup> California Department of Transportation. *Deputy Directive No. 64 R-2*.  
< [http://www.dot.ca.gov/hq/tpp/offices/bike/guidelines\\_files/DD64.pdf](http://www.dot.ca.gov/hq/tpp/offices/bike/guidelines_files/DD64.pdf) >

<sup>2</sup> California Department of Transportation. *Complete Intersections Guide*.  
< <http://www.dot.ca.gov/hq/traffops/engineering/investigations/docs/intersection-guide-bicycles-pedestrians.pdf> >

California Department of Transportation, *Caltrans Strategic Management Plan 2015- 2020*,  
<[http://www.dot.ca.gov/perf/library/pdf/Caltrans\\_Strategic\\_Mgmt\\_Plan\\_033015.pdf](http://www.dot.ca.gov/perf/library/pdf/Caltrans_Strategic_Mgmt_Plan_033015.pdf)>

### Ramp Metering Status in California

Since the 1960s Caltrans has implemented ramp metering to mitigate congestion and protect the investment made in the existing State Highway System. As of December 2015 there are 2,954 existing ramp meters statewide.

As shown in the Caltrans Statewide Map on page 11, Caltrans has 12 district offices located throughout the State of California. All of the districts except District 1 and District 9 are currently operating ramp meters or expect to operate ramp meters in the next ten years. District 1, covering the rural Del Norte, Humboldt, Mendocino, and Lake counties, and District 9, covering the rural Inyo, Mono and eastern Kern counties, do not expect to implement ramp metering in the next ten years.

Ramp meters regulate the flow of vehicles entering the freeway. They may operate with fixed metering rates, local traffic-responsive metering rates, or corridor/system-wide traffic adaptive metering rates. Most ramp meters in California are local traffic-responsive meters and metering rates are determined based on the freeway traffic conditions monitored by inductive loop detectors. Vehicles are released onto the freeway proportional to the level of congestion on the mainline. When the freeway is free-flowing, ramp metering release rates for mainline entry are high. When the freeway is congested, the ramp metering release rates are low. Corridor/system-wide traffic adaptive metering utilizes a central system to monitor traffic conditions of a highway network and determine the metering rates for all of the ramp meters along the network that would maximize traffic performance for the entire highway network. Over the past several years, Caltrans has been evaluating several corridor/system-wide traffic adaptive ramp metering strategies along the state highways. One of the latest strategies involves field testing an effective algorithm for integration of freeway corridor ramp metering control and arterial corridor intersection traffic signal control using University of California Partners for Advanced Transportation Technology (UC PATH's) modified Asservissement Linéaire d'Entrée Autoroutière (ALINEA) algorithm along Route 99 in District 3.

### Benefits of Ramp Metering

Ramp metering is a traffic management strategy that uses a system of traffic signals at freeway entrances and connector ramps to regulate the volume of traffic and spacing of vehicles entering a freeway corridor. This strategy is used to maximize the efficiency of the freeway, improve mobility, and thereby minimize the total delay within the transportation corridor. Ramp metering attempts to ensure the total traffic volume entering a freeway segment, plus the entering ramp traffic, remains below the capacity of that freeway segment. Ramp metering has the potential to prevent freeway congestion by delaying its onset. It reduces freeway congestion by controlling the rate of vehicles entering the freeway by eliminating the entry of large groups of vehicles; known as "platoons." The result is increased freeway throughput, increased freeway operating speeds, and improved overall freeway operation. Ramp metering also maintains smoother and safer merging operations which improve safety by reducing rear-end and sideswipe collisions.

A past study performed on State Route 94 in San Diego<sup>3</sup> indicated that installation of ramp meters improved mainline speeds from below 30 miles per hour (mph) to above 55 mph. The *I-580 Ramp Metering before-and-after Studies – Phase II Final Report* dated August 2008, showed that the installation of ramp meters over an 18 mile stretch of Route 580 in Alameda County shortened travel time by 30 percent. The Metropolitan Transportation Commission (MTC) published the *Freeway Performance Initiative: Regional System Efficiency & Integration in the Works* fact sheet<sup>4</sup> detailing the effect of ramp metering deployments since 2007. The fact sheet shows a 30 percent or greater delay reduction on 80 percent of the freeway segments analyzed in the Bay Area.

In the well-cited *Twin Cities Metro Area Ramp Meter Study*<sup>5</sup> conducted by the Minnesota Department of Transportation in 2001, the traffic flow and safety impacts of ramp metering were evaluated by turning off all 430 ramp meters in the Minneapolis/St. Paul area for six weeks as mandated by the 2001 Minnesota Legislature. The results indicated when ramp meters were turned off, freeway throughput was reduced by 9 percent, travel time increased by 22 percent, speed dropped by 7 percent and the number of crashes increased by 26 percent.

#### Ramp Metering Firmware

Caltrans is progressing toward a unified ramp metering firmware that will minimize operational and maintenance costs. A firmware package named Universal Ramp Metering Software (URMS), has been developed for the 2070 Controller. Currently, URMS has been fully deployed in Districts 3, 5, 6, and 10. Other districts continue to use their existing ramp metering firmware packages while evaluating the URMS for full deployment. District 4 uses the Traffic Operations System (TOS). District 7 uses the Semi-Automatic Traffic Management System (SATMS). District 8 and District 11 use the San Diego Ramp Metering System Revision 8 (Rev8). District 12 uses the Orange County Ramp Metering System (OCRMS). In order to prevent disruptions to their ramp metering operations, Districts 4, 7, 11, and 12 are carefully and systematically executing their URMS deployment plan for their respective region.

#### Ramp Metering Research Projects

Caltrans conducts research to develop and implement new performance ideas and products. The Division of Traffic Operation collaborates with the Division of Research, Innovation, and System Information (DRISI) to conduct this research. The results from the research projects are used to update the RMDM. A brief description of current ramp metering research projects are as follows:

- Performance analysis and control design for on-ramp metering of active merging bottlenecks: The objective of this research is to analyze the performance and design the control parameters for traffic-responsive on-ramp metering of congested merging

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<sup>3</sup> California Department of Transportation. *Ramp Metering Study on State Route 94 in San Diego*.  
< <http://www.dot.ca.gov/dist11/d11tmc/sdmap/direct/rampinfo.html> >

<sup>4</sup> Metropolitan Transportation Commission. *Freeway Performance Initiative: Regional System Efficiency & Integration in the Works*.  
< [http://apps.mtc.ca.gov/meeting\\_packet\\_documents/agenda\\_1666/05d\\_1\\_FPI\\_Fact\\_Sheet\\_Final\\_5.2.11.pdf](http://apps.mtc.ca.gov/meeting_packet_documents/agenda_1666/05d_1_FPI_Fact_Sheet_Final_5.2.11.pdf) >

<sup>5</sup> Minnesota Department of Transportation. *Twin Cities Metro Area Ramp Meter Study*.  
< <http://www.dot.state.mn.us/rampmeter/study.html> >

bottlenecks. The University of California Irvine (UCI), in connection with DRISI, is currently conducting research in this project.

- Field Experiment of Coordinated Ramp Metering (CRM) Phase II: The objective of this project is field testing of the CRM algorithm at the selected site to determine the technical feasibility of implementing coordinated ramp metering based on real-time data, and to determine its effectiveness in improving corridor traffic flow through preliminary evaluation based on data analysis. The researchers are working with the District 3 Transportation Management Center (TMC) on activating the CRM algorithm on SR 99 between Elk Grove Boulevard and US 50 merge.
- Congestion-responsive on-ramp metering; before-and-after studies: The objective of this project is to evaluate the validity of enacting freeway on-ramp metering in direct response to the varied start and end times of recurrent freeway congestion. This evaluation shall be done by means of before-and-after field studies on a real-world freeway section supplemented by simulation modeling. Currently, the researchers are working with District 4 staff.
- Coordination of freeway ramp meters and arterial traffic signals (phase IIA); site selection & simulation development: Researchers are working with District 4 staff on developing the concept of operations on how to interface with the ramp metering and data systems at Caltrans District 4 TMC.

#### Ramp Metering Training

Ramp metering training has been developed and conducted across the State through the Traffic Mobility Workshop. The target audience includes not only the operations engineers, but more importantly project engineers, project managers, and resident engineers; as well as planners and local agency staff. Ramp metering topics are also covered in the Project Engineer Academy. Ramp metering training will be developed to support the new RMDM once it is released. Ramp metering topics have also been incorporated in other statewide training courses, such as the Traffic Mobility Workshop, and the Project Engineer Academy. These training sessions promote ramp metering as an effective system management strategy throughout the project planning, design, and construction process.

#### State Highway Operation and Protection Program (SHOPP)

In addition to the ramp meters planned in this RMDP, 60 percent of the existing ramp meters must be replaced over the next ten years due to equipment exceeding its service life or obsolescence. These ramp meters must be identified in the SHOPP for Fiscal Year (FY) 2016/17 through FY 2019/20. The 2016 SHOPP is developed under the legislative directive which supports the State's "fix-it-first" approach and Caltrans' sustainability, stewardship and efficiency, and system performance goals. However, copper wire theft has compromised the health of ramp meters throughout the state. Copper wire theft poses a burden to day-to-day ramp metering operations. In District 6, 82 percent of the ramp meters were affected by copper wire theft. The District 6 ramp metering branch along with other branches developed a viable solution to this issue in accordance to Caltrans Deputy Directive 113, Wire Theft Prevention. Strategies are being developed to enhance the security of the metering system, and in particular, copper wiring, so that system down time due to wire theft can be minimized. By implementing some of the strategies in the "Wire Theft Prevention Toolbox"

(<http://traffic.onramp.dot.ca.gov/wire-theft-prevention>), District 6 has restored 54 percent of its ramp meters.

### **Ramp Metering High Priority Location Selection**

The following guidelines are commonly used by Caltrans to identify proposed locations for entrance ramp metering.

1. Follow the guidance as described in Deputy Directive No. 35 R-1 and the Ramp Metering Design Manual.
2. Mitigate traffic safety situations, especially as a result of entrance ramp merging operations.
3. Mitigate current or future mainline congestion or other operational issues.
4. Improve corridor / system-wide operations; for example, closing gaps of un-metered entrance ramps on freeway corridors.
5. Respond to requests or complaints from the general public or local agencies.
6. Implement the project within the ten year planning horizon of the RMDP.

In addition, the districts may have additional criteria to address local needs. For example, the California Environment Quality Act (CEQA) requires potential ramp meter installation impact documentation on a project-by-project, site-specific basis at the local and regional level. For additional examples of districts' criteria, please refer to the ramp metering strategies section in each district's narrative.

Once funding becomes available, further prioritization of the planned ramp metering locations is advised. The CSMP guidelines and mobility performance reports (MPR), which identify existing bottleneck locations, are generally the starting points to prioritize ramp metering locations; although operational experience also plays a significant role in the prioritization process. Other documents, such as the Regional Transportation Plans, Transportation Concept Reports, District System Management Plans, and the Transportation Management System Master Plan provide additional justification for the prioritization.

Each district with high priority ramp metering locations established a list based on the unique characteristics of its geographical location and congestion challenges. These locations are considered to be the most critical to mitigate local congestion. These high priority ramp metering locations are highlighted in blue in the districts' ramp meter data. The prioritized locations listed do not represent a commitment for funding by Caltrans or others. The high priority ramp meter locations should be nominated for funding or incorporated into other capital improvement projects when opportunities arise.

Preliminary conceptual cost ranges for the high priority ramp metering locations are provided by district personnel for advance planning purposes. The conceptual cost ranges listed in the district's narratives are listed in Table 1. Actual cost estimates for each project will be determined at the project initiation document (PID) phase.

**Table 1 Ramp Metering Conceptual Construction Cost Estimates**

Number of Lanes Proposed	Electrical Cost (\$K)**	Civil Cost (\$K)***	Total Cost (\$K)*
1-Lane Ramp Meter	100	50	150
2-Lane Ramp Meter	120	500	610
3-Lane Ramp Meter	220	600	820
Connector Ramp Meter	380	850	1,225

\* Generally, estimates are for typical on-ramps with no structure work and right of way acquisition. Longer and shorter on-ramps will vary from above estimates. Estimate does not include support cost (approximately 33%) or contingencies cost (approximately 25%). These estimates do not include traffic control or modification to existing drainage; or removal of sound wall, barriers, and metal beam guard rail (MBGR).

\*\* Electrical cost includes electrical equipment (signals, conduit, controller cabinets, controllers, advance warning signs, advance warning signals, and mainline/on-ramp detectors).

\*\*\* Civil Cost includes civil work to widen the on-ramp, maintenance vehicle pull out (MVP), CHP enforcement area, signing, and striping.

**General Comparison with the 2013 Statewide RMDP**

Table 2 and Table 3 below show the summary ramp metering location information as contained in the 2015 and 2013 RMDPs, respectively. The 2015 RMDP shows a statewide total of 2,954 existing ramp meters. There are 152 more existing ramp meters than are shown in the 2013 RMDP. Since the 2013 RMDP was released, District 4 alone has implemented 71 new ramp metering locations, with the continued support of the Freeway Performance Initiative by the Metropolitan Transportation Commission and other local agencies.

The 2015 RMDP plans to implement ramp metering at 1,697 locations over the next ten years. With the exception of District 1 and District 9, all districts plan to install additional ramp meters. District 7, in partnership with local agencies, proposes to increase the number of planned ramp meters in their region over the next ten years by 192 locations, an increase of 40 total locations compared to the 2013 RMDP.

**Table 2: 2015 RMPD Metering Locations by District**

	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	Total
Existing	0	0	210	708	6	76	1025	278	0	2	318	331	2954
Planned	0	11	148	637	20	130	192	241	0	169	130	19	1697
Total	0	11	358	1345	26	206	1217	519	0	171	448	350	4651

**Table 3: 2013 RMPD Metering Locations by District**

	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	Total
Existing	0	1	189	637	3	64	1023	228	0	2	310	345	2802
Planned	0	10	163	684	10	111	152	213	0	167	130	2	1642
Total	0	11	352	1321	13	175	1175	441	0	169	440	347	4444

## DATA FIELD DEFINITIONS

The TMS Inventory database holds data records that include county, route, post mile, and funding information; installation date, controller type, controller software, and controller communication medium. Many of the TMS Inventory database fields are not relevant to the RMDP, therefore, the RMDP contains a subset of the TMS Inventory information. The data fields used in the RMDP are defined by the TMS Inventory database. Eleven data fields are used to describe each ramp metering location contained in the RMDP. These fields are: Status, District, County, Route, Post Mile, Direction, Location, Ramp Type, Number of Lanes, High Occupancy Vehicle Preferential Lane (HOVPL), and Comments. The RMDP was developed based on the statewide Transportation Management Systems (TMS) Inventory database 2015.

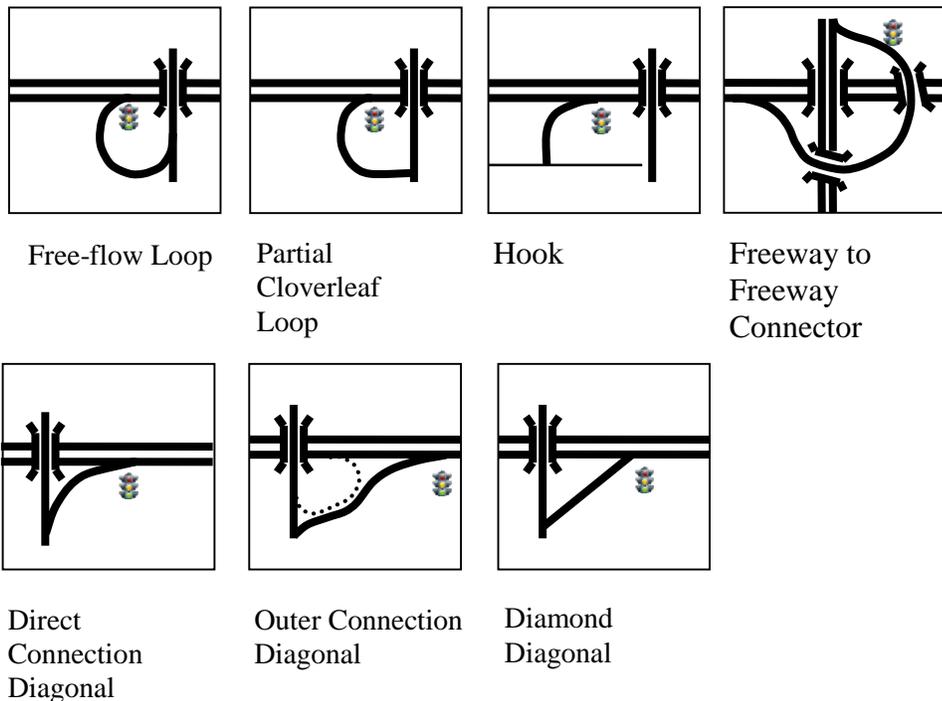
A detailed description of each field is provided as follows:

1. **Status:** A black dot “●” identifies “existing” ramp metering locations. This include locations where there are operational ramp meters or locations where ramp metering hardware is fully installed and accepted by the Division of Traffic Operations, but it is currently not activated (Non Operational). Ramp meters which are in construction are identified as “planned” ramp metering locations.
2. **District:** A management region defined by Caltrans. There are 12 Caltrans districts covering all of California.
3. **County:** The largest territorial division for local government within California.
4. **Route:** The legislatively identified number for a major roadway connecting two or more destinations.
5. **Post mile:** A number designating a unique location on a roadway measured in miles from the county line. This value may include an alphabetic prefix, which typically indicates roadway realignment. Post miles begin at zero and increase from west to east and south to north.
6. **Direction:** The following direction identifiers are used in the RMDP:
  - ◆ NB = Northbound
  - ◆ SB = Southbound
  - ◆ EB = Eastbound
  - ◆ WB = Westbound
7. **Location:** The name of the adjacent road, arterial or connecting freeway from which traffic enters the ramp.

8. **Ramp Type:** The configuration of a dedicated road facility providing a connection between two roadways; at least one of the roadways a ramp connects to is typically a high-speed facility such as a freeway or multi-lane highway. The following entrance ramp types are identified in the RMDP:

- ◆ L = Loop
- ◆ H = Hook
- ◆ C = Freeway-to-freeway Connector
- ◆ S = Slip or diagonal
- ◆ D = Collector/Distributor

Example entrance ramp types:



9. **Number (#) of Lanes:** A numeric value describing the total number of lanes present at the ramp's limit line.

10. **HOVPL (High Occupancy Vehicle Preferential Lanes):** Preferential lanes are lanes designated for vehicles with a specified minimum number of occupants. High occupancy vehicles may also include specific low-emission vehicle models. The following HOVPL types are identified in the RMDP:

- ◆ M = metered HOVPL
- ◆ NM = non-metered HOVPL
- ◆ Blank space = No HOVPL lane

11. **Comments:** Where applicable the comment section of the RMDP will include the following terms to describe the status of the ramp meter. The comment section can also include district specific comments which will be described in the district's narrative information:

- ◆ Operational = Ramp meter is currently actively metering
- ◆ Non Operational (Non Op) = Ramp metering hardware is fully installed and accepted by the Division of Traffic Operations, but it is currently not activated.
- ◆ Partially Constructed (Part Const) = Ramp meter in construction, or just the underground equipment constructed, with no poles/signs/heads in place.
- ◆ Planned = Meter non-existent; only planned/proposed

# 2015 Ramp Metering Development Plan



Disclaimer: This information is for discussion and planning purposes, and does not represent a commitment by Caltrans or others to install or operate ramp meters at these locations.

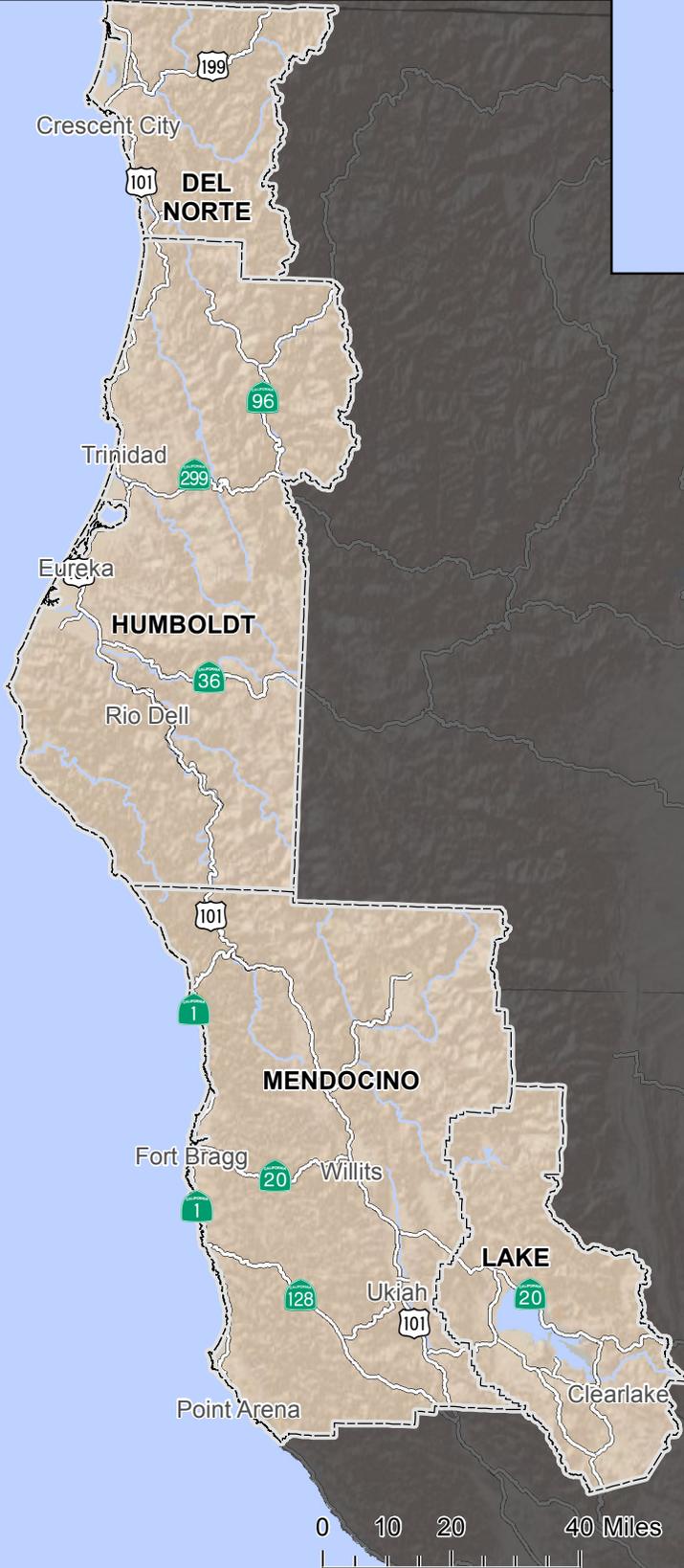
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# DISTRICT 1

# District 1

Ramp Metering Development Plan

Division of Traffic Operations  
Data by: Office of Traffic Management  
Map by: Office of Performance



**2015  
Ramp Metering Status**

- 0-Existing
- 0-Planned
- County line



Disclaimer: This information is for discussion and planning purposes, and does not represent a commitment by Caltrans or others to install or operate ramp meters at these locations.

## **DISTRICT 1**

District 1, primarily a rural district, is headquartered in Eureka. It includes the counties of Del Norte, Humboldt, Lake, and Mendocino. District 1 has a population of 317,395 in an area of 9,348 square miles. This makes it the third most sparsely populated Caltrans district with only 34 people per square mile. There are 947 centerline miles and 2,394 lane-miles of highway managed by Caltrans in District 1.

District 1, also known as the “North Coast,” depends on its highway infrastructure for both commerce and tourism. US 101, traversing north to south through the heart of the district, has often been characterized as the "lifeline of the North Coast".

### Current or Planned Ramp Metering Routes

No routes have current or planned ramp metering in District 1 as illustrated in the District’s map on the previous page.

### Congestion Challenges

No regular or serious congestion issues exist within District 1.

### District Ramp Metering Strategies

Recurrent urban freeway congestion is not sufficient to justify ramp meters in the ten-year horizon of the RMPD.

### Supporting Documents

- ◆ District 1 TCRs, DSMP, and other planning products:  
<http://www.dot.ca.gov/dist1/d1transplan/d1system.htm>

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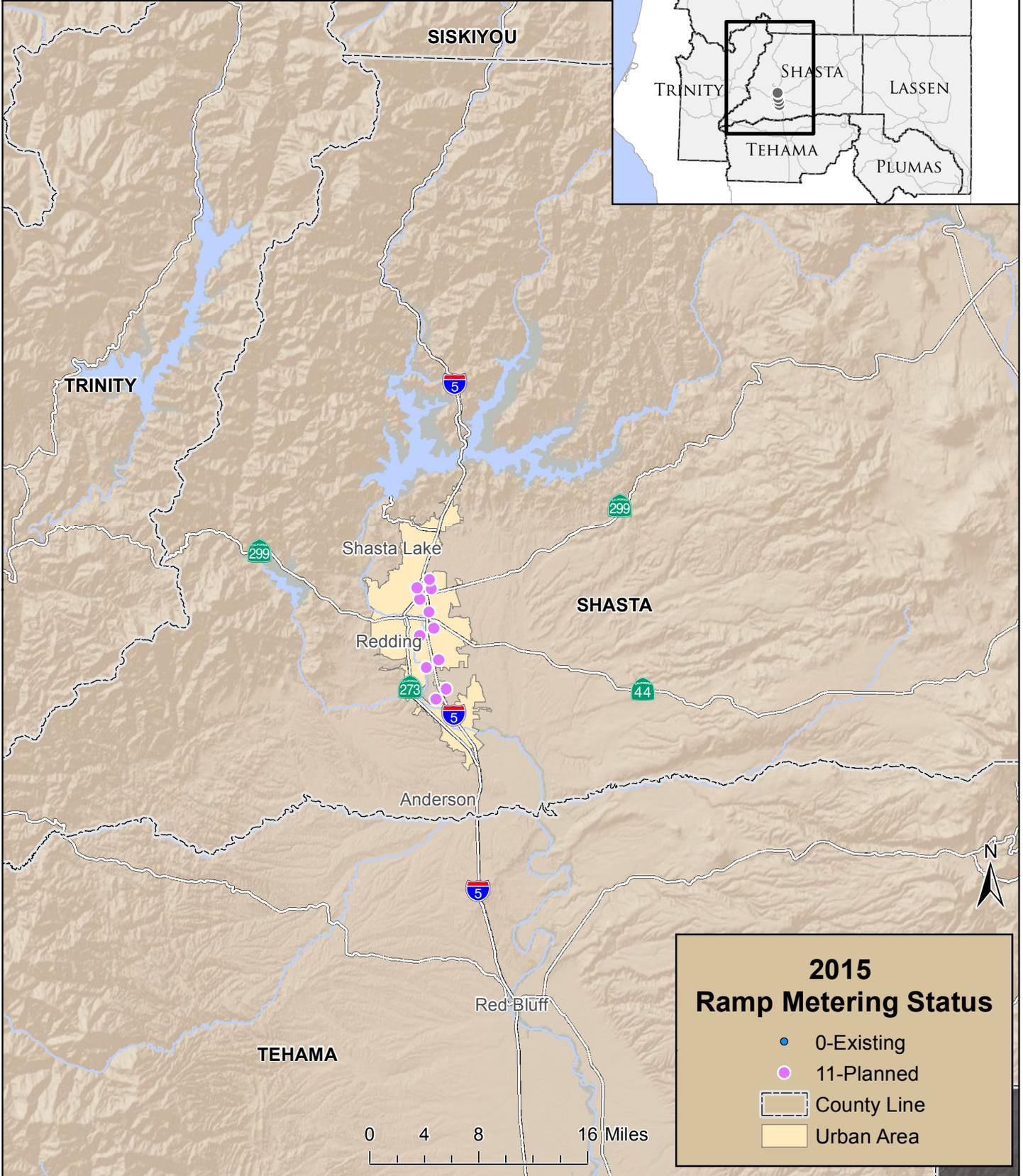
# DISTRICT 2



# District 2

Ramp Metering Development Plan

Division of Traffic Operations  
Data by: Office of Traffic Management  
Map by: Office of Performance



Disclaimer: This information is for discussion and planning purposes, and does not represent a commitment by Caltrans or others to install or operate ramp meters at these locations.

## **DISTRICT 2**

District 2 is composed of seven counties in the northeast portion of California: Tehama, Shasta, Trinity, Siskiyou, Plumas, Lassen, and Modoc. The counties are rural in nature with the exception of the Redding/Anderson urban area in Shasta County. District 2 has a population of approximately 360,000 in 27,307 square miles with a density of about 13 people per square mile. This makes it the second most sparsely populated of the twelve Caltrans districts. Caltrans manages 1,752 centerline miles and 4,038 lane-miles of highway in District 2.

### Current or Planned Ramp Metering Routes

The following routes have or are planned to have ramp metering:  
I-5 and SR 44.

District 2 has no existing ramp meters and 11 planned ramp meters for a projected total of 11 ramp meters for the ten-year period covered by the RMDP. Currently there are no proposed high priority locations in District 2. Ramp meter locations are illustrated on the District's RMDP map.

### Congestion Challenges

Some non-freeway routes within District 2 experience sporadic congestion during summer months. However, ramp metering is not an appropriate option for these facilities. Recurring congestion within the district is generally limited to peak periods on portions of facilities located in the northern end of the Sacramento Valley between the cities of Redding (Shasta County) and Red Bluff (Tehama County). I-5 is the primary highway serving this area and is the focus of the District 2 ramp metering effort.

### District Ramp Metering Strategies

District Directive DD-10 Freeway Ramp Meter Implementation contains the criteria for consideration of ramp metering for freeway and interchange projects within District 2. The directive establishes four levels of ramp meter implementation based on projected ten-year peak-hour traffic density on mainline highway lanes. Ramp meters are included in the RMDP if they are expected to be required and fully operational within the ten year period.

### Supporting Documents

- ◆ TCRs, CSMPs, DSMP, and other planning products:  
<http://www.dot.ca.gov/dist2/planning/conceptrpts.htm>
- ◆ District Directive DD-10 Freeway Ramp Meter Implementation  
<http://onramp.dot.ca.gov/dist02/pdf/dd10.pdf>



## 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	2	Sha	5	9.65	SB	Knighton Rd				Planned
	2	Sha	5	9.90	NB	Knighton Rd				Planned
	2	Sha	5	11.96	SB	S Bonnyview				Planned
	2	Sha	5	12.26	NB	S Bonnyview				Planned
	2	Sha	5	14.28	SB	Cypress				Planned
	2	Sha	5	14.76	NB	Cypress				Planned
	2	Sha	5	17.05	SB	Lake Blvd				Planned
	2	Sha	5	17.57	NB	Lake Blvd				Planned
	2	Sha	5	17.92	SB	Twin View Blvd				Planned
	2	Sha	5	18.22	NB	Twin View Blvd				Planned
	2	Sha	44	R0.13	WB	Dana Dr				Part Const

- Existing Meter

High Priority

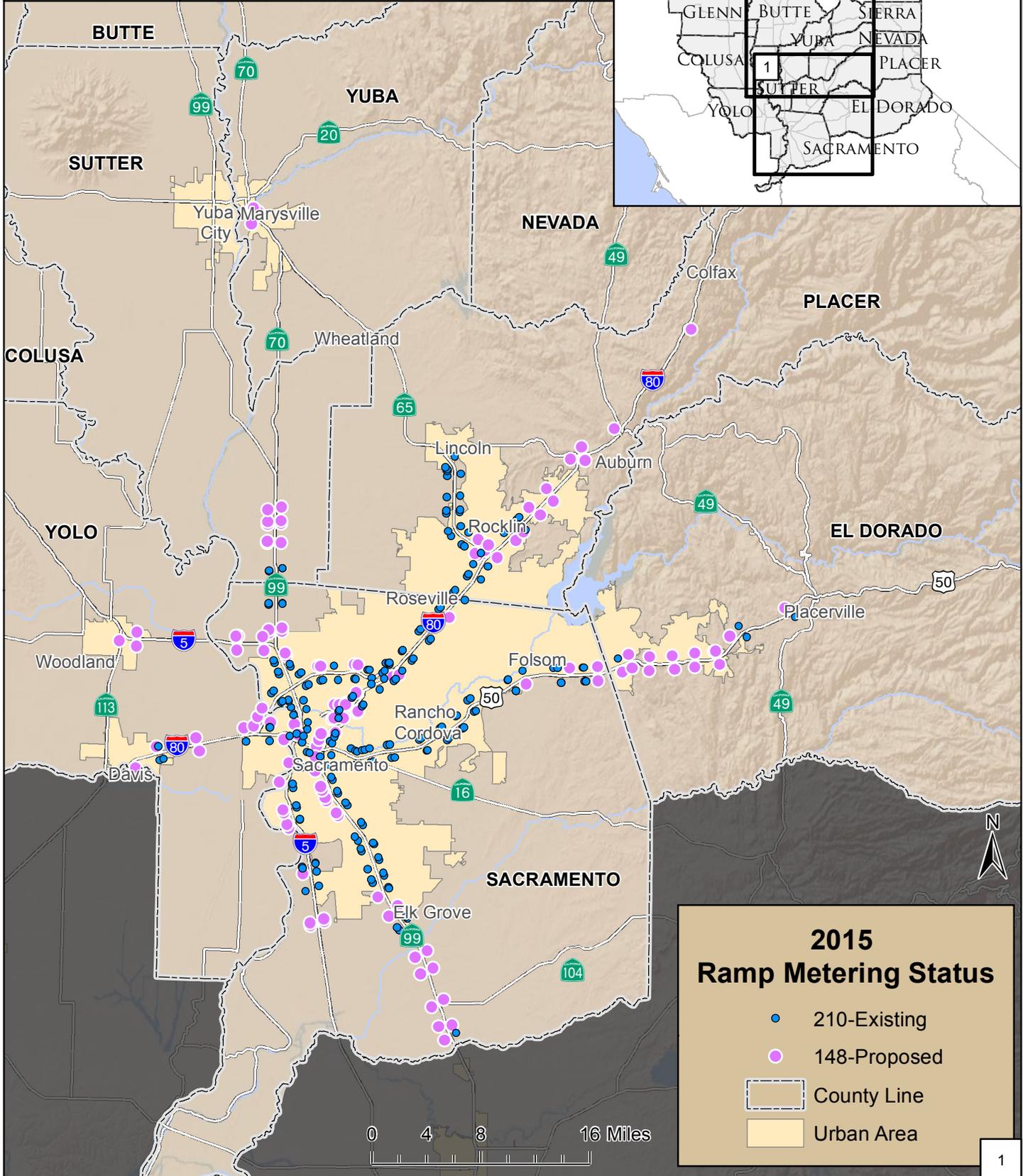
# DISTRICT 3



# District 3

Ramp Metering Development Plan

Division of Traffic Operations  
Data by: Office of Traffic Management  
Map by: Office of Performance



**2015 Ramp Metering Status**

- 210-Existing
- 148-Proposed
- County Line
- Urban Area

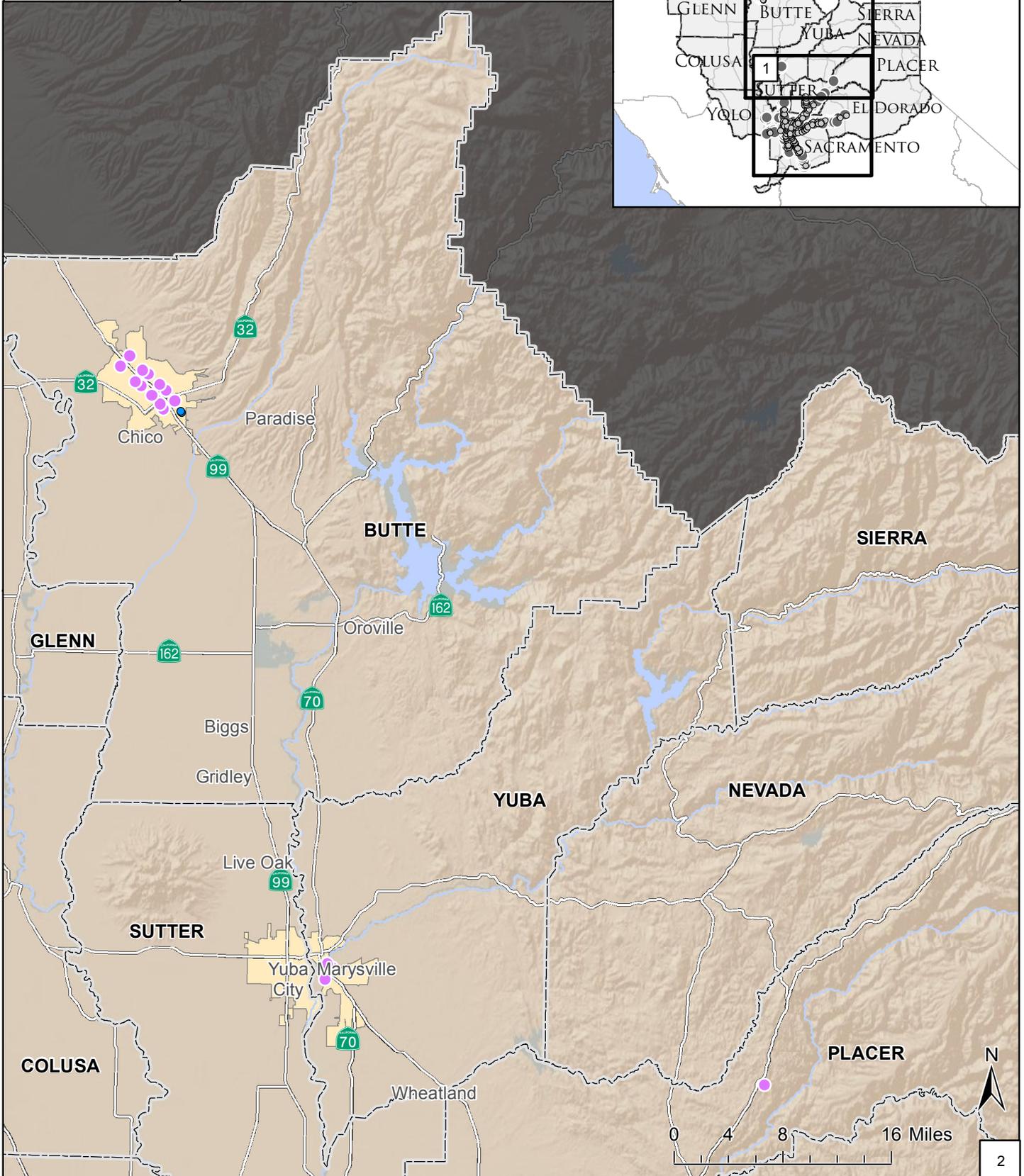
Disclaimer: This information is for discussion and planning purposes, and does not represent a commitment by Caltrans or others to install or operate ramp meters at these locations.



# District 3

Ramp Metering Development Plan

Division of Traffic Operations  
Data by: Office of Traffic Management  
Map by: Office of Performance



Disclaimer: This information is for discussion and planning purposes, and does not represent a commitment by Caltrans or others to install or operate ramp meters at these locations.

## **DISTRICT 3**

District 3 is composed of eleven counties in the Sacramento Valley and Northern Sierra: Glenn, Butte, Colusa, Sierra, Sutter, Yuba, Placer, El Dorado, Sacramento, Yolo, and Nevada. Most of these counties are rural in nature with the exception of the major urban areas of the Sacramento Region. The Sacramento Metropolitan area is in the southern part of the District, which includes the interior coastal range to the west, flat agricultural land across the valley, foothills, river canyons, the Sierra Nevada Mountains, and the Lake Tahoe Basin. In 2015 District 3 had a population estimate of 2,796,577 in 12,443 square miles with a density of 225 people per square mile. According to data from the California Department of Finance, counties in District 3 are expected to grow to 3.42 million by 2032. District 3 manages 1,516 centerline miles with over 4,465 total lane-miles of highway.

### Current or Planned Ramp Metering Routes

The following routes have or are planned to have ramp metering:  
I-5, I-80, US 50, SR 51, SR 65, SR 70, SR 99, and SR 160

There are 210 existing and 148 planned ramp meters on these routes for a projected total of 358 ramp meters for the ten-year period covered by the Ramp Meter Development Plan (RMDP). Ramp meter locations are illustrated on the District 3 RMDP map.

The conceptual cost range to install ramp meters at all the District 3 proposed high priority locations is \$20,740,000. At this time, the conceptual cost range does not account for right-of-way cost. Actual project cost estimate will be determined during the project development phases when the scope and schedule are finalized.

### Congestion Challenges

Congestion is a common occurrence in the Sacramento Metropolitan area due to commute traffic and the large volume of interregional truck traffic. The City of Sacramento is the major hub in the Central Valley for the movement of goods, services, and recreational traffic. I-5 and SR 99 are major north/south routes and I-80 and US 50 are major east/west routes through District 3. The rate of commercial and residential development in the area continues to be among the highest in the State, which places stress on the transportation infrastructure.

The November 18, 2014 *Top Priority Corridors System Performance* report prepared by Caltrans, revealed that SR 99, I-80, and US 50 are the three most congested highways within District 3 with vehicle miles traveled (VMT) exceeding 1.75 Billion cars per year, resulting in vehicle hours of delay (VHD, at 35 mph) reaching up to 775,000. Additionally, PeMs data reveals that the high traffic volumes on I-5, SR 51, SR 65, and SR 160 also generate substantial congestion and delay. The combination of high VMT and VHD has resulted in traffic volumes exceeding the capacity of the state highway systems, which is a major congestion challenge.

## District Ramp Metering Strategies

The District's ramp metering strategies follow guidance and policy set forth in Deputy Directive No. 35 R-1 Ramp Metering, the Ramp Meter Design Manual, and the Highway Design Manual. Planned high-priority ramp meter locations have been identified in the *District 3 ITS/Operational Improvement Plan*, and are included in the RMDP. Individual interchanges and/or freeway segments are regularly monitored and ramp metering needs are prioritized. The RMDP is consistent with the Sacramento Area Council of Governments Metropolitan Transportation Plan and is a part of the District 3 overall strategy for providing mobility and congestion relief.

Most traffic congestion occurs in urban or developed areas. As a result, most of the existing and future ramp meters have been identified for these locations. New interchanges in close proximity to developed areas, as well as existing interchanges where development encroaches the interchange are added to the RMDP list. If no congestion is present at a new ramp location, the meters are not immediately activated. The ramp meter equipment is stored, but the detection equipment is installed for data collection and communication. Currently, there are 151 existing activated ramp meters in District 3.

## Ramp Metering Priorities

Ramp metering has been shown to be an effective strategy to relieve congestion in corridors prone to bottleneck conditions. Corridors are evaluated and if chronic congestion and bottleneck conditions occur, the entire corridor is then targeted for ramp metering. This is because placing a ramp meter only at the location of the bottleneck tends to move the bottleneck to a non-metered ramp, so the entire corridor benefits from continuous metering. The locations listed on the table that follows are along corridors that have bottlenecks identified. The locations chosen for ramp metering experience severe congestion due to bottlenecks at the peak hour and metering will provide congestion relief. HOV bypass lanes are included where feasible per the policies identified in the Ramp Meter Design Manual. However, HOV bypass lanes cannot be installed at all locations due to the geometrics of certain ramp configurations. When these bypass lanes are not installed, a design exception is required.

## Supporting Documents

- ◆ District 3 2014 Intelligent Transportation System/Operational Improvement Plan:  
<http://www.dot.ca.gov/dist3/departments/planning/d3itsops.htm>
- ◆ District 3 TCRs, CSMPs, DSMP, Corridor Studies, and other planning products:  
<http://www.dot.ca.gov/dist3/departments/planning/systemplanning.htm>



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	3	But	99	R30.69	NB	Skyway (EB)	L	2		Non-Op
●	3	But	99	R30.82	NB	Skyway (WB)	S	2		Non-Op
	3	But	99	R31.68	NB	East 20th Street				Planned
	3	But	99	R31.68	SB	East 20th Street				Planned
	3	But	99	R32.26	SB	Rte 32				Planned
	3	But	99	R32.54	NB	Rte 32				Planned
	3	But	99	33.17	NB	East First Ave				Planned
	3	But	99	R33.17	SB	East First Ave				Planned
	3	But	99	R34.27	NB	Cohasset Rd				Planned
	3	But	99	R34.27	SB	Cohasset Rd				Planned
	3	But	99	R34.79	NB	East Ave				Planned
	3	But	99	R34.79	SB	East Ave				Planned
	3	But	99	R36.30	NB	Eaton Road				Planned
	3	But	99	R36.30	SB	Eaton Road				Planned
	3	ED	50	0.86	EB	Latrobe Rd	L			Planned
●	3	ED	50	0.90	WB	El Dorado Hills Blvd (SB)	S	3	M	Operational
	3	ED	50	0.90	EB	El Dorado Hills Blvd (SB)	S			Planned
	3	ED	50	1.70	WB	Silva Valley Parkway				Planned
	3	ED	50	1.70	EB	Silva Valley Parkway				Planned
	3	ED	50	R3.20	EB	Bass Lake Rd	S			Planned
	3	ED	50	R3.20	WB	Bass Lake Rd	S			Planned
	3	ED	50	5.00	WB	Cambridge Rd	L			Planned
	3	ED	50	5.00	EB	Cambridge Rd	L			Planned
	3	ED	50	6.60	WB	Cameron Park Dr (SB)	S			Planned
	3	ED	50	6.60	EB	Cameron Park Dr	S			Planned
	3	ED	50	6.61	WB	Cameron Park Dr (NB)	L			Planned
	3	ED	50	R8.40	WB	Ponderosa Rd (SB)	S			Planned
	3	ED	50	R8.56	EB	Ponderosa Rd	S			Planned
	3	ED	50	R8.60	WB	Ponderosa Rd (NB)	L			Planned
	3	ED	50	R10.30	WB	Shingle Springs Dr				Planned
●	3	ED	50	11.16	WB	Red Hawk Parkway	S	1	NM	Non-Op
●	3	ED	50	11.35	EB	Red Hawk Parkway	S	1	NM	Non-Op
	3	ED	50	R15.05	WB	Forini Road				Planned
●	3	ED	50	R15.06	EB	Missori Flat Rd	S	2	NM	Non-Op
	3	Pla	65	R5.23	NB	WB-80	S	2	NM	Planned
	3	Pla	65	R5.70	SB	Stanford/Galleria/Harding				Planned
	3	Pla	65	R5.90	NB	Stanford/Galleria/Harding				Planned
	3	Pla	65	R5.90	SB	Stanford/Galleria/Harding				Planned
	3	Pla	65	R6.15	NB	Stanford Ranch Road				Planned
●	3	Pla	65	R6.87	SB	Pleasant Grove Blvd(EB)	S	2	NM	Operational
●	3	Pla	65	R7.08	NB	Pleasant Grove Blvd	L	2		Non-Op
●	3	Pla	65	7.10	SB	Pleasant Grove Blvd (WB)	L	2	M	Operational
●	3	Pla	65	M7.90	SB	Blue Oaks Blvd (EB)	S	2	M	Operational
●	3	Pla	65	M8.00	NB	Blue Oaks Blvd (EB)	L	1	NM	Non-Op
●	3	Pla	65	M8.20	SB	Blue Oaks Blvd (WB)	L	2	M	Operational
●	3	Pla	65	R9.3	SB	Sunset Ave (EB)	S	3	M	Operational
●	3	Pla	65	R9.4	NB	Sunset Ave (EB)	L	2	M	Non-Op
●	3	Pla	65	R9.5	SB	Sunset Ave (WB)	L	2	M	Operational
●	3	Pla	65	R9.6	NB	Sunset Ave (WB)	S	2	M	Non-Op
●	3	Pla	65	R10.5	SB	Whitney Blvd				Non-Op
●	3	Pla	65	R10.6	NB	Whitney Blvd				Non-Op
●	3	Pla	65	R12	SB	Twelve Bridges	L	2		Non-Op

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	3	Pla	65	R12.2	NB	Twelve Bridges	S	2		Non-Op
●	3	Pla	65	R12.39	SB	Ferrari Ranch Road	S	2	M	Non-Op
●	3	Pla	65	R12.85	SB	Industrial Ave (WB)	L	2	M	Non-Op
●	3	Pla	65	R13.12	SB	Ferrari Ranch Road	S	2	M	Operational
●	3	Pla	65	R13.17	NB	Ferrari Ranch Road	L	2	M	Non-Op
●	3	Pla	80	0.17	WB	Riverside Dr (SB)	S	2	NM	Operational
●	3	Pla	80	0.37	WB	Riverside Dr (NB)	L	1	NM	Operational
●	3	Pla	80	0.41	EB	Auburn Blvd.	S	3	M	Non-Op
●	3	Pla	80	1.81	WB	Douglas Blvd (EB)	S	1	NM	Operational
●	3	Pla	80	1.99	WB	Douglas Blvd (WB)	L	2	NM	Operational
●	3	Pla	80	2.20	EB	Douglas Blvd	S	1	NM	Non-Op
●	3	Pla	80	2.81	WB	Atlantic St	S	1	NM	Operational
●	3	Pla	80	3.24	EB	Eurica Rd	S	3	M	Non-Op
●	3	Pla	80	3.61	WB	Taylor Rd	S	1	NM	Operational
	3	Pla	80	3.95	WB	Rte 65	C			Planned
	3	Pla	80	4.50	EB	Rte 65				Planned
●	3	Pla	80	5.93	WB	Rocklin Rd	S	2	NM	Non-Op
	3	Pla	80	6.27	EB	Rocklin Rd				Planned
	3	Pla	80	7.10	EB	Sierra College Blvd (SB)	L	2		Planned
●	3	Pla	80	7.30	WB	Sierra College Blvd (SB)	S	2	NM	Non-Op
●	3	Pla	80	7.34	EB	Sierra College Blvd (NB)	S	2		Non-Op
●	3	Pla	80	7.51	WB	Sierra College Blvd (NB)	L	2	NM	Non-Op
	3	Pla	80	8.57	WB	Horseshoe Bar Rd				Planned
	3	Pla	80	8.86	EB	Horseshoe Bar Rd				Planned
	3	Pla	80	10.27	EB	Penryn Rd				Planned
	3	Pla	80	10.44	WB	Penryn Rd				Planned
	3	Pla	80	13.67	WB	Newcastle Rd				Planned
	3	Pla	80	13.79	EB	Newcastle Rd				Planned
	3	Pla	80	14.32	WB	Rte 193				Planned
	3	Pla	80	14.52	EB	Rte 193				Planned
	3	Pla	80	17.54	WB	Rte 49/Auburn				Planned
	3	Pla	80	R26.21	EB	Applegate Rd				Planned
	3	Sac	5	8.33	SB	Hood Franklin Road (EB)	S			Planned
	3	Sac	5	8.44	NB	Hood Franklin Road (EB)	L			Planned
	3	Sac	5	8.54	SB	Hood Franklin Road (WB)	L			Planned
	3	Sac	5	8.65	NB	Hood Franklin Road (WB)	S			Planned
●	3	Sac	5	10.88	SB	Elk Grove Blvd	L			Non-Op
●	3	Sac	5	11.11	NB	Elk Grove Blvd	S	3	M	Operational
●	3	Sac	5	12.19	NB	Laguna Blvd	S	3	M	Operational
	3	Sac	5	12.19	SB	Laguna Blvd	L			Planned
●	3	Sac	5	12.60	SB	Cosumnes River Blvd (EB)	S	1	M	Non-Ops
●	3	Sac	5	12.70	SB	Cosumnes River Blvd (WB)	L	1	M	Non-Ops
●	3	Sac	5	12.75	NB	Cosumnes River Blvd (EB)	L	2	M	Operational
●	3	Sac	5	12.80	NB	Cosumnes River Blvd(WB)	S	3	M	Operational
	3	Sac	5	16.03	SB	Pocket Rd (EB)	S			Planned
●	3	Sac	5	16.08	NB	Pocket Rd (EB)	L	2	M	Operational
	3	Sac	5	16.20	SB	Pocket Rd (WB)	L			Planned
●	3	Sac	5	16.22	NB	Pocket Rd (WB)	S	2	NM	Operational
	3	Sac	5	17.04	SB	Florin Rd (EB)	S			Planned
●	3	Sac	5	17.09	NB	Florin Rd (EB)	L	1	NM	Operational
	3	Sac	5	17.26	SB	Florin Rd (WB)	L			Planned
●	3	Sac	5	17.40	NB	Florin Rd (WB)	S	1	NM	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	3	Sac	5	18.83	NB	43rd Avenue	S	2	NM	Operational
	3	Sac	5	19.19	SB	Seamas Avenue	S			Planned
●	3	Sac	5	19.39	NB	Seamas Avenue	S	2	M	Operational
	3	Sac	5	20.39	SB	Sutterville Rd	S			Planned
●	3	Sac	5	20.69	NB	Sutterville Rd	S	2	M	Operational
●	3	Sac	5	22.70	NB	W Street	S	1	NM	Operational
●	3	Sac	5	22.72	SB	P Street	S	2	NM	Operational
●	3	Sac	5	23.30	NB	P Street	S	2	NM	Operational
	3	Sac	5	23.64	SB	I Street	S			Planned
●	3	Sac	5	23.70	NB	L Street	S	2	NM	Operational
●	3	Sac	5	23.90	NB	I Street	S	2	NM	Operational
●	3	Sac	5	24.51	SB	Richards Blvd	S	2	NM	Operational
●	3	Sac	5	24.82	NB	Richards Blvd	S	2	NM	Operational
●	3	Sac	5	25.40	SB	Garden Highway	L	1	NM	Operational
●	3	Sac	5	25.50	NB	Garden Highway	S	1	NM	Operational
●	3	Sac	5	25.90	SB	W. El Camino Ave (EB)	S	1	NM	Operational
●	3	Sac	5	26.00	SB	W. El Camino Ave (WB)	L	2	NM	Operational
●	3	Sac	5	28.00	SB	Arena Blvd(EB)	S	2	M	Operational
●	3	Sac	5	28.10	NB	Arena Blvd (EB)	L	2	M	Operational
●	3	Sac	5	28.20	SB	Arena Blvd (WB)	L	2	NM	Operational
●	3	Sac	5	28.30	NB	Arena Blvd (WB)	S	2	M	Operational
●	3	Sac	5	28.88	SB	Del Paso Road (EB)	S	1	NM	Operational
	3	Sac	5	28.96	NB	Del Paso Road (EB)	L	1		Planned
●	3	Sac	5	29.08	SB	Del Paso Road (WB)	L	2	NM	Operational
	3	Sac	5	29.16	NB	Del Paso Road (WB)	S	1		Planned
	3	Sac	5	30.80	SB	Metro Air Parkway	S			Planned
	3	Sac	5	30.90	NB	Metro Air Parkway	S			Planned
	3	Sac	5	32.69	NB	Airport Blvd (NB)	S			Planned
	3	Sac	5	32.79	SB	Airport Blvd	L			Planned
	3	Sac	5	32.87	NB	Airport Blvd (SB)	L			Planned
●	3	Sac	50	L0.19	WB	15th St	S	2	NM	Operational
	3	Sac	50	L0.43	WB	5th St				Planned
●	3	Sac	50	R0.59	WB	Stockton Blvd	L	1	NM	Operational
●	3	Sac	50	R0.71	EB	Stockton Blvd	S	2	NM	Operational
●	3	Sac	50	L1.42	EB	11th St	S	2	NM	Operational
●	3	Sac	50	L1.64	EB	16th St	S	2	NM	Operational
●	3	Sac	50	R1.93	WB	59th St	S	2	M	Operational
●	3	Sac	50	L2.39	EB	28th St	S	1	NM	Operational
●	3	Sac	50	R2.43	WB	65th St (SB)	S	1	NM	Operational
●	3	Sac	50	R2.61	EB	65th St (SB)	L	2	M	Operational
●	3	Sac	50	R2.68	WB	65th St (NB)	L	1	NM	Operational
●	3	Sac	50	R2.81	EB	65th St (NB)	S	2	M	Operational
●	3	Sac	50	R3.23	WB	Hornet Dr	S	2	M	Operational
●	3	Sac	50	R3.43	WB	Howe Ave (SB)	S	2	M	Operational
●	3	Sac	50	R3.63	EB	Howe Ave (SB)	L	2	NM	Operational
●	3	Sac	50	R3.76	WB	Howe Ave (NB)	L	2	M	Operational
●	3	Sac	50	R3.88	EB	Howe Ave (NB)	S	2	M	Operational
●	3	Sac	50	R5.06	WB	Watt Ave (SB)	S	3	M	Operational
●	3	Sac	50	R5.25	WB	Watt Ave (NB)	L	1	NM	Operational
●	3	Sac	50	R5.29	EB	Watt Ave (SB)	L	2	NM	Non-Op
●	3	Sac	50	R5.52	EB	Watt Ave (NB)	S	3	M	Non-Op
●	3	Sac	50	R7.62	WB	Bradshaw Rd (SB)	S	1	NM	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	3	Sac	50	R7.80	EB	Bradshaw Rd (SB)	L	2	M	Operational
●	3	Sac	50	R7.81	WB	Bradshaw Rd (NB)	L	2	M	Operational
●	3	Sac	50	R7.86	EB	Bradshaw Rd (NB)	S	2	NM	Operational
●	3	Sac	50	R9.35	WB	Mather Field Rd (SB)	S	1	NM	Operational
●	3	Sac	50	R9.47	EB	Mather Field Rd (SB)	L	2	M	Operational
●	3	Sac	50	R9.55	WB	Mather Field Rd (NB)	L	2	M	Operational
●	3	Sac	50	R9.63	EB	Mather Field Rd (NB)	S	2	NM	Operational
●	3	Sac	50	R10.85	EB	Zinfandel Drive (SB)	L	2	M	Operational
●	3	Sac	50	R10.86	WB	Zinfandel Drive (SB)	S	1	NM	Operational
●	3	Sac	50	R10.98	EB	Zinfandel Drive (NB)	S	2	M	Operational
●	3	Sac	50	R10.99	WB	Zinfandel Drive (NB)	L	2	M	Operational
●	3	Sac	50	12.35	WB	Sunrise Blvd (SB)	S	3	M	Operational
●	3	Sac	50	12.45	EB	Sunrise Blvd (SB)	L	2	M	Operational
●	3	Sac	50	12.50	WB	Sunrise Blvd (NB)	L	2	NM	Operational
●	3	Sac	50	12.60	EB	Sunrise Blvd (NB)	S	2	M	Operational
●	3	Sac	50	15.67	WB	Hazel Ave (SB)	S	3	M	Operational
●	3	Sac	50	15.70	WB	Hazel Ave (NB)	L	1	NM	Operational
●	3	Sac	50	15.82	EB	Hazel Ave (SB)	L	2	M	Operational
●	3	Sac	50	15.82	EB	Hazel Ave (NB)	S	2	M	Operational
●	3	Sac	50	16.81	WB	Folsom Blvd	S	3	M	Operational
	3	Sac	50	16.91	EB	Folsom Blvd	L	2	M	Planned
●	3	Sac	50	18.99	WB	Prairie City Rd (SB)	S	2	M	Operational
●	3	Sac	50	19.26	WB	Prairie City Rd (NB)	L	1	NM	Non-Op
●	3	Sac	50	19.58	EB	Prairie City Rd (SB)	S	2	M	Operational
●	3	Sac	50	19.59	EB	Prairie City Rd (NB)	S	1	NM	Non-Op
	3	Sac	50	20.20	WB	Oak Avenue Parkway (SB)				Planned
	3	Sac	50	20.21	WB	Oak Avenue Parkway (NB)				Planned
●	3	Sac	50	21.20	WB	East Bidwell St (SB)	S	2	M	Operational
●	3	Sac	50	21.25	WB	Scott Rd (NB)	L	2	M	Operational
●	3	Sac	50	21.30	EB	East Bidwell St (SB)	L	2	M	Operational
●	3	Sac	50	21.40	EB	Scott Rd (NB)	S	1	NM	Operational
	3	Sac	50	22.30	WB	Empire Ranch Road (NB)				Planned
	3	Sac	50	22.30	EB	Empire Ranch Road (SB)				Planned
	3	Sac	50	22.31	WB	Empire Ranch Road (SB)				Planned
	3	Sac	51	0.09	SB	30th/T St	S	2	NM	Planned
	3	Sac	51	0.59	SB	29th/N St	S	2	NM	Planned
●	3	Sac	51	0.77	NB	30th/P St	S	2	NM	Operational
	3	Sac	51	1.07	SB	29th/H St	S	2	NM	Planned
●	3	Sac	51	1.26	NB	30th/J St	S	2	NM	Operational
●	3	Sac	51	1.58	NB	30th/E St	S	2	NM	Operational
	3	Sac	51	2.00	SB	Richards Blvd.				Planned
	3	Sac	51	2.10	NB	Sutters Landing Parkway				Planned
●	3	Sac	51	3.36	SB	Exposition Blvd (EB)	S	1	NM	Operational
●	3	Sac	51	3.40	SB	Exposition Blvd (WB)	L	2	NM	Operational
	3	Sac	51	4.07	SB	Arden Way (WB)				Planned
	3	Sac	51	4.09	NB	Rte 160	C			Planned
	3	Sac	51	4.10	SB	Arden Way (EB)	S			Planned
	3	Sac	51	4.20	NB	Arden Way (EB)	S			Planned
	3	Sac	51	4.23	NB	Arden Way (WB)				Planned
●	3	Sac	51	4.60	SB	El Camino Ave (EB)	S	1	NM	Operational
●	3	Sac	51	4.73	NB	El Camino Ave (EB)	L	2	NM	Operational
●	3	Sac	51	4.75	SB	El Camino Ave (WB)	L	2	NM	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	3	Sac	51	4.92	NB	El Camino Ave (WB)	S	1	NM	Operational
	3	Sac	51	5.37	SB	Marconi Ave				Planned
●	3	Sac	51	6.67	SB	Fulton Ave	S	1	NM	Operational
●	3	Sac	51	6.92	NB	Fulton Ave	S	3	M	Operational
●	3	Sac	51	7.52	SB	Watt Ave/Auburn Blvd	S	1	NM	Operational
●	3	Sac	51	7.89	SB	Watt Ave (SB)	S	1	NM	Operational
●	3	Sac	51	7.90	NB	Watt Ave (SB)	L	1	NM	Operational
●	3	Sac	51	8.10	NB	Watt Ave (NB)	S	1	NM	Operational
●	3	Sac	51	8.60	SB	Rte 244/Auburn Blvd	S	1	NM	Operational
	3	Sac	51	8.65	NB	Hood Franklin Road (WB)	S			Planned
●	3	Sac	80	M1.20	WB	W. El Camino Ave (EB)				Non-Op
●	3	Sac	80	M1.30	EB	W. El Camino Ave (EB)				Non-Op
●	3	Sac	80	M1.35	WB	W. El Camino Ave (WB)				Non-Op
●	3	Sac	80	M1.52	EB	W. El Camino Ave (WB)				Non-Op
●	3	Sac	80	M3.50	WB	Truxel Rd (SB)	S	2		Non-Op
●	3	Sac	80	M3.60	EB	Truxel Rd (SB)	L	2	NM	Operational
●	3	Sac	80	M3.70	WB	Truxel Rd (NB)	L	2	NM	Non-Op
●	3	Sac	80	M3.80	EB	Truxel Rd (NB)	S	2	M	Operational
	3	Sac	80	M4.85	WB	Northgate Blvd (SB)	S			Planned
●	3	Sac	80	M4.94	EB	Northgate Blvd (SB)	L	2	NM	Operational
	3	Sac	80	M5.03	WB	Nothgate Blvd (NB)	L			Planned
●	3	Sac	80	M5.10	EB	Northgate Blvd (NB)	S	2	NM	Operational
●	3	Sac	80	M5.97	WB	Norwood Avenue	S			Non-Op
●	3	Sac	80	M6.33	EB	Norwood Ave, E/O	S	2	NM	Operational
	3	Sac	80	M7.46	WB	Raley Blvd/Marysville (SB)				Planned
●	3	Sac	80	M7.61	EB	Raley Blvd/Marysville (SB)	L	1	NM	Operational
	3	Sac	80	M7.66	WB	Raley Blvd/Marysville (NB)				Planned
●	3	Sac	80	M7.81	EB	Raley Blvd/Marysville (NB)	S	1	NM	Operational
●	3	Sac	80	M8.54	WB	Winters St	S	2	M	Operational
●	3	Sac	80	M8.70	WB	Longview Dr	S	2	NM	Operational
●	3	Sac	80	M8.85	EB	Winters St	S	2	M	Operational
●	3	Sac	80	M9.61	EB	Longview Dr	S	2	M	Operational
●	3	Sac	80	M10.10	WB	Watt Ave (SB)	S	1	NM	Operational
●	3	Sac	80	M10.28	WB	Watt Ave (NB)	L	1	NM	Operational
●	3	Sac	80	M10.35	WB	Rte 244/Auburn Blvd	S	2	NM	Operational
	3	Sac	80	R10.79	EB	Watt Ave RT Station				Planned
●	3	Sac	80	R11.36	EB	Rte 244	S	2	M	Operational
●	3	Sac	80	12.40	WB	Madison Ave (EB)	S	3	M	Operational
●	3	Sac	80	12.45	EB	Madison Ave (EB)	L	2	M	Operational
●	3	Sac	80	12.51	WB	Madison Ave (WB)	L	2	NM	Operational
●	3	Sac	80	12.65	EB	Madison Ave (WB)	S	2	M	Operational
●	3	Sac	80	14.31	WB	Elkhorn Blvd (EB)	S	3	M	Operational
●	3	Sac	80	14.41	EB	Greenback Ln. (EB)	L	2	M	Operational
●	3	Sac	80	14.50	WB	Greenback Ln. (WB)	L	2	M	Operational
●	3	Sac	80	14.60	EB	Greenback Ln. (WB)	S	2	M	Operational
●	3	Sac	80	16.49	WB	Antelope Rd (EB)	S	2	M	Operational
	3	Sac	80	16.67	EB	Antelope Rd	L			Planned
●	3	Sac	80	16.69	WB	Antelope Rd (WB)	L	2	NM	Operational
●	3	Sac	99	0.79	NB	C Street, Galt	S	3	NM	Non-Op
	3	Sac	99	0.80	SB	C Street, Galt				Planned
	3	Sac	99	1.57	NB	Simmerhorn Rd, Galt				Planned
	3	Sac	99	1.88	SB	Pringle Ave, Galt				Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	3	Sac	99	3.50	SB	Twin Cities/Jct. 104				Planned
	3	Sac	99	3.53	NB	Twin Cities/Jct. 104				Planned
	3	Sac	99	6.01	NB	Arno Road				Planned
	3	Sac	99	6.01	SB	Arno Road				Planned
	3	Sac	99	7.30	SB	Dillard Road				Planned
	3	Sac	99	7.36	NB	Dillard Road				Planned
●	3	Sac	99	9.80	SB	Grant Line Rd (EB)	S	2	NM	Non-Op
●	3	Sac	99	10.00	NB	Grant Line Rd (EB)	L	2	NM	Operational
●	3	Sac	99	10.05	SB	Grant Line Rd (WB)	L	2	NM	Non-Op
●	3	Sac	99	10.20	NB	Grant Line Rd (WB)	S	2	NM	Operational
	3	Sac	99	11.10	SB	Poppy Ridge Rd				Planned
	3	Sac	99	11.20	NB	Poppy Ridge Rd				Planned
	3	Sac	99	12.61	SB	Elk Grove Blvd				Planned
●	3	Sac	99	12.70	NB	Stockton Blvd	L	2	NM	Operational
●	3	Sac	99	12.89	NB	Elk Grove Blvd	S	3	M	Operational
●	3	Sac	99	13.66	SB	Laguna Blvd (EB)	S	1		Non-Op
●	3	Sac	99	13.78	NB	Laguna Blvd (EB)	L	1	NM	Operational
●	3	Sac	99	13.89	SB	Laguna Blvd (WB)	L	1		Non-Op
●	3	Sac	99	14.00	NB	Laguna Blvd (WB)	S	1	NM	Operational
●	3	Sac	99	14.72	SB	Sheldon Rd	S	1		Non-Op
●	3	Sac	99	15.00	NB	Sheldon Rd (EB)	L	2	M	Operational
●	3	Sac	99	15.20	NB	Sheldon Rd (WB)	S	3	M	Operational
●	3	Sac	99	16.10	SB	Cosumnes River Blvd (EB)	S	2		Non-Op
●	3	Sac	99	16.19	NB	Calvine Rd (EB)	L	2	M	Operational
●	3	Sac	99	16.30	SB	Cosumnes River Blvd (WB)	L	2		Non-Op
●	3	Sac	99	16.32	NB	Calvine Rd (WB)	S	3	M	Operational
●	3	Sac	99	16.98	SB	Stockton Blvd	D	1	NM	Operational
●	3	Sac	99	17.51	SB	Bruceville Rd	S	1	NM	Operational
●	3	Sac	99	17.67	NB	Mack Road (EB)	L	2	M	Operational
●	3	Sac	99	17.91	NB	Mack Road (WB)	S	2	M	Operational
	3	Sac	99	19.50	SB	Florin Road (EB)				Planned
●	3	Sac	99	19.52	NB	Florin Rd (EB)	L	1	NM	Operational
	3	Sac	99	19.70	SB	Florin Road (WB)				Planned
●	3	Sac	99	19.75	NB	Florin Rd (WB)	S	2	M	Operational
	3	Sac	99	20.73	SB	47th Avenue (EB)				Planned
●	3	Sac	99	20.78	NB	47th Avenue (EB)	L	2	M	Operational
	3	Sac	99	20.94	SB	47th Avenue (WB)				Planned
●	3	Sac	99	20.99	NB	47th Avenue (WB)	S	2	M	Operational
	3	Sac	99	21.56	SB	Martin Luther King Jr Blvd				Planned
	3	Sac	99	21.83	SB	Fruitridge Road (EB)				Planned
●	3	Sac	99	21.87	NB	Fruitridge Road (EB)	L	1	NM	Operational
●	3	Sac	99	22.08	NB	Fruitridge Road (WB)	S	1	NM	Operational
	3	Sac	99	22.90	SB	12th Ave				Planned
●	3	Sac	99	23.24	NB	12th Ave	S	1	NM	Operational
	3	Sac	99	23.85	SB	Broadway				Planned
	3	Sac	99	33.18	SB	Elkhorn Blvd (EB)				Planned
	3	Sac	99	33.32	NB	Elkhorn Blvd (EB)				Planned
	3	Sac	99	33.41	SB	Elkhorn Blvd (WB)				Planned
	3	Sac	99	33.55	NB	Elkhorn Blvd (WB)				Planned
●	3	Sac	99	35.30	SB	Elverta Rd (WB)	L	2	NM	Non-Ops
●	3	Sac	99	35.40	NB	Elverta Rd (WB)	S	2	M	Non-Ops
●	3	Sac	99	35.40	NB	Elverta Rd (EB)	L	2	M	Non-Ops

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	3	Sac	99	35.40	SB	Elverta Rd (EB)	S	2	M	Non-Ops
	3	Sac	160	45.60	NB	Canterbury Road				Planned
	3	Sac	160	45.60	SB	Canterbury Road				Planned
●	3	Sac	160	45.98	NB	Exposition Blvd	S	1		Non-Op
	3	Sac	160	46.04	SB	Royal Oaks Drive				Planned
	3	Sac	160	46.33	NB	Tribute Road				Planned
	3	Sac	160	46.80	SB	Arden Way (EB)				Planned
	3	Sac	160	46.89	SB	Arden Way (WB)				Planned
●	3	Sut	99	0.90	SB	Riego Rd (EB)	L	2	NM	Non-Op
●	3	Sut	99	0.95	NB	Riego Rd (EB)	L	2	M	Non-Op
	3	Sut	99	3.00	NB	Sankey Rd				Planned
	3	Sut	99	3.00	SB	Sankey Rd (EB)				Planned
	3	Sut	99	3.10	SB	Sankey Rd (WB)				Planned
	3	Sut	99	4.30	SB	Sutter Bay Blvd (EB)				Planned
	3	Sut	99	4.40	NB	Sutter Bay Blvd (EB)				Planned
	3	Sut	99	4.50	SB	Sutter Bay Blvd (WB)				Planned
	3	Sut	99	4.60	NB	Sutter Bay Blvd (WB)				Planned
	3	Sut	99	5.40	SB	Howsley Rd				Planned
	3	Sut	99	5.61	NB	Howsley Rd				Planned
●	3	Sut	99	5.70	NB	Riego Rd (WB)	S	2	M	Non-Ops
●	3	Sut	99	5.70	SB	Riego Rd (WB)	S	2	M	Non-Ops
	3	Yol	5	5.52	SB	County Road 102	S			Planned
	3	Yol	5	5.53	NB	County Road 102	S			Planned
	3	Yol	5	R6.51	SB	Woodland, East Main St	S			Planned
●	3	Yol	50	1.35	WB	Harbor Blvd (SB)	S	2	M	Non-Op
●	3	Yol	50	1.36	EB	Harbor Blvd	S	3	M	Non-Op
●	3	Yol	50	1.40	WB	Harbor Blvd (NB)	L	2	M	Non-Op
	3	Yol	50	2.49	EB	Jefferson Blvd				Planned
	3	Yol	50	2.82	EB	South River Rd				Planned
	3	Yol	80	0.45	EB	Richrads Blvd				Planned
	3	Yol	80	R2.48	WB	Soda Springs				Planned
●	3	Yol	80	2.60	EB	Mace Blvd (SB)	L	2	M	Operational
●	3	Yol	80	2.70	WB	Mace Blvd	S	2		Non-Op
●	3	Yol	80	2.82	EB	Mace Blvd (NB)	S	2	M	Operational
	3	Yol	80	5.49	WB	Webster UC (Road 32A)				Planned
	3	Yol	80	5.61	EB	Webster UC (Road 32B)				Planned
	3	Yol	80	9.08	WB	W. Capitol Ave				Planned
●	3	Yol	80	9.11	EB	Enterprise Blvd	L	1		Non-Op
	3	Yol	80	R9.91	WB	Rte 50 Junction				Planned
	3	Yol	80	R11.00	WB	Reed Ave				Planned
	3	Yol	80	R11.20	EB	Reed Ave				Planned
	3	Yol	80	13.21	WB	Donner Park IC				Planned
	3	Yol	80	14.16	WB	Truckee (AG. Sta. ML)				Planned
	3	Yub	70	13.01	EB	Plumas Lake Blvd				Planned
	3	Yub	70	13.01	WB	Plumas Lake Blvd				Planned
	3	Yub	70	13.50	EB	North Beale Road				Planned

● Existing Meter

High Priority

# DISTRICT 4

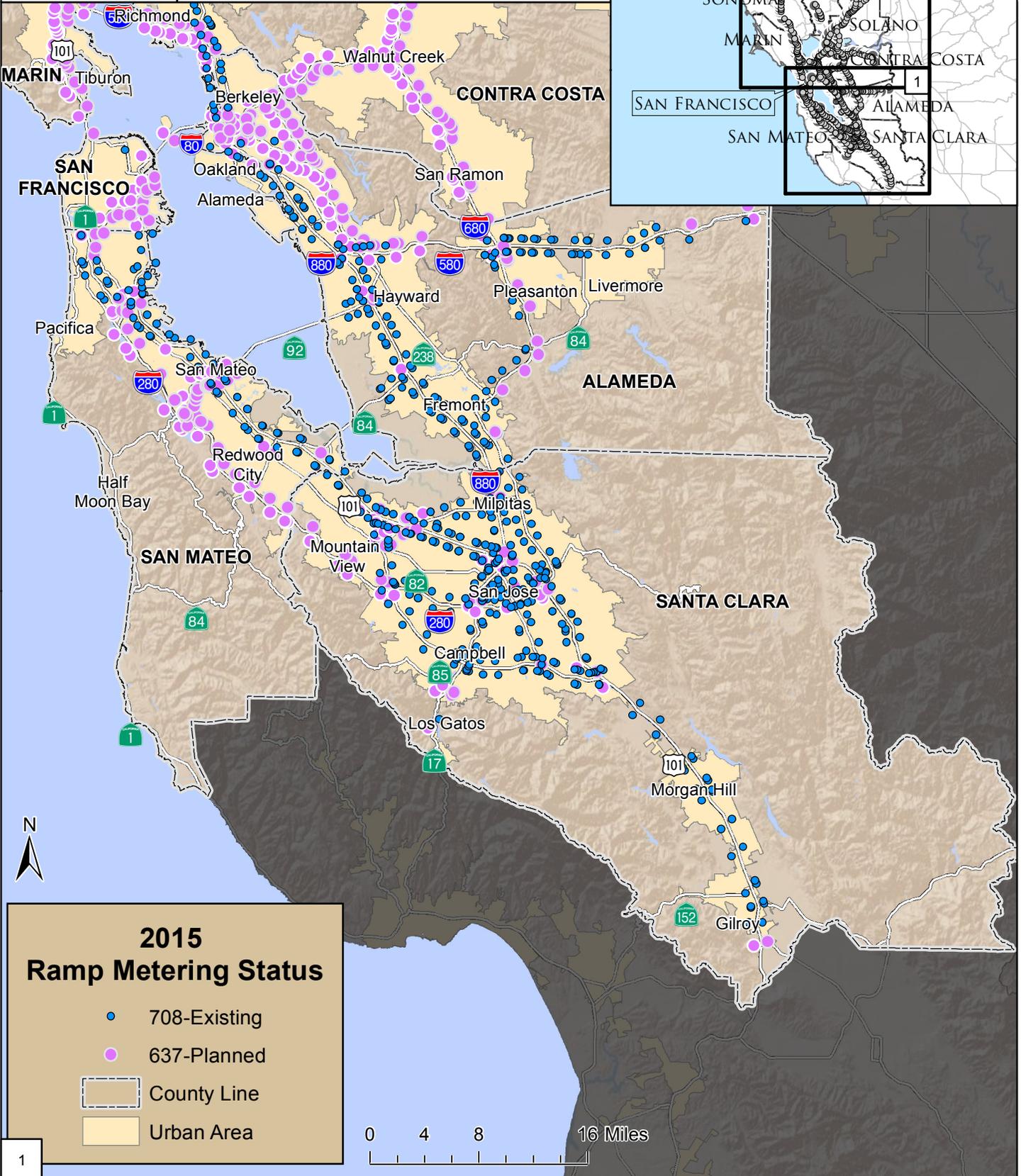


California Department of Transportation

# District 4

Ramp Metering Development Plan

Division of Traffic Operations  
Data by: Office of Traffic Management  
Map by: Office of Performance



## 2015 Ramp Metering Status

- 708-Existing
- 637-Planned
- County Line
- Urban Area

0 4 8 16 Miles

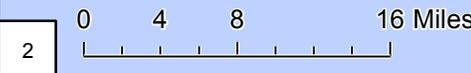
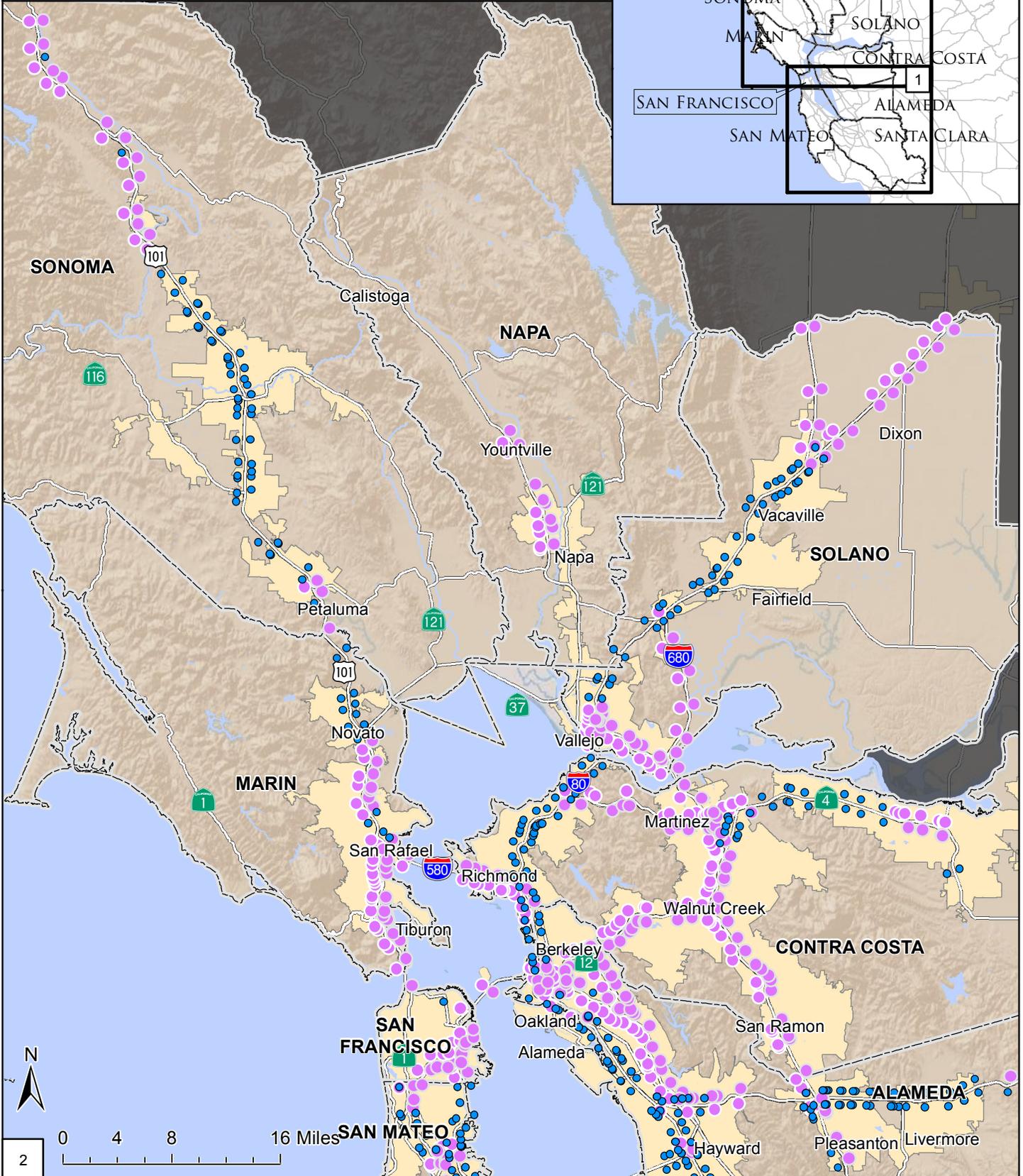
Disclaimer: This information is for discussion and planning purposes, and does not represent a commitment by Caltrans or others to install or operate ramp meters at these locations.



# District 4

Ramp Metering Development Plan

Division of Traffic Operations  
Data by: Office of Traffic Management  
Map by: Office of Performance



Disclaimer: This information is for discussion and planning purposes, and does not represent a commitment by Caltrans or others to install or operate ramp meters at these locations.

## **DISTRICT 4**

District 4 is composed of a mix of urbanized areas around the San Francisco Bay, lower density suburban areas, agricultural areas, and open space. The nine counties in the District are: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma. There are over 100 incorporated cities. District 4 has a population of approximately 7.15 million in an area of 6,984 square miles. With 1,024 people per square mile, it is the third most densely populated district in the State. District 4 maintains and operates 7,600 lane miles with over 770 centerline miles of conventional highways and 690 miles of freeway including 471 miles of carpool/express lanes.

### Current or Planned Ramp Metering Routes

The following routes have or are planned to have ramp metering:

I-80, I-238, I-280, I-380, I-580, I-680, I-780, I-880, I-980, US 101, SR 4, SR 13, SR 17, SR 24, SR 84, SR 85, SR 87, SR 92, SR 237, SR 238, and SR 242.

District 4 has 708 existing and programmed ramp meters and 637 planned ramp meter projects for a total of 1,345 ramp meters over the ten-year period covered by the RMDP. District 4 also operates mainline metering on westbound I-80 at the San Francisco/Oakland Bay Bridge. Ramp meter locations are illustrated on the District 4 RMDP map.

The conceptual cost estimate to install ramp meters at all of this District's proposed high priority locations is \$248,270,000. Currently, the conceptual cost estimate does not account for right-of-way cost. Actual project cost will be determined during the project development phases when the scope and schedule are finalized.

### Congestion Challenges

As the economic outlook improves, District 4's demand on the State Highway System will most likely expand as a result of increased employment, demand for goods and services, and greater reliance on motorized travel modes. With these growth factors, higher traffic volumes and bottlenecks contributing to higher levels of congestion may result. This in turn adds to the challenge of finding new efficiencies in an already overburdened regional highway transportation network.

### District Ramp Metering Strategies

Caltrans, in partnership with the Alameda County Transportation Commission (Alameda CTC), the Contra Costa Transportation Authority (CCTA), and ten municipalities along the corridor, are working to deploy the Interstate 80 Safety, Mobility, and Automated Real-time Traffic Management (SMART) Corridor Project. Scheduled to be in operation by early 2016, this partnership effort was formerly branded as the I-80 Integrated Corridor Mobility (ICM) Project. This project will feature adaptive ramp metering, incident management, improvements on San Pablo Avenue (SR 123 which is parallel to I-80), and traffic

information boards (integration of interstate highway and local arterial information) with the purpose of improving safety, efficiency, and reliability along the corridor.

On US 101 and SR 82, the San Mateo County Smart Corridors Project is being developed and will utilize similar corridor-wide adaptive ramp metering to improve safety, efficiency, and reliability along two parallel highway corridors which link San Francisco with the Silicon Valley.

District 4 recognizes from past experience with Caltrans' corridor system management plans (CSMP) how consulting with local jurisdictions, (including the development of formal agreements relating to ramp meter deployment), is an important and prudent measure for advancing transportation operations strategies (TOS) in the San Francisco Bay Area. Outreach methods include:

- ◆ Local agency engagement through an active technical committee
- ◆ Identifying and addressing local impacts of ramp metering
- ◆ On-going communication with regional partners and the general public

District 4 continues to plan, develop, and implement ramp metering with our partner agencies in the region including the Metropolitan Transportation Commission (MTC), appropriate county-level congestion management agencies (CMA), and the local municipalities in the San Francisco Bay Area.

District 4 Directive 97-03 (effective November 1997) set general district policy on ramp metering. This included requiring all new freeway mainline and freeway interchange projects to include ramp metering infrastructure. As part of the 2005 Regional Transportation Plan, MTC adopted a similar policy under Resolution 3609 that encourages all new major freeway projects in the Bay Area to consider installing traffic operations system components and ramp metering equipment.

MTC affirmed in the 2009 Regional Transportation Plan its commitment to Resolution 3609 by making a \$1.6 billion programmatic investment over 25 years to implement the Freeway Performance Initiative (FPI). The purpose of this program is to support system management strategies that improve the operating efficiency of the Bay Area freeway network, including traffic operation systems, ramp metering, and equipment maintenance and replacement.

This investment strategy was expanded upon in the 2013 Regional Transportation Plan (*Plan Bay Area*). In this plan, MTC has reaffirmed and increased their programmatic funding commitment by calling for an investment strategy of approximately \$2.7 billion in discretionary regional funds over the next 28 years to carry out this program and others under the FPI umbrella. Also in 2013, MTC adopted Resolution 4104 which expands upon Resolution 3609 by requiring MTC funded projects to include the installation and activation of ramp metering.

Top priority corridors to have metering implemented and activated in the next two years include the CC 4, Ala 80, CC 80, Sol 80, SC1 101, Mrn 101, Son 101, Ala 580, Ala 680, CC 680, SC1 680, Ala 880, and SC1 880 corridors. Priority for funding projects to build out the

ramp metering system should include the Sol 80, SCI 101, Son 101, Mrn101, Ala 580, and CC 680 corridors.

### Supporting Documents

- ◆ District 4 Directive 97-03 Ramp Metering.
- ◆ District 4 corridor system management plans (CSMPs), corridor plans (CPs), and transportation concept reports (TCRs):  
<http://www.dot.ca.gov/hq/tpp/corridor-mobility/d4-portal-page.html>
- ◆ District 4 Office of Traffic Operations Strategies, Office of Traffic Systems:  
<http://www.dot.ca.gov/dist4/highwayops/operations.htm>
- ◆ Metropolitan Transportation Commission (MTC): Resolution 3609 Freeway Performance Initiative.
- ◆ MTC Plan Bay Area 2040: <http://www.onebayarea.org/>
- ◆ Proposed MTC Traffic Operations System (TOPS) Policy Update – MTC Resolution No. 4104:  
[http://apps.mtc.ca.gov/meeting\\_packet\\_documents/agenda\\_2049/3a\\_MTC\\_TOS\\_Policy\\_Update.pdf](http://apps.mtc.ca.gov/meeting_packet_documents/agenda_2049/3a_MTC_TOS_Policy_Update.pdf)



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	4	ALA	13	4.48	NB	Mountain Blvd / Calaveras Ave	S	1		Planned
	4	ALA	13	4.89	SB	Carson St / Alison Ave	S	1		Planned
	4	ALA	13	5.31	NB	EB Redwood Rd	H	1		Planned
	4	ALA	13	5.48	NB	Redwood Rd / Mountain Blvd	H	1		Planned
	4	ALA	13	6.22	SB	Monterey Blvd / Lincoln Ave	H	1		Planned
	4	ALA	13	6.58	NB	Joaquin Miller Rd / Mountain Blvd / Lincoln Ave	S	1		Planned
	4	ALA	13	7.13	SB	Monterey Blvd / Park Blvd	S	1		Planned
	4	ALA	13	7.39	NB	Mountain Blvd / Park Blvd	H	1		Planned
	4	ALA	13	8.26	SB	Estates Dr / EB Moraga Ave	S	1		Planned
	4	ALA	13	8.28	NB	EB Moraga Ave / Thornhill Dr	H	1		Planned
	4	ALA	13	8.37	NB	WB Moraga Ave / Thornhill Dr	S	1		Planned
	4	ALA	13	9.01	SB	Broadway Terrace	S	1		Planned
	4	ALA	13	R9.18	NB	Pinewood Rd / Broadway Terrace	S	1		Planned
	4	ALA	13	R9.62	SB	EB Rte 24	C	1		Planned
	4	ALA	13	T9.82	SB	WB Rte 24	C	1		Planned
	4	ALA	13	T9.89	NB	WB Rte 24	C	1		Planned
	4	ALA	24	R2.00	EB	EB Rte 580	C	2		Planned
	4	ALA	24	R2.00	EB	WB Rte 580	C	2		Planned
	4	ALA	24	R2.10	WB	Martin Luther King Jr Way / 52nd St	S	2		Planned
	4	ALA	24	R3.25	EB	Telegraph Ave / 56th St	S	1		Planned
	4	ALA	24	R3.27	WB	Claremont Ave / Hudson St	S	1		Planned
	4	ALA	24	R3.98	WB	Miles Ave / Patton St	S	1		Planned
	4	ALA	24	R4.39	EB	Broadway / Brookside Ave	S	1		Planned
	4	ALA	24	R4.81	WB	NB Rte 13	C	1		Planned
	4	ALA	24	R5.39	EB	NB Rte 13	C	2		Planned
	4	ALA	24	R5.58	WB	Caldecott Ln	S	1		Planned
	4	ALA	24	R5.73	EB	Broadway	S	1		Planned
	4	ALA	80	2.43	WB	NB Rte 880 HOV	C	1	NM	Planned
	4	ALA	80	2.45	WB	NB Rte 880	C	2		Planned
	4	ALA	80	2.54	WB	W Grand Ave / Maritime St / Wake Ave	S	2		Planned
	4	ALA	80	3.02	EB	Maritime St / Wake Ave	S	1		Planned
	4	ALA	80	3.05	WB	WB Rte 580	C	4	NM	Planned
	4	ALA	80	3.43	EB	WB Rte 580	C	2		Planned
●	4	ALA	80	3.45	WB	Powell St	S	1		Operational
	4	ALA	80	3.68	EB	NB Rte 880	C	3	NM	Planned
●	4	ALA	80	3.89	WB	Powell St/ W Frontage Rd	H	2		Operational
●	4	ALA	80	3.95	EB	Powell St	S	1		Operational
●	4	ALA	80	4.33	WB	W Frontage Rd / NB Rte 13 / Ashby Ave	S	1		Operational
●	4	ALA	80	4.67	EB	NB Rte 13 / Potter St / Ashby Ave	S	2		Operational
●	4	ALA	80	5.67	WB	University Ave	L	1		Operational
●	4	ALA	80	6.01	EB	WB University Ave	S	1		Operational
●	4	ALA	80	6.41	WB	Gilman St	S	2		Operational
●	4	ALA	80	6.79	EB	Gilman St / Eastshore Hwy	S	2		Operational
●	4	ALA	80	R7.11	WB	Buchanan St	S	2		Operational
	4	ALA	80	R7.16	WB	EB Rte 580	C	2		Planned
●	4	ALA	80	R7.54	EB	Buchanan St	S	1		Operational
●	4	ALA	84	R3.67	SB	SB Paseo Padre Pkwy / Thornton Ave	S	1		Non Op

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	ALA	84	R3.68	NB	SB Paseo Padre Pkwy / Thornton Ave	L	1		Non Op
●	4	ALA	84	R3.77	SB	NB Thornton Ave / Paseo Padre Pkwy	L	1		Non Op
●	4	ALA	84	R3.86	NB	NB Thornton Ave / Paseo Padre Pkwy	S	1		Non Op
●	4	ALA	84	R4.77	SB	Ardenwood Blvd / Newark Blvd	S	1		Non Op
●	4	ALA	84	R5.09	NB	Newark Blvd / Ardenwood Blvd	S	3	NM	Non Op
	4	ALA	84	R5.86	SB	SB Rte 880	C	1		Planned
	4	ALA	84	R5.93	SB	SB Rte 880 for HOV	C	1	NM	Planned
●	4	ALA	92	R4.42	EB	Clawiter Rd / Eden Landing Rd	L	2	M	Operational
●	4	ALA	92	R4.54	WB	Clawiter Rd / Breakwater Ct	L	2	M	Operational
●	4	ALA	92	R5.00	WB	Industrial Blvd / Cryer St	S	2	M	Operational
●	4	ALA	92	R5.10	EB	Industrial Blvd / Sleepy Hollow Ave	L	2	M	Operational
●	4	ALA	92	R5.62	WB	Hesperian Blvd	S	2	M	Operational
●	4	ALA	92	R5.84	EB	Hesperian Blvd (On Rte 92 Seg)	S	2		Operational
	4	ALA	92	6.26	WB	SB Rte 880	C	2		Planned
	4	ALA	92	6.35	EB	SB Rte 880	C	1		Planned
	4	ALA	92	6.51	WB	NB Rte 880	C	1		Planned
	4	ALA	92	6.55	EB	NB Rte 880 (On Rte 92 Seg)	C	1		Planned
●	4	ALA	238	R14.57	NB	Castro Valley Blvd / Foothill Blvd	S	2		Non Op
	4	ALA	238	R14.77	NB	WB Rte 580	C	3		Planned
	4	ALA	238	R14.82	NB	EB Rte 580	C	2		Planned
●	4	ALA	238	15.17	NB	170th Ave / Rte 185 / E 14th St	S	1		Non Op
●	4	ALA	238	15.20	SB	E Lewelling Blvd / Mission Blvd / E 14th St	S	2		Non Op
●	4	ALA	238	16.32	SB	Hesperian Blvd / College St	L	1		Non Op
	4	ALA	238	16.42	SB	NB Rte 880	C	2		Planned
	4	ALA	238	16.42	SB	SB Rte 880 / Washington Ave	D	2		Planned
	4	ALA	580	L1.00	WB	WB Rte 205	C	3		Planned
	4	ALA	580	R1.38	EB	Grant Line Rd / Jess Ranch Rd	S	1		Planned
●	4	ALA	580	R1.66	WB	Grant Line Rd / Altamont Pass Rd	S	1		Operational
	4	ALA	580	R5.69	EB	N Flynn Rd / Carroll Rd	S	1		Planned
●	4	ALA	580	R6.22	WB	Carroll Rd / N Flynn Rd	S	1		Operational
●	4	ALA	580	R8.52	EB	Southfront Rd / Greenville Rd	S	1		Operational
●	4	ALA	580	R8.55	WB	Altamont Pass Rd / Greenville Rd	S	1		Operational
●	4	ALA	580	R9.48	EB	NB N Vasco Rd	S	1		Operational
●	4	ALA	580	9.79	WB	NB N Vasco Rd	L	1		Operational
●	4	ALA	580	9.79	WB	SB N Vasco Rd	S	1		Operational
●	4	ALA	580	10.57	EB	First St / Springtown Blvd	S	1		Operational
●	4	ALA	580	10.83	WB	Springtown Blvd / First St	S	2		Operational
●	4	ALA	580	12.42	EB	N Livermore Ave	S	2		Operational
●	4	ALA	580	12.65	WB	N Livermore Ave	S	2		Operational
●	4	ALA	580	14.02	WB	NB Isabel Ave	L	3	M	Operational
●	4	ALA	580	14.03	EB	NB Isabel Ave (Rte 84)	S	3	M	Operational
●	4	ALA	580	14.11	EB	SB Isabel Ave (Rte 84) / Portola Ave	L	2	M	Operational
●	4	ALA	580	14.59	WB	SB Isabel Ave / Portola Ave	S	2	M	Operational
●	4	ALA	580	14.98	EB	SB Airway Blvd	L	2	M	Operational
●	4	ALA	580	15.00	WB	NB Airway Blvd	L	2	M	Operational
●	4	ALA	580	15.17	WB	Airway Blvd	S	2	M	Operational
●	4	ALA	580	16.50	EB	NB El Charro Rd / Fallon Rd	S	2	M	Operational
●	4	ALA	580	16.66	WB	NB El Charro Rd / Fallon Rd	L	2	M	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	ALA	580	16.71	EB	SB Fallon Rd / El Charro Rd	L	2	M	Operational
●	4	ALA	580	16.90	WB	SB Fallon Rd / El Charro Rd	S	2	M	Operational
●	4	ALA	580	17.74	EB	NB Santa Rita Rd / Tassajara Rd	S	3	M	Operational
●	4	ALA	580	17.94	EB	SB Tassajara Rd / Santa Rita Rd	L	2	M	Operational
●	4	ALA	580	17.94	WB	NB Santa Rita Rd / Tassajara Rd	L	2	M	Operational
●	4	ALA	580	18.07	WB	SB Tassajara Rd / Santa Rita Rd	S	2	M	Operational
●	4	ALA	580	18.67	EB	NB Hacienda Dr	S	2	M	Operational
●	4	ALA	580	18.79	WB	NB Hacienda Dr	L	2	M	Operational
●	4	ALA	580	18.85	EB	SB Hacienda Dr	L	1		Operational
●	4	ALA	580	18.94	WB	SB Hacienda Dr	S	2	M	Operational
●	4	ALA	580	19.74	EB	NB Hopyard Rd / Dougherty Rd	S	1		Operational
●	4	ALA	580	19.85	WB	NB Hopyard Rd / Dougherty Rd	L	2	M	Operational
●	4	ALA	580	19.87	EB	SB Dougherty Rd / Hopyard Rd	L	2	M	Operational
●	4	ALA	580	19.96	WB	SB Dougherty Rd / Hopyard Rd	S	2	M	Operational
●	4	ALA	580	20.09	EB	NB Rte 680	C	2		Non Op
●	4	ALA	580	20.15	EB	SB Rte 680	C	2		Non Op
	4	ALA	580	20.68	WB	NB Rte 680	C	1		Planned
●	4	ALA	580	20.91	WB	SB Rte 680	C	2	NM	Non Op
●	4	ALA	580	R21.32	EB	NB Foothill Rd / San Ramon Rd	S	2	M	Operational
●	4	ALA	580	R21.32	EB	SB San Ramon Rd / Foothill Rd	L	1		Operational
●	4	ALA	580	R21.54	WB	NB Foothill Rd / San Ramon Rd	L	1		Operational
●	4	ALA	580	R21.54	WB	SB San Ramon Rd / Foothill Rd	S	2	M	Operational
	4	ALA	580	R26.07	EB	Palo Verde Rd / Eden Canyon Rd	S	1		Planned
	4	ALA	580	R26.41	WB	Eden Canyon Rd / Palo Verde Rd	S	1		Planned
	4	ALA	580	R28.27	EB	NB Grove Way / Crow Canyon Rd	S	1		Planned
	4	ALA	580	R28.36	WB	E Castro Valley Blvd / Crow Canyon Rd / Grove Way	H	2		Part Const
	4	ALA	580	R28.55	EB	SB Grove Way / Crow Canyon Rd	H	1		Planned
●	4	ALA	580	R29.21	EB	Redwood Rd	S	3	NM	Non Op
●	4	ALA	580	R29.53	WB	Redwood Rd	S	1		Non Op
	4	ALA	580	30.16	EB	Strobridge Ave / Gary Dr	S	1		Planned
	4	ALA	580	R30.49	EB	SB Rte 238	C	3		Planned
●	4	ALA	580	R30.53	EB	NB Rte 238 / Foothill Blvd	S	2	NM	Non Op
	4	ALA	580	R30.64	WB	Castro Valley Blvd / NB Rte 238 (Foothill Blvd) / Mattox Rd	D	1		Planned
	4	ALA	580	R31.63	EB	Liberty St / 163rd Ave	S	1		Planned
	4	ALA	580	R32.07	WB	Foothill Blvd / Carolyn St	S	2		Planned
	4	ALA	580	R32.59	EB	Fairmont Dr / Freedom Ave	S	1		Planned
	4	ALA	580	R32.98	WB	150th Ave / Foothill Blvd	S	1		Planned
	4	ALA	580	R34.06	WB	Grand Ave / Benedict Dr	S	1		Planned
	4	ALA	580	R34.09	EB	Grand Ave	S	1		Planned
	4	ALA	580	R34.66	WB	Benedict Dr / Marlow Dr	S	1		Planned
	4	ALA	580	R34.88	EB	SB MacArthur Blvd / Foothill Blvd	S	1		Planned
	4	ALA	580	R35.15	WB	NB Foothill Blvd / Revere Ave	S	1		Planned
	4	ALA	580	R35.87	WB	Peralta Oaks Dr / 106th Ave	S	1		Planned
	4	ALA	580	R36.25	EB	98th Ave / Gulf Links Rd	S	1		Planned
	4	ALA	580	R36.50	WB	Gulf Links Rd / Mountain Blvd	S	1		Planned
	4	ALA	580	R37.62	EB	Keller Ave / Fontaine St	S	1		Planned
	4	ALA	580	R37.93	WB	Mountain Blvd / Maynard Ave / Keller Ave	S	1		Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	4	ALA	580	R38.43	WB	Edwards Ave / Mountain Blvd / Leona Dr	S	1		Planned
	4	ALA	580	R38.73	EB	Kuhnle Ave / Sunnymere Ave / Seminary Ave	S	1		Planned
	4	ALA	580	R38.98	EB	SB Rte 13	C	1		Planned
	4	ALA	580	R39.28	WB	Rusting Ave / Mountain Blvd	S	1		Planned
	4	ALA	580	R39.45	WB	SB Rte 13 / Calaveras Ave / Davenport Ave	D	1		Planned
	4	ALA	580	L39.85	EB	SB MacArthur Blvd	S	1		Planned
	4	ALA	580	L39.96	WB	MacArthur Blvd	S	1		Planned
	4	ALA	580	R40.19	WB	High St	S	1		Planned
	4	ALA	580	R40.78	WB	35th Ave	S	1		Planned
	4	ALA	580	R40.97	EB	Coolidge Ave / Harold St	S	1		Planned
	4	ALA	580	R41.73	WB	Fruitvale Ave / Montana St / Dimond Ave	S	2		Planned
●	4	ALA	580	R42.03	EB	Beaumont Ave / MacArthur Blvd	S	1		Non Op
	4	ALA	580	42.75	WB	Park Blvd / Chatham Rd	S	1		Planned
	4	ALA	580	42.76	WB	Excelsior Ave / Park Blvd	S	1		Planned
	4	ALA	580	43.38	EB	Lakeshore Ave / Grand Ave	S	1		Planned
	4	ALA	580	43.78	WB	Grand Ave / Santa Clara Ave	S	1		Planned
	4	ALA	580	44.02	EB	SB W MacArthur Ave	S	1		Planned
	4	ALA	580	44.02	EB	Oakland Ave	S	1		Planned
	4	ALA	580	44.13	WB	Harrison St / Oakland Ave	D	1		Planned
	4	ALA	580	44.88	EB	EB Rte 980 / EB Rte 24 / 27th St	D	2		Planned
	4	ALA	580	44.93	EB	West St / 35th St	S	1		Planned
	4	ALA	580	44.93	EB	WB Rte 24	C	2		Planned
	4	ALA	580	45.34	WB	EB Rte 980 / EB Rte 24 / 27th St	D	2		Planned
	4	ALA	580	45.57	WB	WB Rte 24 / WB 52nd St / Martin Luther King Jr Way	D	2		Planned
	4	ALA	580	46.24	WB	W MacArthur Blvd / Peralta St / Emery St / Rte 123 (To EB Rte 80)	D	1		Planned
	4	ALA	580	R47.54	WB	Buchanan St	S	1		Planned
	4	ALA	580	46.37L	EB	EB Rte 80	C	3		Planned
	4	ALA	680	R7.19	NB	Vargas Rd	H	1		Planned
●	4	ALA	680	R7.37	SB	Vargas Rd	S	1		Operational
●	4	ALA	680	R8.20	SB	Sheridan Rd / Mission Rd	S	1		Operational
●	4	ALA	680	R9.57	SB	Andrade Rd / Mission Rd	S	1		Operational
	4	ALA	680	R9.84	NB	Andrade Rd / Athenour Way	S	1		Planned
●	4	ALA	680	R10.88	SB	Paloma Rd / Calaveras Rd	D	1		Operational
	4	ALA	680	R10.97	NB	Calaveras Rd / Paloma Rd / Rte 84	L	1		Planned
●	4	ALA	680	R10.98	SB	SB Rte 84 / Vallecitos Rd	S	2		Operational
	4	ALA	680	R11.45	NB	SB Rte 84	S	1		Planned
	4	ALA	680	R12.11	NB	Koopman Rd / Pleasanton Sunol Rd	S	1		Planned
●	4	ALA	680	R14.67	SB	Sunol Blvd / Pleasanton Sunol Rd	L	1		Operational
	4	ALA	680	R14.96	NB	Sunol Blvd / Pleasanton Sunol Rd	S	1		Planned
●	4	ALA	680	R15.98	SB	Bernal Ave	S	1		Operational
	4	ALA	680	R16.51	NB	Bernal Ave	S	1		Planned
●	4	ALA	680	R18.59	SB	EB Stoneridge Dr	S	1		Operational
	4	ALA	680	R18.74	NB	EB Stoneridge Dr	L	1		Planned
●	4	ALA	680	R18.81	SB	WB Stoneridge Dr	L	1		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	4	ALA	680	R18.90	NB	WB Stoneridge Dr	S	1		Planned
	4	ALA	680	R19.37	SB	EB Rte 580	C	1		Planned
●	4	ALA	680	R19.37	SB	St Patrick Way / Amador Plaza Rd	S	1		Non Op
	4	ALA	680	R19.47	NB	EB Rte 580	C	1		Planned
	4	ALA	680	R19.55	SB	WB Rte 580	C	1		Planned
	4	ALA	680	R19.74	NB	WB Rte 580	C	2		Planned
	4	ALA	680	R19.84	NB	Village Pkwy / Dublin Blvd	H	2		Planned
	4	ALA	680	R21.22	SB	Alcosta Blvd / Westside Dr	S	2		Part Const
●	4	ALA	680	M0.41	NB	Scott Creek Rd	S	1		Non Op
●	4	ALA	680	M2.09	SB	Mission Blvd / Rte 262	D	2		Operational
	4	ALA	680	M2.34	NB	NB Mission Blvd / Rte 262	L	1		Planned
	4	ALA	680	M2.52	NB	SB Mission Blvd / Rte 262	S	1		Part Const
●	4	ALA	680	M3.85	SB	Auto Mall Pkwy / Durham Rd	S	2		Operational
●	4	ALA	680	M3.99	NB	Durham Rd / Auto Mall Pkwy	L	2		Non Op
●	4	ALA	680	M5.33	SB	Washington Blvd	L	2	M	Operational
●	4	ALA	680	M5.60	NB	Washington Blvd	S	2	NM	Non Op
●	4	ALA	680	M6.39	SB	Mission Blvd (Rte 238)	S	2		Operational
●	4	ALA	680	M6.46	NB	Mission Blvd (Rte 238)	L	2		Non Op
●	4	ALA	880	R0.04	SB	WB Dixon Landing Rd	L	3	M	Operational
●	4	ALA	880	R0.08	NB	Dixon Landing Rd	S	2	M	Operational
●	4	ALA	880	R0.08	NB	California Cir / Dixon Landing Rd	H	1		Operational
●	4	ALA	880	R1.67	SB	SB Mission Blvd (Rte 262)	C	3	M	Operational
●	4	ALA	880	R1.92	SB	Warren Ave	L	3	M	Operational
●	4	ALA	880	2.37	NB	Warren Ave	L	2	M	Operational
●	4	ALA	880	2.53	NB	SB Mission Blvd (Rte 262)	C	3	M	Operational
●	4	ALA	880	3.09	SB	Fremont Blvd / Cushing Pkwy	S	3	M	Operational
●	4	ALA	880	3.26	SB	SB Fremont Blvd	L	2	M	Operational
●	4	ALA	880	3.31	NB	NB Fremont Blvd	L	2	M	Operational
●	4	ALA	880	3.50	NB	SB Fremont Blvd	S	1		Operational
●	4	ALA	880	4.55	SB	EB Auto Mall Pkwy	S	2	M	Operational
●	4	ALA	880	4.70	NB	EB Auto Mall Pkwy	L	2	M	Operational
●	4	ALA	880	4.74	SB	WB Auto Mall Pkwy	L	2	M	Operational
●	4	ALA	880	4.89	NB	WB Auto Mall Pkwy	S	3	M	Operational
●	4	ALA	880	6.08	SB	NB Stevenson Blvd	S	1		Operational
●	4	ALA	880	6.20	NB	NB Stevenson Blvd	L	1		Operational
●	4	ALA	880	6.28	SB	SB Stevenson Blvd	L	1		Operational
●	4	ALA	880	6.40	NB	SB Stevenson Blvd	S	3	M	Operational
●	4	ALA	880	7.03	SB	EB Mowry Ave	S	1		Operational
●	4	ALA	880	7.16	NB	EB Mowry Ave	L	2	M	Operational
●	4	ALA	880	7.23	SB	WB Mowry Ave	L	2	M	Operational
●	4	ALA	880	7.37	NB	WB Mowry Ave	S	2		Operational
●	4	ALA	880	8.65	SB	NB Thornton Ave	S	3	M	Operational
●	4	ALA	880	8.83	NB	NB Thornton Ave	L	2	M	Operational
●	4	ALA	880	8.87	SB	SB Thornton Ave	L	2	M	Operational
●	4	ALA	880	9.01	NB	SB Thornton Ave	S	3	M	Operational
●	4	ALA	880	10.12	SB	NB Decoto Rd (Rte 84)	S	2		Operational
●	4	ALA	880	10.28	NB	NB Decoto Rd (Rte 84)	L	2		Operational
●	4	ALA	880	10.32	SB	SB Decoto Rd (Rte 84)	L	1		Operational
●	4	ALA	880	10.49	NB	SB Decoto Rd (Rte 84)	S	1		Operational
●	4	ALA	880	11.34	SB	EB Alvarado / Fremont Blvd	S	3	M	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	ALA	880	11.42	SB	WB Alvarado / Fremont Blvd	L	1		Operational
●	4	ALA	880	11.55	NB	Alvarado / Fremont Blvd	S	3	M	Operational
●	4	ALA	880	12.87	SB	EB Alvarado Niles Rd	S	2	M	Operational
●	4	ALA	880	13.04	SB	WB Alvarado Niles Rd	L	2	M	Operational
●	4	ALA	880	13.14	NB	Alvarado Niles Rd	S	3	M	Operational
●	4	ALA	880	13.55	SB	Whipple Rd	S	3	M	Operational
●	4	ALA	880	13.90	NB	Whipple Rd	D	1		Operational
●	4	ALA	880	14.52	SB	W Industrial Pkwy	L	1		Operational
●	4	ALA	880	14.63	NB	W Industrial Pkwy	S	2	M	Operational
●	4	ALA	880	15.55	SB	EB W Tennyson Rd	S	2	M	Operational
●	4	ALA	880	15.55	SB	WB W Tennyson Rd	L	1		Operational
●	4	ALA	880	15.75	NB	WB W Tennyson Rd	S	2	M	Operational
●	4	ALA	880	15.81	NB	EB W Tennyson Rd	L	1		Operational
●	4	ALA	880	16.56	SB	EB Rte 92 (W Jackson St)	C	1		Operational
●	4	ALA	880	16.56	SB	WB Rte 92 (W Jackson St)	C	2	M	Operational
●	4	ALA	880	16.85	NB	EB Rte 92 (W Jackson St)	C	3	M	Operational
●	4	ALA	880	16.85	NB	WB Rte 92 (W Jackson St)	C	1		Operational
●	4	ALA	880	17.48	SB	EB W Winton Ave	S	2	M	Operational
●	4	ALA	880	17.48	SB	WB W Winton Ave	L	1		Operational
●	4	ALA	880	17.83	NB	W Winton Ave	D	2		Operational
●	4	ALA	880	18.25	SB	W A St	S	2	M	Operational
●	4	ALA	880	18.48	NB	W A St	S	2	M	Operational
●	4	ALA	880	19.96	SB	Hesperian Blvd / Grant Ave / Lewelling Blvd	H	2		Operational
●	4	ALA	880	20.21	SB	NB Rte 238	C	3		Non Op
●	4	ALA	880	20.42	NB	WB Lewelling Blvd	S	2	M	Operational
●	4	ALA	880	20.65	SB	Washington Ave	L	1		Operational
●	4	ALA	880	20.91	NB	Washington Ave	L	1		Operational
●	4	ALA	880	20.92	NB	NB Rte 238	C	2		Non Op
●	4	ALA	880	22.73	SB	Marina Blvd	S	2		Operational
●	4	ALA	880	22.95	NB	Marina Blvd	S	2		Operational
●	4	ALA	880	23.62	SB	EB Davis St (Rte 112)	S	2	M	Operational
●	4	ALA	880	23.69	NB	EB Davis St (Rte 112)	L	1		Operational
●	4	ALA	880	23.69	NB	WB Davis St (Rte 112)	S	1		Operational
●	4	ALA	880	23.71	SB	WB Davis St (Rte 112)	L	2	M	Operational
●	4	ALA	880	24.68	SB	EB 98th Ave	S	3	M	Operational
●	4	ALA	880	24.72	NB	EB 98th Ave	L	2	M	Operational
●	4	ALA	880	24.79	SB	WB 98th Ave	L	2	M	Operational
●	4	ALA	880	24.90	NB	WB 98th Ave	S	1		Operational
●	4	ALA	880	25.27	SB	NB Hegenberger Rd	S	3	M	Operational
●	4	ALA	880	25.47	SB	SB Hegenberger Rd	L	1		Operational
●	4	ALA	880	25.52	NB	NB Hegenberger Rd / Edges Ave	L	2		Operational
●	4	ALA	880	25.61	NB	SB Hegenberger Rd	S	1		Operational
●	4	ALA	880	26.58	SB	EB 66th Ave / Zhone Way / Oakport	S	1		Operational
●	4	ALA	880	26.58	SB	WB 66th Ave / Zhone Way	L	1		Operational
●	4	ALA	880	26.70	NB	EB 66th Ave / Zhone Way / Coliseum Way	D	2		Operational
●	4	ALA	880	26.70	NB	WB 66th Ave	S	1		Operational
●	4	ALA	880	27.42	SB	Oakport St / High St	D	2		Operational
●	4	ALA	880	27.86	NB	42nd Ave (Rte 77)	S	1		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	ALA	880	27.86	NB	High St	S	1		Operational
●	4	ALA	880	28.65	SB	29th Ave	S	1		Operational
	4	ALA	880	28.83	NB	Lisbon Ave / E 8th St	D	1		Planned
●	4	ALA	880	28.88	SB	Kennedy St / E 7th St / 23rd Ave	H	1		Operational
●	4	ALA	880	29.10	NB	NB 23rd Ave	S	2	M	Operational
●	4	ALA	880	29.15	NB	SB 23rd Ave	H	1		Operational
	4	ALA	880	30.03	SB	Embarcadero / 10th Ave	S	1		Planned
●	4	ALA	880	30.96	SB	Oak St	S	3	M	Operational
●	4	ALA	880	31.31	SB	Broadway	S	2		Operational
●	4	ALA	880	31.42	NB	Jackson St	S	2		Operational
	4	ALA	880	31.68	SB	WB Rte 980	C	2		Planned
●	4	ALA	880	R32.04	SB	Adeline St / 5th St	S	2	NM	Non Op
	4	ALA	880	R32.79	NB	Union St / 5th St	S	2		Planned
●	4	ALA	880	R33.29	SB	7th St	S	3	NM	Non Op
	4	ALA	880	R34.19	SB	EB Rte 80	C	2		Planned
	4	ALA	880	R34.19	SB	WB Rte 80	C	3		Planned
	4	ALA	880	R34.75L	NB	W Grand Ave / Frontage Rd	S	1		Part Const
	4	ALA	980	0.42	WB	Brush St / 11th St	S	2		Planned
	4	ALA	980	0.63	WB	17th St / West St	S	2		Planned
	4	ALA	980	0.90	EB	Castro St / 12th St	S	2		Planned
	4	ALA	980	1.01	EB	Castro St / 18th St	S	2		Planned
	4	ALA	980	1.66	EB	27th St (on Rte 980 Seg to EB Rte	S	1		Planned
	4	ALA	980	1.84	WB	EB Rte 580	C	2		Planned
	4	ALA	980	1.84	WB	WB Rte 580	C	2		Planned
	4	ALA	980	1.86	EB	27th St	S	2		Planned
	4	CC	4	L0.10	WB	WB Rte 80	C	1		Planned
	4	CC	4	0.13	EB	EB Rte 80	C	2		Planned
	4	CC	4	0.20	EB	Willow Ave	H	1		Planned
	4	CC	4	R1.29	EB	Sycamore Ave / Palm Ave / Claeys Ln	H	1		Planned
	4	CC	4	1.81	WB	Franklin Canyon Rd / Sycamore Ave	S	1		Planned
	4	CC	4	2.26	WB	Franklin Canyon Rd	S	1		Planned
	4	CC	4	3.65	EB	Christie Rd	H	1		Planned
	4	CC	4	R4.51	EB	Cummings Skyway / Barry Hill Rd	L	1		Planned
	4	CC	4	T4.70	WB	Cummings Skyway	S	1		Planned
	4	CC	4	R5.33	EB	Mc Ewen Rd / Franklin Canyon Rd	S	1		Planned
	4	CC	4	R8.41	WB	Alhambra Ave	S	2	NM	Planned
	4	CC	4	R8.72	EB	Alhambra Ave	S	2	NM	Planned
	4	CC	4	R9.05	WB	Center Ave / Pine St	S	2	NM	Planned
	4	CC	4	R9.34	EB	Center Ave / Pine St	S	2	NM	Planned
	4	CC	4	R10.18	WB	Morello Ave / Arnold Dr	S	2	NM	Planned
	4	CC	4	R10.49	EB	Morello Ave / Muir Rd	S	2	NM	Planned
	4	CC	4	12.31	WB	Pacheco Blvd / Blum Rd	S	2	NM	Planned
	4	CC	4	12.35	EB	Pacheco Blvd / Muir Rd	H	2	NM	Planned
	4	CC	4	12.51	WB	SB Rte 680	C	1		Planned
	4	CC	4	12.63	EB	SB Rte 680	C	1		Planned
	4	CC	4	12.71	WB	NB Rte 680	C	1		Planned
	4	CC	4	12.8	EB	NB Rte 680	C	1		Planned
	4	CC	4	R13.71	WB	Solano Way / Arnold Industrial Way	S	2	NM	Planned
●	4	CC	4	R13.94	EB	Solano Way / Arnold Industrial Way / March Dr	S	2	M	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	4	CC	4	R14.36	WB	NB Rte 242	C	1		Planned
	4	CC	4	R14.59	WB	Port Chicago Hwy	S	1		Planned
	4	CC	4	R15.15	WB	Port Chicago Hwy (On Rte 4 Seg to SB Rte 242)	S	2	NM	Planned
●	4	CC	4	R15.60	EB	Port Chicago Hwy	D	2	M	Operational
	4	CC	4	R15.75	EB	NB Rte 242	C	3		Planned
●	4	CC	4	R16.69	WB	Willow Pass Rd / Evora Rd / Willow Pass Ct	S	2	M	Operational
●	4	CC	4	R17.18	EB	Willow Pass Rd / Avila Rd	S	2	M	Operational
●	4	CC	4	R18.57	WB	SB Willow Pass Rd / San Marco Blvd / Evora Rd	S	2	M	Operational
●	4	CC	4	R18.73	EB	SB Willow Pass Rd / San Marco Blvd / W Leland Rd	L	1		Operational
●	4	CC	4	R18.81	WB	NB San Marco Blvd / Willow Pass Rd / Evora Rd	L	1		Operational
●	4	CC	4	R18.96	EB	NB San Marco Blvd / Willow Pass Rd / W Leland Rd	S	1		Operational
●	4	CC	4	R19.95	WB	Bailey Rd	S	3	M	Operational
●	4	CC	4	R20.29	EB	Bailey Rd	S	2	M	Operational
●	4	CC	4	22.82	WB	Railroad Ave	S	2		Operational
●	4	CC	4	23.22	EB	Railroad Ave	S	3	M	Operational
●	4	CC	4	24.11	WB	California Ave / Loveridge Rd	H	2		Operational
●	4	CC	4	24.4	EB	Loveridge Rd	S	3	M	Operational
●	4	CC	4	25.82	WB	Auto Center Dr / Somersville Rd	S	3	M	Operational
●	4	CC	4	26.19	EB	Somersville Rd / Auto Center Dr	S	3	M	Operational
	4	CC	4	26.81	WB	L St / Contra Loma Blvd	S	3	NM	Planned
	4	CC	4	27.13	WB	G St / Drake St	S	2	NM	Planned
	4	CC	4	R27.66	WB	A St / Lone Tree Way	S	3	NM	Planned
	4	CC	4	R27.94	EB	Lone Tree Way / A St	S	2	NM	Planned
	4	CC	4	R28.76	WB	Hillcrest Ave	S	2	NM	Planned
	4	CC	4	R29.09	EB	Hillcrest Ave	S	2	NM	Planned
	4	CC	4	T30.17	WB	SB Rte 160	C	2		Planned
	4	CC	4	T30.55	EB	Lone Tree Way	S	2	NM	Planned
	4	CC	4	T30.55	WB	Jeffery Way / Lone Tree Way	H	1		Planned
	4	CC	4	T30.59	WB	WB Lone Tree Way	S	2	NM	Planned
	4	CC	4	T30.63	EB	Laurel Rd	S	1		Planned
	4	CC	4	T30.64	EB	Laurel Rd	L	1		Planned
	4	CC	4	T30.65	WB	Laurel Rd	S	3	NM	Planned
●	4	CC	4	R34.13	EB	Sand Creek Rd	L	1		Non Op
●	4	CC	4	R34.14	WB	Sand Creek Rd	S	3		Non Op
	4	CC	24	0.62	WB	Fish Ranch Rd	S	1		Planned
	4	CC	24	0.71	EB	Old Tunnel Rd	S	1		Planned
	4	CC	24	1.01	WB	California Shakespeare Theater Way / Wilder Rd	S	1		Planned
	4	CC	24	1.45	EB	Wilder Rd	S	1		Planned
	4	CC	24	R2.12	WB	SB Camino Pablo / Santa Maria Way	S	1		Planned
	4	CC	24	R2.31	EB	SB Camino Pablo	L	1		Planned
	4	CC	24	R2.36	WB	NB Camino Pablo	L	1		Planned
	4	CC	24	R2.59	EB	Bryant Way / Vashell Way / Davis Rd	S	1		Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	4	CC	24	R3.25	WB	St Stephens Dr / El Nido Ranch Rd / E Altarinda Dr	S	1		Planned
	4	CC	24	R3.66	EB	Hidden Valley Rd / St Stephens Dr / Wanda Way	S	1		Planned
	4	CC	24	R4.21	WB	El Nido Ranch Rd	H	1		Planned
	4	CC	24	R4.34	EB	SB Acalanes Rd	L	1		Planned
	4	CC	24	R4.35	WB	NB Acalanes Rd	L	1		Planned
	4	CC	24	R4.51	EB	Acalanes Rd / Mt Diablo Blvd	S	1		Planned
	4	CC	24	R6.40	WB	Deer Hill Rd / Laurel Dr / First St	H	1		Planned
	4	CC	24	R6.67	EB	1st St	S	1		Planned
	4	CC	24	R7.55	WB	NB Pleasant Hill Rd	L	1		Planned
	4	CC	24	R7.55	WB	SB Pleasant Hill Rd	S	1		Planned
	4	CC	24	R7.81	EB	NB Pleasant Hill Rd / Mt Diablo Blvd	S	2		Planned
	4	CC	24	R7.81	EB	SB Pleasant Hill Rd	L	1		Planned
	4	CC	24	R8.67	WB	Mt Diablo Blvd / Camino Diablo / Boulevard Way	S	1		Planned
	4	CC	24	R8.69	WB	NB Rte 680	C	2		Planned
	4	CC	24	R8.70	WB	SB Rte 680	C	3		Planned
	4	CC	24	9.43	WB	Hillside Ave / Ygnacio Valley Rd	L	1		Planned
●	4	CC	80	0.14	WB	Central Ave	S	1		Operational
●	4	CC	80	0.35	EB	Central Ave	S	2		Operational
●	4	CC	80	0.83	WB	Carlson Blvd	S	1		Operational
●	4	CC	80	1.13	EB	Carlson Blvd	S	2		Operational
●	4	CC	80	1.54	WB	Potrero Ave / Eastshore Blvd	S	2		Operational
●	4	CC	80	1.98	EB	WB Cutting Blvd	S	2		Operational
●	4	CC	80	2.03	EB	EB Cutting Blvd	L	1		Operational
●	4	CC	80	2.19	EB	Cutting Blvd for HOV	S	1	NM	Non Op
●	4	CC	80	2.72	WB	Barrett Ave / 44th St	S	2		Operational
●	4	CC	80	3.06	EB	San Pablo Ave (Rte 123) / Roosevelt Ave	S	2		Operational
●	4	CC	80	3.30	WB	Solano Ave	S	1		Operational
●	4	CC	80	4.22	WB	San Pablo Dam Rd	S	2		Operational
●	4	CC	80	4.58	EB	San Pablo Dam Rd / Amador St	S	1		Operational
●	4	CC	80	4.75	WB	El Portal Dr	S	2		Operational
●	4	CC	80	5.46	EB	El Portal Dr	S	2		Operational
●	4	CC	80	5.82	WB	EB Hilltop Dr	S	2	M	Operational
●	4	CC	80	5.95	EB	EB Hilltop Dr	L	1		Operational
●	4	CC	80	6.02	WB	WB Hilltop Dr	L	1		Operational
●	4	CC	80	6.15	EB	Hilltop Dr	S	2	M	Operational
●	4	CC	80	6.49	WB	Richmond Pkwy / Fitzgerald Dr for HOV	S	1	NM	Non Op
●	4	CC	80	6.69	WB	Richmond Pkwy / Fitzgerald Dr	L	1		Operational
●	4	CC	80	6.73	EB	EB Fitzgerald Dr / Richmond Pkwy	L	2		Operational
●	4	CC	80	6.98	EB	WB Fitzgerald Dr / Richmond Pkwy	H	1		Operational
●	4	CC	80	7.45	WB	Appian Way	S	2		Operational
●	4	CC	80	7.57	EB	SB Appian Way	L	1		Operational
●	4	CC	80	7.73	EB	NB Appian Way	S	2		Operational
●	4	CC	80	8.40	WB	Pinole Valley Rd	S	2		Operational
●	4	CC	80	8.72	EB	Pinole Valley Rd	S	1		Operational
●	4	CC	80	9.56	WB	Rte 4 (John Muir Pkwy)	C	3	M	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	CC	80	10.29	EB	Rte 4 (John Muir Pkwy)	C	2		Non Op
●	4	CC	80	10.54	WB	Willow Ave	S	2		Operational
●	4	CC	80	10.87	EB	Willow Ave	S	1		Operational
●	4	CC	80	12.54	WB	Cummings Skyway	S	1		Operational
●	4	CC	80	12.99	EB	Cummings Skyway	S	1		Operational
●	4	CC	80	13.48	WB	San Pablo Ave / Pomona St	S	1		Operational
●	4	CC	80	13.71	EB	Pomona St / Lincoln Hwy / San Pablo Ave	S	1		Operational
	4	CC	242	L0.23	NB	NB Rte 680	C	3		Planned
●	4	CC	242	R0.66	SB	Clayton Rd / Market St	S	2		Operational
●	4	CC	242	R1.46	SB	Concord Ave	L	2	M	Operational
●	4	CC	242	R1.50	NB	EB Concord Ave	L	2	M	Operational
●	4	CC	242	R1.67	NB	WB Concord Ave / Market St	S	3	M	Operational
●	4	CC	242	R2.05	SB	Solano Way / Grant St	S	2	M	Operational
●	4	CC	242	R2.27	NB	Solano Way / Grant St	S	1		Operational
●	4	CC	242	R2.72	SB	EB Olivera Rd	S	1		Operational
●	4	CC	242	R2.73	SB	WB Olivera Rd	L	1		Operational
	4	CC	242	R3.14	SB	WB Rte 4	C	3		Planned
	4	CC	242	R3.15	SB	EB Rte 4	C	1		Planned
	4	CC	580	0.12	EB	Central Ave / Rydin Rd	S	1		Planned
	4	CC	580	0.36	WB	Central Ave	S	1		Planned
	4	CC	580	1.21	EB	Bayview Ave / S 51st St	H	1		Planned
	4	CC	580	1.42	WB	Bayview Ave	S	1		Planned
	4	CC	580	R2.01	EB	Regatta Blvd / Meade St	L	1		Planned
	4	CC	580	R2.30	WB	Juliga Woods St / Regatta Blvd	H	1		Planned
	4	CC	580	R2.74	EB	NB Marina Bay Pkwy / S 23rd St	S	1		Planned
	4	CC	580	R2.85	WB	NB Marina Bay Pkwy / S 23rd St	L	1		Planned
	4	CC	580	R2.93	EB	SB S 23rd St / Marina Bay Pkwy	L	1		Planned
	4	CC	580	R3.05	WB	SB S 23rd St / Marina Bay Pkwy	S	1		Planned
	4	CC	580	R3.49	EB	Hoffman Blvd / NB S Harbour Way	S	1		Planned
	4	CC	580	R3.62	EB	SB S Harbour Way	L	1		Planned
	4	CC	580	R3.87	WB	WB Cutting Blvd	S	1		Planned
	4	CC	580	R4.50	EB	Canal Blvd / Tewksbury Ave	S	1		Planned
	4	CC	580	R4.76	WB	Canal Blvd (On Rte 580 Seg)	S	1		Planned
	4	CC	580	R5.04	WB	NB Richmond Pkwy / Castro St	L	1		Planned
	4	CC	580	R5.36	EB	E Standard Ave / Marine St	H	2		Planned
	4	CC	580	5.78	EB	Western Dr	S	1		Planned
	4	CC	580	6.07	WB	Western Dr	H	1		Planned
	4	CC	680	R0.09	SB	San Ramon Valley Blvd / Alcosta Blvd	H	3		Part Const
	4	CC	680	R0.17	NB	Alcosta Blvd	S	3		Part Const
	4	CC	680	R2.74	SB	EB Bollinger Canyon Rd	S	1		Part Const
	4	CC	680	R2.83	NB	EB Bollinger Canyon Rd	L	1		Part Const
	4	CC	680	R2.94	SB	WB Bollinger Canyon Rd	L	1		Part Const
	4	CC	680	R3.04	NB	WB Bollinger Canyon Rd	S	2		Part Const
	4	CC	680	R3.91	SB	EB Crow Canyon Rd	S	1		Part Const
	4	CC	680	R4.11	SB	WB Crow Canyon Rd	L	1		Part Const
	4	CC	680	R4.24	NB	EB Crow Canyon Rd	L	1		Part Const
	4	CC	680	R4.44	NB	WB Crow Canyon Rd	S	1		Part Const
	4	CC	680	R6.64	SB	Sycamore Valley Rd	S	1		Part Const
	4	CC	680	R6.91	NB	Sycamore Valley Rd	S	1		Part Const

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	4	CC	680	R7.43	SB	Diablo Rd	S	1		Planned
	4	CC	680	R7.52	NB	EB Diablo Rd	L	1		Planned
	4	CC	680	R7.72	NB	WB Diablo Rd	S	1		Planned
	4	CC	680	R8.06	SB	El Cerro Blvd	S	1		Planned
	4	CC	680	R8.32	NB	El Cerro Blvd	S	1		Planned
	4	CC	680	R8.84	NB	El Pintado Rd	S	1		Planned
	4	CC	680	R10.21	SB	Stone Valley Rd	S	1		Planned
	4	CC	680	R10.55	NB	Stone Valley Rd	S	1		Planned
	4	CC	680	R11.13	SB	W Livorna Rd	S	1		Planned
	4	CC	680	R11.40	NB	Livorna Rd	S	1		Planned
	4	CC	680	R12.42	SB	Rudgear Rd / Danville Blvd	S	1		Part Const
	4	CC	680	12.72	NB	Danville Blvd / Rudgear Rd	H	1		Planned
	4	CC	680	13.09	SB	S Main St	L	1		Part Const
	4	CC	680	13.81	SB	EB Olympic Blvd	S	1		Planned
	4	CC	680	13.81	SB	WB Olympic Blvd	L	1		Planned
	4	CC	680	14.03	SB	EB Rte 24	C	2		Planned
	4	CC	680	14.09	NB	Olympic Blvd	S	1		Planned
	4	CC	680	14.55	NB	EB Rte 24	C	3		Planned
	4	CC	680	14.67	SB	Hillside Ave / Ygnacio Valley Rd	S	2		Planned
	4	CC	680	15.50	SB	San Luis Rd / N Main St	S	1		Planned
	4	CC	680	15.73	NB	Lawrence Way / Penniman Way / N Main St	S	2		Part Const
	4	CC	680	16.29	SB	Geary Rd / Treat Blvd	S	1		Planned
	4	CC	680	16.55	SB	N Main St / Sunnyvale Ave	H	1		Planned
	4	CC	680	16.70	NB	Buskirk Ave / Treat Blvd	S	1		Planned
	4	CC	680	16.85	NB	Oak Rd / Elena Ct / Coggins Dr	H	1		Planned
	4	CC	680	R17.32	SB	Boyd Rd / SB Contra Costa Blvd	S	1		Planned
	4	CC	680	R17.47	SB	Monument Blvd	S	1		Planned
	4	CC	680	R17.83	NB	Monument Blvd	S	1		Planned
	4	CC	680	R18.44	SB	SB Rte 242	C	3		Planned
	4	CC	680	R19.05	SB	EB Sunvalley Blvd / Willow Pass Rd	S	1		Planned
	4	CC	680	19.07	SB	WB Sunvalley Blvd / Willow Pass Rd	L	1		Planned
	4	CC	680	19.20	NB	Willow Pass Rd	S	2		Planned
	4	CC	680	19.70	SB	Concord Ave / Chilpancingo Pkwy	S	1		Planned
	4	CC	680	19.84	NB	WB Burnett Ave	H	1		Planned
	4	CC	680	19.89	SB	Contra Costa Blvd	H	1		Planned
	4	CC	680	20.04	NB	WB Concord Ave	S	1		Planned
	4	CC	680	21.03	SB	EB Rte 4	C	1		Planned
	4	CC	680	21.13	NB	EB Rte 4	C	1		Planned
	4	CC	680	21.26	SB	WB Rte 4	C	1		Planned
	4	CC	680	21.39	NB	WB Rte 4	C	1		Planned
	4	CC	680	22.36	SB	Pacheco Blvd	S	1		Planned
	4	CC	680	22.83	NB	Arthur Rd	S	1		Planned
	4	CC	680	24.25	SB	Marina Vista / Waterfront Rd	S	1		Planned
	4	CC	680	24.31	NB	Waterfront Rd / Marina Vista	S	1		Planned
	4	MRN	101	0.06	NB	Vista Point	S	1		Planned
	4	MRN	101	0.17	SB	Alexander Ave / Conzelman Rd / Sausalito Lateral	S	1		Planned
	4	MRN	101	0.31	NB	Alexander Ave / Bunker Rd / Danes Dr	S	1		Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	4	MRN	101	1.71	SB	Spencer / Monte Mar Dr	H	1		Planned
	4	MRN	101	1.83	NB	Monte Mar Dr / Spencer	S	1		Planned
	4	MRN	101	2.40	NB	Rodeo Ave	S	1		Planned
	4	MRN	101	2.49	SB	Rodeo Ave	H	1		Planned
	4	MRN	101	3.42	SB	Donahue St / N Bridge Blvd (Marin City)	L	1		Planned
	4	MRN	101	3.57	NB	N Bridge Blvd / Bridgeway / Gate 6 Rd (Marin City)	S	1		Planned
	4	MRN	101	3.99	SB	Rte 1 (Shoreline Hwy / Almonte Blvd)	S	1		Planned
	4	MRN	101	4.02	NB	SB Rte 1 (Shoreline Hwy / Almonte Blvd)	H	1		Planned
	4	MRN	101	4.75	NB	Redwood Hwy Frontage Rd / De Silva Dr	H	1		Planned
	4	MRN	101	4.75	SB	Redwood Hwy Frontage Rd / Hamilton Dr	H	1		Planned
	4	MRN	101	5.56	SB	EB East Blithedale Ave / Tiburon Blvd	S	1		Planned
	4	MRN	101	5.66	NB	EB Tiburon Blvd / East Blithedale Ave	L	1		Planned
	4	MRN	101	5.73	SB	WB Rte 131 (Tiburon Blvd / East Blithedale Ave)	L	1		Planned
	4	MRN	101	5.83	NB	WB Rte 131 (Tiburon Blvd / East Blithedale Ave)	S	1		Planned
	4	MRN	101	6.54	SB	Meadow Valley Rd / Casa Buena Dr	S	1		Planned
	4	MRN	101	7.24	SB	EB Tamalpais Dr	S	1		Planned
	4	MRN	101	7.33	NB	EB Tamalpais Dr	L	1		Planned
	4	MRN	101	7.40	SB	WB Tamalpais Dr	L	1		Planned
	4	MRN	101	7.51	NB	WB Tamalpais Dr / Redwood Hwy / San Clemente Dr	S	1		Planned
	4	MRN	101	7.64	SB	Madera Blvd	S	1		Planned
	4	MRN	101	8.10	NB	Industrial Way / Redwood Hwy / Warnum Dr	S	1		Planned
	4	MRN	101	8.17	SB	Fifer Ave	S	1		Planned
	4	MRN	101	8.46	SB	Sir Francis Drake Blvd	D	2		Part Const
	4	MRN	101	8.85	NB	Sir Francis Drake Blvd	S	3	NM	Planned
	4	MRN	101	9.83	SB	W Francisco Blvd / Jacoby St / Andersen Dr	S	1		Part Const
●	4	MRN	101	10.00	NB	WB Rte 580	C	2		Non Op
	4	MRN	101	10.76	SB	2nd St	S	2		Part Const
●	4	MRN	101	11.20	NB	Mission Ave	S	2		Non Op
●	4	MRN	101	12.10	SB	Lincoln Ave / Prospect Dr	H	1		Non Op
●	4	MRN	101	12.27	NB	Villa Ave / Hammondale Ct / Lincoln Ave	H	1		Non Op
	4	MRN	101	12.77	SB	Merrydale Rd / N San Pedro Rd	H	1		Planned
	4	MRN	101	12.85	NB	N San Pedro Rd	S	1		Planned
	4	MRN	101	13.63	NB	EB Manuel T Freitas Pkwy / Redwood Hwy / Civic Center Dr	H	1		Planned
	4	MRN	101	13.67	SB	WB Manuel T Freitas Pkwy	L	1		Planned
	4	MRN	101	13.67	SB	EB Manuel T Freitas Pkwy / Del Presidio Blvd	S	1		Planned
	4	MRN	101	13.76	NB	Redwood Hwy / Civic Center Dr	S	1		Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	4	MRN	101	14.62	SB	Lucas Valley Rd	S	1		Planned
	4	MRN	101	14.66	NB	EB Lucas Valley Rd	L	1		Planned
	4	MRN	101	14.79	NB	WB Smith Ranch Rd / Lucas Valley Rd	S	1		Planned
	4	MRN	101	15.43	SB	Miller Creek Rd	S	1		Planned
	4	MRN	101	15.75	NB	St Vincent Dr / Miller Creek Rd	S	1		Planned
	4	MRN	101	16.66	SB	Alameda del Prado / Nave Dr	S	1		Planned
	4	MRN	101	16.79	NB	Nave Dr / Bolling Dr	H	1		Planned
	4	MRN	101	17.89	SB	Ignacio Blvd / Enfrente Rd	S	1		Planned
	4	MRN	101	18.05	NB	Nave Dr / Ignacio Blvd / Roblar Dr	H	1		Part Const
	4	MRN	101	18.18	NB	SB Bel Marin Keys Blvd / NB Nave Dr / NB Ignacio Blvd	S	2		Part Const
●	4	MRN	101	18.66	SB	WB Rte 37 / EB Novato Blvd	C	2		Non Op
●	4	MRN	101	19.19	NB	WB Rte 37	C	1		Non Op
●	4	MRN	101	19.26	NB	EB Novato Blvd	S	1		Non Op
●	4	MRN	101	19.97	SB	Rowland Blvd	S	3		Non Op
●	4	MRN	101	R20.40	NB	Rowland Blvd	S	2		Non Op
●	4	MRN	101	R21.03	SB	De Long Ave	S	2		Non Op
●	4	MRN	101	R21.23	NB	De Long Ave / Davidson St	S	1		Non Op
●	4	MRN	101	R21.85	SB	Atherton Ave	S	2		Non Op
●	4	MRN	101	R22.11	NB	Atherton Ave	S	2		Non Op
●	4	MRN	101	25.48	NB	Redwood Sanitary Landfill Rd	S	1		Non Op
●	4	MRN	101	25.57	SB	Redwood Sanitary Landfill Rd	S	1		Non Op
	4	MRN	580	2.54	EB	Main St / E Francisco Blvd	S	1		Planned
	4	MRN	580	2.86	WB	E Francisco Blvd	H	1		Planned
	4	MRN	580	3.18	EB	Sir Francis Drake Blvd	S	1		Planned
	4	MRN	580	4.40	EB	Bellam Blvd / NB Rte 101	S	1		Planned
	4	MRN	580	4.50	WB	Bellam Blvd / E Francisco Blvd	S	1		Planned
	4	NAP	29	R10.27	SB	EB W Imola Ave	S	1		Planned
	4	NAP	29	10.33	SB	WB W Imola Ave	L	1		Planned
	4	NAP	29	10.46	NB	W Imola Ave	S	1		Planned
	4	NAP	29	11.44	SB	1st St	S	1		Planned
	4	NAP	29	11.48	NB	EB 1st St	H	1		Planned
	4	NAP	29	11.59	NB	WB 1st St	S	1		Planned
	4	NAP	29	11.94	SB	Solano Ave / W Lincoln Ave	H	1		Planned
	4	NAP	29	12.16	NB	Lincoln Ave / California Blvd	S	1		Planned
	4	NAP	29	12.86	SB	Redwood Rd / Trancas St	S	1		Planned
	4	NAP	29	13.16	NB	Trancas St / Redwood Rd	S	1		Planned
	4	NAP	29	13.58	NB	Sierra Ave	H	1		Planned
	4	NAP	29	14.94	NB	Howard Ln	H	1		Planned
	4	NAP	29	18.01	NB	Hoffman Ln / Washington St	H	1		Planned
	4	NAP	29	18.01	SB	Hoffman Ln / Solano Ave	H	1		Planned
	4	NAP	29	18.90	SB	California Dr	S	1		Planned
	4	NAP	29	19.16	NB	California Dr	S	1		Planned
	4	SCL	17	4.03	SB	Bear Creek Rd	S	1		Planned
●	4	SCL	17	4.20	NB	Bear Creek Rd / Old Santa Cruz Hwy	S	1		Operational
	4	SCL	17	6.16	SB	S Santa Cruz Ave	S	1		Planned
	4	SCL	17	6.93	SB	SB Saratoga Los Gatos Rd (Rte 9)	S	1		Planned
	4	SCL	17	7.05	NB	SB Saratoga Los Gatos Rd (Rte 9)	L	1		Part Const
	4	SCL	17	7.10	SB	NB Saratoga Los Gatos Rd (Rte 9)	L	1		Planned
	4	SCL	17	7.19	NB	NB Saratoga Los Gatos Rd (Rte 9)	S	1		Part Const

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	SCL	17	8.92	SB	Lark Ave	L	1		Non Op
●	4	SCL	17	9.06	NB	Lark Ave	S	2		Operational
●	4	SCL	17	9.27	SB	SB Rte 85	C	1		Non Op
●	4	SCL	17	9.40	NB	SB Rte 85	C	1		Operational
●	4	SCL	17	9.40	SB	NB Rte 85	C	1		Non Op
●	4	SCL	17	9.55	NB	NB Rte 85	C	2		Operational
●	4	SCL	17	10.20	SB	San Tomas Expwy / Camden Ave	S	3	NM	Non Op
●	4	SCL	17	10.57	NB	White Oaks Rd / Camden Ave / San Tomas Expwy	L	1		Operational
●	4	SCL	17	10.76	NB	Camden Ave / Curtner Ave / San Tomas Expwy	S	3	M	Operational
●	4	SCL	17	12.24	SB	EB E Hamilton Ave	S	1		Non Op
●	4	SCL	17	12.28	NB	EB E Hamilton Ave	L	2		Operational
●	4	SCL	17	12.39	SB	WB E Hamilton Ave	L	1		Non Op
●	4	SCL	17	12.48	NB	WB E Hamilton Ave	S	2		Operational
	4	SCL	17	13.74	SB	NB Rte 280	C	2		Planned
	4	SCL	17	13.82	SB	SB Rte 280	C	1		Planned
●	4	SCL	85	0.33	NB	NB Rte 101	C	2		Operational
	4	SCL	85	0.36	NB	NB Rte 101 HOV	C	1	NM	Planned
●	4	SCL	85	0.38	NB	NB Bernal Rd	L	2	M	Operational
●	4	SCL	85	0.56	NB	SB Bernal Rd	S	2	M	Operational
●	4	SCL	85	0.75	NB	SB Rte 101	C	2	M	Operational
●	4	SCL	85	0.92	NB	Great Oaks Blvd	S	2	M	Operational
●	4	SCL	85	1.74	SB	NB Cottle Rd	S	1		Operational
●	4	SCL	85	2.00	NB	NB Cottle Rd	L	2		Operational
●	4	SCL	85	2.00	SB	SB Cottle Rd	L	1		Operational
●	4	SCL	85	2.11	NB	SB Cottle Rd	S	3	M	Operational
●	4	SCL	85	3.80	SB	EB Blossom Hill Rd	S	1		Operational
●	4	SCL	85	3.84	NB	EB Blossom Hill Rd	L	2	M	Operational
●	4	SCL	85	4.03	NB	WB Blossom Hill Rd	S	1		Operational
●	4	SCL	85	4.04	SB	WB Blossom Hill Rd	L	1		Operational
●	4	SCL	85	4.87	SB	SB Rte 87	C	3	M	Operational
●	4	SCL	85	5.05	SB	Santa Teresa Blvd	S	1		Operational
●	4	SCL	85	5.18	NB	Santa Teresa Blvd	L	2	M	Operational
●	4	SCL	85	5.41	NB	SB Rte 87	C	2	M	Operational
●	4	SCL	85	6.10	SB	NB Almaden Expy	S	2	M	Operational
●	4	SCL	85	6.14	NB	NB Almaden Expy	L	2	M	Operational
●	4	SCL	85	6.22	SB	SB Almaden Expy	L	1		Operational
●	4	SCL	85	6.34	NB	SB Almaden Expy	S	2		Operational
●	4	SCL	85	7.97	SB	Camden Ave	S	2	M	Operational
●	4	SCL	85	8.23	NB	Camden Ave	S	2		Operational
●	4	SCL	85	9.10	SB	Union Ave	S	1		Operational
●	4	SCL	85	9.43	NB	Union Ave	S	2		Operational
●	4	SCL	85	10.07	SB	S Bascom Ave / Los Gatos Blvd	S	2	M	Operational
●	4	SCL	85	10.29	SB	Rte 17	C	2		Operational
●	4	SCL	85	R10.47	NB	S Bascom Ave	S	2	M	Operational
●	4	SCL	85	R10.88	NB	Rte 17	C	2		Operational
●	4	SCL	85	R11.16	NB	Winchester Blvd	S	2	M	Operational
●	4	SCL	85	R13.52	SB	Saratoga Ave	S	2		Operational
●	4	SCL	85	R13.93	NB	Saratoga Ave	S	2		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	SCL	85	R15.67	SB	S De Anza Blvd	S	2		Operational
●	4	SCL	85	R16.06	NB	S De Anza Blvd	S	2		Operational
●	4	SCL	85	R17.49	SB	Stevens Creek Blvd	S	2	M	Operational
	4	SCL	85	R18.23	SB	SB Rte 280	C	2		Planned
●	4	SCL	85	R18.38	NB	SB Rte 280	C	1		Operational
●	4	SCL	85	R18.50	NB	NB Rte 280 / Stevens Creek Blvd (on Rte 85 Seg)	C	3		Operational
●	4	SCL	85	R18.70	SB	NB Rte 280	C	1		Operational
●	4	SCL	85	R18.85	NB	W Homestead Rd	L	1		Operational
●	4	SCL	85	R19.73	SB	W Fremont Ave	S	2	M	Operational
●	4	SCL	85	R20.03	NB	W Fremont Ave	S	2		Operational
●	4	SCL	85	R21.61	SB	SB Rte 82	S	2	M	Operational
●	4	SCL	85	R21.69	NB	SB Rte 82	L	1		Operational
●	4	SCL	85	R21.82	SB	NB Rte 82	L	1		Operational
●	4	SCL	85	R21.86	NB	NB Rte 82	S	2	M	Operational
●	4	SCL	85	R22.13	NB	EB Rte 237	C	1		Operational
	4	SCL	85	R22.20	SB	WB Rte 237	C	1		Planned
●	4	SCL	85	R22.49	SB	W Evelyn Ave	S	1		Operational
●	4	SCL	85	R23.01	NB	Central Expy / Easy St	S	1		Operational
●	4	SCL	85	R23.39	SB	Moffett Blvd	L	1		Operational
	4	SCL	85	R23.66	SB	SB Rte 101 HOV	C	1	NM	Planned
	4	SCL	85	23.87	SB	SB Rte 101	C	2		Planned
●	4	SCL	85	23.87	SB	SB N Shoreline Blvd	L	2		Operational
●	4	SCL	87	0.13	NB	SB Rte 85	C	2	M	Operational
	4	SCL	87	0.13	NB	NB Rte 85	C	2		Planned
●	4	SCL	87	0.42	NB	Santa Teresa Blvd	S	2		Operational
●	4	SCL	87	1.22	SB	Capitol Expy	S	1		Operational
●	4	SCL	87	1.53	NB	Narvaez Ave / Capitol Expy	S	2		Operational
●	4	SCL	87	2.66	SB	EB Curtner Ave	S	1		Operational
●	4	SCL	87	2.85	SB	WB Curtner Ave	L	1		Operational
●	4	SCL	87	3.07	NB	Unified Way / Curtner Ave	S	2	M	Operational
●	4	SCL	87	3.54	NB	Almaden Expy (Co Hwy G8)	S	3	M	Operational
●	4	SCL	87	4.36	NB	Lelong St	S	2	M	Operational
	4	SCL	87	4.71	SB	SB Rte 280	C	1		Planned
	4	SCL	87	4.71	SB	NB Rte 280	C	2		Planned
●	4	SCL	87	5.15	SB	Auzerias Ave / Delmas Ave	S	2	M	Operational
●	4	SCL	87	5.68	NB	Park Ave / Wozway	S	2	M	Operational
●	4	SCL	87	6.03	SB	EB W Julian St	S	2	M	Operational
	4	SCL	87	6.10	NB	Rte 280	C	2		Planned
●	4	SCL	87	6.12	SB	WB W St James St / W Julian St	L	2		Operational
●	4	SCL	87	6.27	NB	W Julian St / W St James St	S	3	M	Operational
●	4	SCL	87	6.70	SB	W Taylor St	S	3	M	Operational
●	4	SCL	87	7.07	NB	W Taylor St	S	3	M	Operational
●	4	SCL	87	8.13	SB	Skyport Dr	S	3	M	Operational
●	4	SCL	87	8.63	NB	Skyport Dr	S	3	M	Operational
	4	SCL	87	9.00	SB	SB Rte 101	C	2		Planned
●	4	SCL	87	9.00	SB	Charcot Ave	S	2		Operational
	4	SCL	101	2.96	SB	Rte 25	S	1		Planned
	4	SCL	101	3.23	NB	Rte 25	S	1		Planned
●	4	SCL	101	R4.78	SB	Monterey Rd	S	1		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	SCL	101	R4.90	NB	Monterey Rd	L	1		Operational
●	4	SCL	101	R5.87	SB	Rte 152 / E 10th St	S	2	M	Operational
●	4	SCL	101	R6.06	NB	EB Rte 152 / E 10th St	L	2	M	Operational
●	4	SCL	101	R6.11	SB	WB Rte 152 / E 10th St	L	2		Operational
●	4	SCL	101	R6.17	NB	WB Rte 152 / 10th St	S	2		Operational
●	4	SCL	101	R7.25	SB	Leavesley Rd	S	1		Operational
●	4	SCL	101	R7.51	NB	EB Leavesley Rd	L	1		Operational
●	4	SCL	101	R7.79	NB	WB Leavesley Rd	S	1		Operational
●	4	SCL	101	R10.12	SB	Masten Ave	S	1		Operational
●	4	SCL	101	R10.43	NB	Masten Ave	S	1		Operational
●	4	SCL	101	R12.32	SB	E San Martin Ave	S	1		Operational
●	4	SCL	101	R12.59	NB	E San Martin Ave	S	1		Operational
●	4	SCL	101	R14.93	SB	Tennant Ave	S	1		Operational
●	4	SCL	101	R15.08	NB	EB Tennant Ave	L	2	M	Operational
●	4	SCL	101	R15.21	NB	Tennant Ave	S	1		Operational
●	4	SCL	101	R15.87	SB	E Dunne Ave	S	1		Operational
●	4	SCL	101	R15.99	NB	EB E Dunne Ave	L	2	M	Operational
●	4	SCL	101	R16.18	NB	WB E Dunne Ave	S	1		Operational
●	4	SCL	101	R17.58	SB	EB Cochrane Rd	S	1		Operational
●	4	SCL	101	R17.78	NB	EB Cochrane Rd	L	1		Operational
●	4	SCL	101	R17.86	SB	WB Cochrane Rd	L	1		Operational
●	4	SCL	101	R17.99	NB	WB Cochrane Rd	S	2	M	Operational
●	4	SCL	101	R21.05	SB	Coyote Creek Golf Dr	S	1		Operational
●	4	SCL	101	R21.46	NB	Coyote Creek Golf Dr	S	1		Operational
●	4	SCL	101	R23.29	SB	Bailey Ave	S	2	M	Operational
●	4	SCL	101	R23.50	NB	Bailey Ave	H	2		Operational
	4	SCL	101	R26.44	SB	SB Rte 85 HOV	C	1	NM	Planned
●	4	SCL	101	R26.69	SB	SB Rte 85	C	2		Operational
●	4	SCL	101	R26.71	SB	Bernal Rd	S	2	M	Operational
●	4	SCL	101	R27.02	NB	Bernal Rd / NB Silicon Valley Blvd	L	2		Operational
●	4	SCL	101	R27.22	NB	Silicon Valley Blvd / Bernal Rd	S	2	M	Operational
●	4	SCL	101	R28.44	SB	EB Blossom Hill Rd / Silver Creek Valley Rd (from Rte 82)	S	1		Operational
●	4	SCL	101	R28.50	NB	EB Blossom Hill Rd / Silver Creek Valley Rd (from Rte 82)	L	2		Operational
	4	SCL	101	R28.67	SB	WB Silver Creek Valley Rd / Blossom Hill Rd	L	1		Planned
●	4	SCL	101	R28.79	NB	WB Silver Creek Valley Rd / Blossom Hill Rd	S	2	M	Operational
●	4	SCL	101	30.05	NB	Hellyer Ave / Dove Rd	L	2		Operational
●	4	SCL	101	30.15	SB	Hellyer Ave	H	1		Operational
●	4	SCL	101	30.75	SB	Yerba Buena Rd	S	1		Operational
●	4	SCL	101	31.19	NB	Yerba Buena Rd	S	2		Operational
●	4	SCL	101	31.30	SB	EB E Capitol Expy	S	2	M	Operational
●	4	SCL	101	31.75	SB	WB E Capitol Expy	L	2	M	Operational
●	4	SCL	101	31.82	NB	EB E Capitol Expy	L	2	M	Operational
●	4	SCL	101	31.83	NB	WB E Capitol Expy	S	3	M	Operational
●	4	SCL	101	32.90	SB	EB Tully Rd	S	2	M	Operational
●	4	SCL	101	32.90	SB	WB Tully Rd	L	2	M	Operational
●	4	SCL	101	33.09	NB	EB Tully Rd	L	2	M	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	SCL	101	33.27	NB	WB Tully Rd	S	3	M	Operational
	4	SCL	101	34.16	SB	SB Rte 280 / SB Rte 680	C	3		Planned
	4	SCL	101	34.44	SB	EB Story Rd	S	1		Planned
	4	SCL	101	34.44	SB	WB Story Rd	L	1		Planned
●	4	SCL	101	34.96	NB	SB Rte 280 / Story Rd	D	1		Operational
●	4	SCL	101	35.11	NB	SB Rte 680	C	2	M	Operational
●	4	SCL	101	R35.64	SB	Rte 130 / E Santa Clara St	S	2		Non Op
●	4	SCL	101	R35.84	NB	Rte 130 / Alum Rock Ave	S	2		Operational
●	4	SCL	101	R36.02	SB	McKee Rd / E Julian St	S	1		Non Op
●	4	SCL	101	R36.22	NB	McKee Rd / E Julian St	S	2		Operational
●	4	SCL	101	37.61	SB	Oakland Rd / N 13th St	S	2		Non Op
●	4	SCL	101	37.84	NB	Oakland Rd / Commercial St	S	2		Operational
	4	SCL	101	38.17	SB	NB Rte 880	C	1		Part Const
	4	SCL	101	38.26	NB	NB Rte 880	C	1		Part Const
	4	SCL	101	38.35	SB	SB Rte 880	C	1		Part Const
	4	SCL	101	38.79	NB	Old Bayshore Hwy	H	1		Planned
	4	SCL	101	38.94	SB	N 4th St / Matrix Blvd / N First St	H	1		Planned
●	4	SCL	101	39.28	NB	NB N First St	L	1		Operational
●	4	SCL	101	39.59	NB	WB E Brokaw Rd	S	2	M	Operational
●	4	SCL	101	40.10	NB	NB Rte 87 (Guadalupe Pkwy) / Skyport Dr	C	3	M	Operational
●	4	SCL	101	40.59	SB	EB De La Cruz Blvd / W Trimble Rd	S	3	M	Operational
●	4	SCL	101	40.65	NB	EB De La Cruz Blvd / W Trimble Rd	L	1		Operational
●	4	SCL	101	40.75	SB	WB W Trimble Rd / De La Cruz Blvd	L	2	M	Operational
●	4	SCL	101	40.81	NB	WB W Trimble Rd / De La Cruz Blvd	S	2	M	Operational
●	4	SCL	101	41.87	SB	SB Montague Expy / San Thomas Expy	L	2	M	Operational
●	4	SCL	101	41.87	SB	NB San Thomas Expy / Montague	S	2	M	Operational
●	4	SCL	101	42.08	NB	NB San Thomas Expy / Montague	L	2	M	Operational
●	4	SCL	101	42.08	NB	SB Montague Expy / San Thomas Expy	S	3	M	Operational
●	4	SCL	101	42.58	SB	NB Bowers Ave / Great America Pkwy	S	2	M	Operational
●	4	SCL	101	42.70	NB	NB Bowers Ave / Great America Pkwy	L	1		Operational
●	4	SCL	101	42.77	SB	SB Great America Pkwy / Bowers Ave	L	2	M	Operational
●	4	SCL	101	42.95	NB	SB Great America Pkwy / Bowers Ave	S	1		Operational
●	4	SCL	101	43.72	SB	NB Lawrence Expy (County Rte G2)	S	3	M	Operational
●	4	SCL	101	43.83	NB	NB Lawrence Expy (County Rte G2)	L	2	M	Operational
●	4	SCL	101	43.88	SB	SB Lawrence Expy (County Rte G2)	L	2	M	Operational
●	4	SCL	101	43.98	NB	SB Lawrence Expy (County Rte G2)	S	2	M	Operational
●	4	SCL	101	44.70	SB	NB N Fair Oaks Ave	S	2	M	Operational
●	4	SCL	101	44.87	SB	SB N Fair Oaks Ave	L	2	M	Operational
●	4	SCL	101	44.88	NB	N Fair Oaks Ave	S	2	NM	Non Op
●	4	SCL	101	45.63	SB	NB N Mathilda Ave	S	2	M	Operational
●	4	SCL	101	45.64	NB	NB N Mathilda Ave	L	2	NM	Non Op
●	4	SCL	101	45.72	SB	SB N Mathilda Ave	L	2	M	Operational
●	4	SCL	101	46.02	SB	EB Rte 237	C	1		Operational
	4	SCL	101	46.25	NB	WB Rte 237 / W Moffett Park Dr	S	1		Planned
●	4	SCL	101	46.81	SB	Ellis St	S	2	M	Operational
●	4	SCL	101	47.27	NB	Ellis St	S	2	NM	Non Op
●	4	SCL	101	47.78	SB	Moffett Blvd	S	2	M	Operational
●	4	SCL	101	47.85	NB	Moffett Blvd	L	2		Non Op

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	SCL	101	48.11	SB	N Shoreline Blvd	D	2		Operational
●	4	SCL	101	48.30	NB	NB Rte 85	C	2		Non Op
	4	SCL	101	48.36	NB	NB Rte 85 HOV	C	1	NM	Planned
●	4	SCL	101	48.71	NB	N Shoreline Blvd	D	3	NM	Non Op
●	4	SCL	101	48.88	SB	Old Middlefield Way	S	2		Operational
●	4	SCL	101	49.50	SB	Rengstorff Ave	S	2	M	Operational
	4	SCL	101	49.66	SB	EB Charleston Rd	S	1		Planned
●	4	SCL	101	49.75	NB	Rengstorff Ave	S	1		Non Op
●	4	SCL	101	50.40	NB	San Antonio Rd	D	2		Non Op
●	4	SCL	101	51.95	SB	EB Oregon Expy	S	3	M	Operational
●	4	SCL	101	52.00	SB	WB Embarcadero Rd	L	2	M	Operational
●	4	SCL	101	52.00	SB	EB Embarcadero Rd	S	1		Operational
●	4	SCL	101	52.34	NB	Embarcadero Rd / E Bayshore Rd / EB Oregon Expy	D	2		Non Op
	4	SCL	237	R0.26	WB	SB Rte 85	C	1		Planned
	4	SCL	237	R0.49	EB	NB Rte 85	C	1		Planned
	4	SCL	237	R0.65	WB	S Whisman Rd / E Dana St	S	1		Planned
	4	SCL	237	R0.87	EB	Sylvan Way / Moorpark Way	S	1		Planned
	4	SCL	237	M1.37	WB	E Middlefield Rd / W Maude Ave	S	1		Part Const
	4	SCL	237	M2.06	EB	W Maude Ave	S	1		Part Const
	4	SCL	237	2.42	EB	SB Rte 101	C	1		Planned
	4	SCL	237	2.54	WB	NB Rte 101	C	1		Planned
●	4	SCL	237	2.84	WB	N Mathilda Ave	S	1		Non Op
	4	SCL	237	3.17	EB	N Mathilda Ave	S	1		Planned
	4	SCL	237	R3.87	WB	Moffett Park Dr / Crossman Ave / N Fair Oaks Ave	S	1		Planned
●	4	SCL	237	R4.46	WB	NB Lawrence Expy / Caribbean Dr	L	1		Operational
●	4	SCL	237	R4.46	WB	SB Caribbean Dr / Lawrence Expy	S	1		Operational
●	4	SCL	237	R4.74	EB	SB Lawrence Expy / Caribbean Dr	L	1		Operational
●	4	SCL	237	R4.75	EB	NB Lawrence Expy / Caribbean Dr	S	2	M	Operational
●	4	SCL	237	R5.61	WB	Great America Pkwy	S	1		Operational
●	4	SCL	237	R6.18	EB	Great America Pkwy	S	2	M	Operational
●	4	SCL	237	6.70	WB	N First St	S	2		Operational
●	4	SCL	237	7.11	EB	N First St	S	2	M	Operational
●	4	SCL	237	8.03	WB	Zanker Rd	L	2		Operational
●	4	SCL	237	8.17	EB	Zanker Rd	S	3	M	Operational
●	4	SCL	237	8.71	WB	N McCarthy Blvd	S	2	M	Operational
	4	SCL	237	R9.05L	WB	SB Rte 880 HOV (to Mountain View)	C	1	NM	Planned
●	4	SCL	237	R9.06L	WB	Calaveras Blvd	S	2		Operational
	4	SCL	237	R9.34L	WB	SB Rte 880	C	2		Planned
	4	SCL	280	R0.26	NB	Rte 101	C	2		Planned
●	4	SCL	280	R0.48	NB	NB McLaughlin Ave	L	1		Operational
●	4	SCL	280	R0.48	NB	SB McLaughlin Ave	S	1		Operational
●	4	SCL	280	R1.19	SB	S 11th St	S	2		Operational
●	4	SCL	280	R1.37	SB	S 7th St	S	2		Operational
●	4	SCL	280	R1.59	NB	S 10th St	S	2		Operational
●	4	SCL	280	R1.85	NB	S 4th St / E Reed St	S	2		Operational
●	4	SCL	280	R2.02	SB	SB S Market St / S 1st St	L	1		Operational
●	4	SCL	280	R2.37	SB	NB Rte 87	C	1		Operational
●	4	SCL	280	R2.37	SB	SB Rte 87	C	2		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	SCL	280	R2.46	NB	S Almaden Blvd / W Reed St / Vine St	S	2		Operational
●	4	SCL	280	R2.66	SB	Bird Ave (On Rte 280 Seg)	S	1		Operational
●	4	SCL	280	R2.70	NB	NB Rte 87	C	2		Operational
●	4	SCL	280	R2.70	NB	SB Rte 87	C	1		Operational
●	4	SCL	280	R3.05	NB	Bird Ave	S	2		Operational
●	4	SCL	280	R3.81	SB	NB Southwest Expy / Meridian Ave	D	2		Operational
●	4	SCL	280	R4.15	NB	NB Meridian Ave	L	1		Operational
●	4	SCL	280	R4.29	SB	Moorpark Ave / Leigh Ave (On Rte 280 Seg)	S	2		Operational
●	4	SCL	280	R4.55	NB	Menker Ave / Parkmoor Ave / Meridian Ave	S	1		Operational
●	4	SCL	280	4.76	NB	Winchester Blvd / Tisch Way	S	2		Operational
●	4	SCL	280	L4.82	NB	Leland Ave / Parkmoor Ave	S	2		Operational
	4	SCL	280	L5.28	SB	NB Rte 17	C	2		Planned
	4	SCL	280	L5.34	NB	NB Rte 17	C	1		Planned
	4	SCL	280	L5.46	SB	SB Rte 880 / Stevens Creek Blvd	D	1		Planned
	4	SCL	280	L5.68	NB	SB Rte 880	C	1		Planned
●	4	SCL	280	5.78	SB	Saratoga Ave	S	2		Operational
●	4	SCL	280	6.09	NB	Saratoga Ave	S	2		Operational
●	4	SCL	280	6.98	SB	Lawrence Expy	S	2		Operational
●	4	SCL	280	7.63	NB	Stevens Creek Blvd / Lawrence Exp	S	2		Operational
●	4	SCL	280	8.31	SB	NB Wolfe Rd	S	2	M	Operational
●	4	SCL	280	8.31	SB	SB Wolfe Rd	L	2	M	Operational
●	4	SCL	280	8.45	NB	NB Wolfe Rd	L	2	M	Operational
●	4	SCL	280	8.46	NB	SB Wolfe Rd	S	1		Operational
●	4	SCL	280	9.27	SB	N De Anza Blvd	S	3	M	Operational
●	4	SCL	280	9.60	NB	N De Anza Blvd	S	2		Non Op
	4	SCL	280	10.51	SB	SB Rte 85	C	3	NM	Part Const
	4	SCL	280	10.52	SB	NB Rte 85 / Stevens Creek Blvd	D	1		Part Const
	4	SCL	280	10.96	NB	SB Rte 85	C	1		Planned
	4	SCL	280	10.97	NB	NB Rte 85	C	2		Planned
	4	SCL	280	11.34	SB	NB Foothill Expy	S	1		Planned
	4	SCL	280	11.34	SB	SB Foothill Expy	L	1		Planned
	4	SCL	280	11.41	NB	NB Foothill Expy	L	1		Planned
	4	SCL	280	14.19	SB	Magdalena Rd / Eastbrook Ave	S	1		Planned
	4	SCL	280	14.29	NB	Magdalena Rd	S	1		Planned
	4	SCL	280	14.94	SB	EB El Monte Rd	S	1		Planned
	4	SCL	280	14.94	SB	WB El Monte Rd	L	1		Planned
	4	SCL	280	15.20	NB	EB El Monte Rd	L	1		Planned
	4	SCL	280	15.21	NB	WB El Monte Rd	S	1		Planned
	4	SCL	280	18.28	SB	SB Page Mill Rd	L	2		Planned
	4	SCL	280	18.28	SB	NB Page Mill Rd	S	1		Planned
	4	SCL	280	18.53	NB	SB Page Mill Rd	S	1		Planned
	4	SCL	280	18.54	NB	NB Page Mill Rd	L	1		Planned
	4	SCL	280	20.48	SB	NB Alpine Rd	S	1		Planned
●	4	SCL	680	M0.20	SB	S King Rd	S	2		Operational
	4	SCL	680	M0.26	NB	SB Rte 101	C	2		Planned
	4	SCL	680	M0.26	NB	NB Rte 101	C	2		Planned
●	4	SCL	680	M0.53	NB	S King Rd	S	2		Operational
●	4	SCL	680	M0.98	SB	S Jackson Ave	S	3	M	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	SCL	680	M1.28	SB	WB E Capitol Expy	L	2		Operational
●	4	SCL	680	M1.47	SB	WB Rte 130 / Alum Rock Ave	L	1		Operational
●	4	SCL	680	M1.58	NB	WB E Capitol Expy	S	3		Operational
●	4	SCL	680	M1.71	NB	EB Rte 130 / Alum Rock Ave	L	1		Operational
●	4	SCL	680	M1.87	NB	WB Rte 130 / Alum Rock Ave	S	2	M	Operational
●	4	SCL	680	M2.16	SB	McKee Rd	D	2		Operational
●	4	SCL	680	M2.59	NB	McKee Rd	D	2		Operational
●	4	SCL	680	M3.63	SB	Berryessa Rd	D	2		Operational
●	4	SCL	680	M4.06	NB	Berryessa Rd	D	2		Operational
●	4	SCL	680	M4.47	SB	Hostetter Rd	D	2		Operational
●	4	SCL	680	M4.99	SB	SB N Capitol Ave	S	2		Operational
●	4	SCL	680	M5.34	NB	N Capitol Ave	S	2	M	Operational
●	4	SCL	680	M5.94	SB	Montague Expy / Landess Ave	D	2		Operational
●	4	SCL	680	M6.41	NB	Landess Ave / Montague Expy	D	2		Operational
●	4	SCL	680	M7.39	SB	E Calaveras Blvd / Rte 237	D	2		Operational
●	4	SCL	680	M7.99	NB	E Calaveras Blvd	D	2		Operational
●	4	SCL	680	M8.29	SB	Jacklin Rd	S	2	M	Operational
●	4	SCL	680	M8.76	NB	Jacklin Rd	S	2	M	Non Op
●	4	SCL	680	M9.93	SB	Scott Creek Rd	S	2		Operational
●	4	SCL	880	0.03	SB	Stevens Creek Blvd	S	1		Operational
●	4	SCL	880	0.28	NB	NB Rte 280	C	1		Operational
	4	SCL	880	0.33	NB	SB Rte 280	C	2		Planned
●	4	SCL	880	0.53	NB	WB Stevens Creek Blvd	S	1		Operational
●	4	SCL	880	0.57	NB	EB Stevens Creek Blvd	L	1		Operational
●	4	SCL	880	1.25	SB	SB Washington St / N Bascom Ave	S	2		Operational
●	4	SCL	880	1.28	SB	NB N Bascom Ave / Washington St	L	1		Operational
●	4	SCL	880	1.33	NB	N Bascom Ave	S	1		Operational
●	4	SCL	880	1.94	SB	SB Rte 82 / The Alameda	S	1		Operational
●	4	SCL	880	2.04	NB	SB Rte 82 / The Alameda	L	1		Non Op
●	4	SCL	880	2.10	SB	NB Rte 82 / The Alameda	L	1		Operational
●	4	SCL	880	2.20	NB	NB Rte 82 / The Alameda	S	1		Non Op
●	4	SCL	880	2.55	SB	SB Coleman Ave	S	3	M	Operational
●	4	SCL	880	2.69	SB	NB Coleman Ave	L	2	M	Operational
●	4	SCL	880	2.69	SB	Airport Blvd (SJ International Airport)	S	2	M	Operational
●	4	SCL	880	2.84	NB	Coleman Ave / McKendrie St	S	3	NM	Non Op
●	4	SCL	880	3.44	SB	SB N First St	S	1		Operational
●	4	SCL	880	3.51	NB	SB N First St	L	1		Non Op
●	4	SCL	880	3.64	SB	NB N First St	L	1		Operational
●	4	SCL	880	3.73	NB	NB N First St	S	1		Non Op
	4	SCL	880	3.94	SB	SB Rte 101	C	1		Part Const
	4	SCL	880	4.02	NB	SB Rte 101	C	1		Part Const
	4	SCL	880	4.13	SB	NB Rte 101	C	1		Part Const
	4	SCL	880	4.21	NB	NB Rte 101	C	1		Part Const
●	4	SCL	880	4.39	SB	Old Bayshore Hwy	L	2		Operational
●	4	SCL	880	4.50	NB	Old Bayshore Hwy / E Gish Rd	S	2	NM	Non Op
●	4	SCL	880	5.21	NB	E Brokaw Rd	H	2	NM	Non Op
●	4	SCL	880	5.22	SB	E Brokaw Rd / Otoole Ave	S	3	M	Operational
●	4	SCL	880	6.45	SB	SB Montague Expy	L	1		Operational
●	4	SCL	880	6.54	SB	NB Montague Expy	S	1		Operational
●	4	SCL	880	6.97	NB	Montague Expy	D	2		Non Op

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	SCL	880	7.53	SB	E Tasman Dr / Great Mall Pkwy	S	2		Operational
●	4	SCL	880	7.65	NB	Great Mall Pkwy / E Tasman Dr	L	2		Operational
●	4	SCL	880	7.99	SB	Rte 237 / W Calaveras Blvd	C	2		Operational
●	4	SCL	880	8.39	NB	EB Calaveras Blvd	L	1		Operational
●	4	SCL	880	8.54	NB	W Calaveras Blvd / S Abbott Ave	S	2	M	Operational
●	4	SCL	880	8.82	NB	EB Rte 237	C	3		Operational
	4	SCL	880	8.82	NB	EB Rte 237 HOV (to Oakland)	C	1	NM	Planned
●	4	SCL	880	10.26	SB	EB Dixon Landing Rd	S	2	M	Operational
	4	SF	80	5.04E	WB	SB Treasure Island Rd	S	1		Planned
	4	SF	80	7.67	WB	Macalla Rd / N Gate Rd	L	2	NM	Planned
	4	SF	80	7.87	EB	Hillcrest Rd / S Gate Rd	S	1		Planned
	4	SF	101	0.60	SB	WB Third St / SB Bayshore Blvd	D	1		Planned
	4	SF	101	0.69	NB	NB Bayshore Blvd	S	1		Planned
	4	SF	101	1.42	SB	Rte 280	C	2		Planned
	4	SF	101	1.64	SB	San Bruno / WB Silliman St	H	1		Planned
	4	SF	101	2.00	SB	EB Alemany Blvd / WB Industrial St	D	1		Planned
	4	SF	101	2.16	NB	EB Alemany Blvd / San Bruno Blvd	D	1		Planned
	4	SF	101	2.24	NB	WB Rte 280	C	2		Planned
	4	SF	101	2.91	SB	WB Cesar Chavez St / Precita Ave	S	1		Planned
	4	SF	101	2.97	SB	SB Potrero Ave	S	1		Planned
	4	SF	101	3.11	NB	WB Cesar Chavez St	S	1		Planned
	4	SF	101	3.11	NB	NB Bayshore Blvd	S	1		Planned
	4	SF	101	3.20	NB	Girard Rd / Marina Blvd	S	2		Planned
●	4	SF	101	6.80	SB	NB Rte 1 (Veterans Blvd)	C	1		Non Op
	4	SF	101	9.60	NB	NB Rte 1 (Veterans Blvd)	C	2		Planned
	4	SF	280	R0.04	NB	John Daly Blvd / Junipero Serra Blvd	S	1		Planned
	4	SF	280	R0.87	NB	San Jose Ave (Rte 82) / Alemany Blvd	S	1		Planned
	4	SF	280	R1.56	SB	Geneva Ave	S	1		Planned
	4	SF	280	R1.92	NB	Geneva Ave / Ocean Ave	D	2		Planned
	4	SF	280	R2.57	SB	SB San Jose Ave / Bosworth St / Lyell St	D	1		Planned
	4	SF	280	R2.83	NB	Monterey Ave / Circular Ave	D	1		Planned
	4	SF	280	R3.45	SB	SB Alemany Blvd / Ellsworth St	S	1		Planned
	4	SF	280	R3.75	NB	NB Alemany Blvd / Trumbull St / Congdon St	D	2		Planned
	4	SF	280	R4.05	SB	SB Rte 101	C	2		Planned
	4	SF	280	R4.06	SB	NB Rte 101	C	2		Planned
	4	SF	280	R4.52	NB	NB Rte 101	C	2		Planned
	4	SF	280	R5.76	SB	Pennsylvania Ave / Cesar Chavez St	H	1		Planned
	4	SF	280	R6.06	NB	25 St / Indiana St	S	1		Planned
	4	SF	280	R6.52	SB	Mariposa St / Pennsylvania St	S	1		Planned
	4	SF	280	R6.64	NB	18th St / Minnesota St	S	1		Planned
	4	SM	84	24.6	SB	SB Rte 82 (El Camino Real) / Redwood Ave	S	1		Planned
	4	SM	84	24.63	NB	SB Rte 82 (El Camino Real) / Hazel Ave / Linden St	H	1		Planned
	4	SM	84	24.78	SB	NB Rte 82 (El Camino Real) / Main St	H	1		Planned
	4	SM	84	24.83	NB	NB Rte 82 (El Camino Real) / Laurel St	H	1		Planned
	4	SM	92	T6.92	WB	NB Rte 280	C	1		Planned
	4	SM	92	R7.53	EB	NB Rte 280	C	1		Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	4	SM	92	R7.53	EB	SB Rte 280	C	1		Planned
	4	SM	92	R7.94	WB	Polhemus Rd / Ralston Ave	L	1		Planned
	4	SM	92	R8.13	EB	Ralston Ave / Polhemus Rd	S	1		Planned
	4	SM	92	R8.42	WB	De Anza Blvd	S	1		Planned
	4	SM	92	R8.85	EB	De Anza Blvd	S	1		Planned
	4	SM	92	R9.27	WB	W Hillsdale Blvd	S	1		Planned
	4	SM	92	R9.37	EB	EB W Hillsdale Blvd	L	1		Planned
	4	SM	92	R9.53	EB	WB W Hillsdale Blvd	S	1		Planned
	4	SM	92	R10.46	WB	Alameda de las Pulgas	S	1		Planned
	4	SM	92	R10.69	EB	Alameda de las Pulgas	S	1		Planned
	4	SM	92	R11.06	WB	SB Rte 82	S	1		Planned
	4	SM	92	R11.17	EB	SB Rte 82	L	1		Planned
	4	SM	92	R11.25	WB	NB Rte 82	L	1		Planned
	4	SM	92	R11.33	EB	NB Rte 82	S	1		Planned
	4	SM	92	R11.47	WB	Concar Dr / S Delaware St	H	1		Planned
	4	SM	92	R11.74	EB	S Delaware St / 19th Ave	S	1		Planned
	4	SM	92	R11.92	WB	SB Rte 101	C	1		Planned
	4	SM	92	R11.96	WB	NB Rte 101	C	1		Planned
	4	SM	92	R12.37	EB	NB Rte 101	C	1		Planned
	4	SM	92	R12.37	EB	SB Rte 101	C	2		Planned
	4	SM	92	R12.82	WB	Fashion Island Blvd / Mariners Island Blvd	S	2		Part Const
	4	SM	92	R12.95	EB	Mariners Island Blvd / Edgewater Blvd	H	1		Part Const
	4	SM	92	R13.41	WB	Chess Dr / Foster City Blvd	H	2		Planned
	4	SM	92	R13.63	EB	Metro Center Blvd / Foster City Blvd	H	1		Part Const
●	4	SM	101	0.7	SB	University Ave	S	2		Operational
●	4	SM	101	1.09	NB	NB University Ave (Rte 109)	L	1		Operational
●	4	SM	101	1.16	NB	University Ave (Rte 109) / Donohoe St	H	1		Operational
●	4	SM	101	1.75	SB	NB Willow Rd	S	1		Operational
	4	SM	101	1.85	NB	NB Willow Rd	L	1		Part Const
●	4	SM	101	1.89	SB	SB Willow Rd	L	1		Operational
	4	SM	101	1.96	NB	SB Willow Rd	S	1		Part Const
●	4	SM	101	3.48	SB	NB Marsh Rd	S	2	M	Operational
●	4	SM	101	3.54	NB	NB Marsh Rd	L	1		Operational
●	4	SM	101	3.65	SB	SB Marsh Rd	L	1		Operational
●	4	SM	101	3.7	NB	SB Marsh Rd	S	3	M	Operational
●	4	SM	101	5.17	SB	Rte 84 / Woodside Rd	S	3	M	Operational
●	4	SM	101	5.33	NB	NB Rte 84 / Seaport Blvd / Woodside Rd	L	2		Operational
●	4	SM	101	5.47	NB	SB Seaport Blvd / Woodside Rd	S	2	M	Operational
●	4	SM	101	6.55	SB	EB Whipple Ave	S	3	M	Operational
●	4	SM	101	6.59	NB	EB Whipple Ave	L	2		Operational
●	4	SM	101	6.67	NB	WB Whipple Ave	S	1		Operational
●	4	SM	101	6.67	SB	WB Whipple Ave	L	1		Operational
●	4	SM	101	7.47	SB	Brittan Ave	H	2		Operational
●	4	SM	101	7.79	SB	Holly St	D	2		Operational
●	4	SM	101	8.54	NB	EB Holly St	L	2	M	Operational
●	4	SM	101	8.54	NB	WB Holly St	S	2	M	Operational
●	4	SM	101	9.11	SB	Ralston Ave / Harbor Blvd	D	3	M	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	SM	101	9.69	NB	EB Ralston Ave / Marine Pkwy	L	2	M	Operational
●	4	SM	101	9.69	NB	WB Marine Pkwy / Ralston Ave	S	3	M	Operational
●	4	SM	101	10.88	SB	EB E Hillsdale Blvd	S	1		Operational
●	4	SM	101	11.06	SB	WB E Hillsdale Blvd	L	2		Operational
●	4	SM	101	11.17	NB	EB E Hillsdale Blvd	L	2	M	Operational
●	4	SM	101	11.35	NB	WB E Hillsdale Blvd	S	1		Operational
●	4	SM	101	11.69	SB	EB Rte 92	C	1		Operational
●	4	SM	101	11.81	SB	Fashion Island Blvd / 19th Ave	S	2	M	Operational
	4	SM	101	11.85	NB	EB Rte 92	C	1		Planned
	4	SM	101	11.92	SB	WB Rte 92	C	1		Planned
●	4	SM	101	12.03	NB	Fashion Island Blvd	S	2	M	Operational
●	4	SM	101	12.05	NB	WB Rte 92	C	2		Non Op
●	4	SM	101	12.72	NB	Kehoe Ave / Norton St	S	1		Operational
●	4	SM	101	13.36	SB	EB E 4th Ave	S	2		Operational
●	4	SM	101	13.36	SB	WB E 3rd Ave	L	1		Operational
●	4	SM	101	13.62	NB	E 3rd Ave / E 4th Ave / J Hart Clinton Dr	D	2		Operational
●	4	SM	101	14.30	SB	E Poplar Ave / N Amphlett Blvd	H	1		Operational
●	4	SM	101	14.93	NB	Airport Blvd / Peninsula Ave / Coyote Point Dr	H	2		Operational
●	4	SM	101	16.05	NB	Anza Blvd / Airport Blvd	H	1		Operational
	4	SM	101	16.46	SB	Rollins Rd / Broadway / Cadillac Way	S	2		Part Const
●	4	SM	101	16.79	NB	Old Bayshore Hwy / Airport Blvd / Broadway	H	3	M	Operational
●	4	SM	101	17.84	SB	EB E Millbrae Ave	S	3	M	Operational
●	4	SM	101	17.94	SB	WB E Millbrae Ave	L	1		Operational
●	4	SM	101	18.06	NB	E Millbrae Ave / Bayshore Hwy / S McDonnell Rd	D	2		Operational
●	4	SM	101	18.93	SB	SFO Domestic Terminal (Lower Level)	S	2		Operational
●	4	SM	101	19.11	SB	SFO International Terminal (Upper Level)	S	2		Operational
●	4	SM	101	19.29	NB	SFO Domestic Terminal (lower level)	S	1		Operational
●	4	SM	101	19.45	SB	EB Rte 380	C	2		Operational
●	4	SM	101	R20.26	SB	San Bruno Ave (On Rte 101 Seg)	S	2		Operational
●	4	SM	101	R20.48	SB	WB Rte 380 / N Access Rd	D	2		Operational
●	4	SM	101	R20.78	NB	San Bruno Ave / SFO Domestic / International Terminals	D	2		Operational
●	4	SM	101	20.84	NB	N Access Rd (WB Rte 380)	S	1		Operational
●	4	SM	101	20.85	NB	EB Rte 380	C	2		Operational
●	4	SM	101	R20.98	NB	S. Airport Blvd / WB Rte 380 On-ramp	S	1		Operational
●	4	SM	101	21.36	SB	Produce Ave / Terminal Ct / San Mateo Ave / S Airport Blvd	S	3		Operational
●	4	SM	101	21.50	NB	S Airport Blvd	H	1		Operational
●	4	SM	101	22.14	NB	E Grand Ave / Airport Blvd	S	1		Operational
●	4	SM	101	22.44	SB	Oyster Point Blvd / Dubuque Ave	S	2		Operational
●	4	SM	101	22.77	SB	Bay Shore Blvd / Airport Blvd	H	2	M	Operational
●	4	SM	101	22.92	NB	Oyster Point Blvd	S	3	M	Operational
●	4	SM	101	23.91	NB	Sierra Point Pkwy / Marina Blvd	S	1		Operational
●	4	SM	101	24.77	SB	Sierra Point Pkwy / Lagoon Rd	H	1		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	SM	101	25.84	NB	Harney Way / Alana Way	H	1		Operational
●	4	SM	101	25.91	SB	Harney Way / Beatty Ave / Candlestick Park	S	2		Operational
	4	SM	280	R0.07	SB	SB Alpine Rd	L	1		Planned
	4	SM	280	R0.21	NB	Alpine Rd	S	1		Planned
	4	SM	280	R1.46	SB	EB Sand Hill Rd	S	1		Planned
	4	SM	280	R1.46	SB	WB Sand Hill Rd	L	1		Planned
	4	SM	280	R1.75	NB	EB Sand Hill Rd	L	1		Planned
	4	SM	280	R1.75	NB	WB Sand Hill Rd	S	1		Planned
	4	SM	280	R3.15	SB	Rte 84 (Woodside Rd)	S	1		Planned
	4	SM	280	R3.50	NB	Rte 84 (Woodside Rd)	S	1		Planned
	4	SM	280	R4.54	SB	Farm Hill Blvd	S	1		Planned
	4	SM	280	R4.84	NB	Farm Hill Blvd	S	1		Planned
	4	SM	280	R6.45	SB	Canada Rd	S	1		Planned
	4	SM	280	R6.57	NB	Canada Rd	H	1		Planned
	4	SM	280	R6.69	SB	Edgewood Rd	L	1		Planned
	4	SM	280	6.86	NB	Edgewood Rd	S	1		Planned
	4	SM	280	7.56	NB	Vista Point (Hassler Trail)	S	1		Planned
	4	SM	280	8.77	NB	Access Rd / Vista Point	S	1		Planned
	4	SM	280	R9.21	SB	Gate (Sheep Camp Trail)	S	1		Planned
	4	SM	280	9.54	NB	Gate (Sheep Camp Trail & Gate Vista Point)	S	1		Planned
	4	SM	280	R10.44	SB	WB Rte 92	C	2		Planned
	4	SM	280	10.73	NB	EB Rte 92	C	1		Planned
	4	SM	280	R10.75	SB	EB Rte 92	S	1		Planned
	4	SM	280	10.99	NB	WB Rte 92	C	1		Planned
	4	SM	280	R12.19	SB	Rte 35 / Bunker Hill Dr	H	1		Planned
	4	SM	280	R12.41	NB	Bunker Hill Dr	S	1		Planned
	4	SM	280	R14.11	SB	Hayne Rd / Skyline Blvd	S	1		Planned
	4	SM	280	R14.54	NB	Hayne Rd / Black Mountain Rd	S	1		Planned
	4	SM	280	R17.01	SB	Trousdale Dr / Skyline Blvd (Rte 35)	S	1		Planned
	4	SM	280	R17.35	NB	Skyline Blvd (Rte 35) / Trousdale Dr	S	1		Planned
	4	SM	280	R17.78	SB	Hillcrest Blvd / Skyline Blvd (Rte 35)	S	1		Planned
	4	SM	280	R18.68	NB	Larkspur Blvd / Skyline Blvd (Rte 35)	S	1		Planned
	4	SM	280	R19.09	SB	SB Rte 35	S	1		Planned
	4	SM	280	R20.26	NB	Cunningham Way / Crystal Springs Ave	S	1		Planned
	4	SM	280	R20.61	SB	W San Bruno Ave / Sneath Ln	S	1		Planned
	4	SM	280	R20.88	SB	WB Rte 380	C	2		Planned
	4	SM	280	R21.22	NB	WB Rte 380	C	3		Planned
●	4	SM	280	R21.36	NB	Sneath Ln / W San Bruno Ave	D	2		Operational
●	4	SM	280	R21.93	SB	Avalon Dr	S	2	M	Operational
●	4	SM	280	R22.54	SB	EB Westborough Blvd	S	2		Operational
●	4	SM	280	R22.62	NB	EB Westborough Blvd	L	1		Operational
●	4	SM	280	R22.99	NB	Junipero Serra Blvd / Westborough Blvd	S	2	M	Operational
●	4	SM	280	R24.08	SB	Hickey Blvd	S	2		Operational
●	4	SM	280	R24.18	NB	Hickey Blvd / Imperial Way	L	1		Operational
●	4	SM	280	R24.78	NB	Serramonte Blvd / Junipero Serra Blvd	S	2		Operational
●	4	SM	280	R25.09	SB	NB Rte 1	C	1		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	SM	280	R25.22	SB	Sullivan Ave / D St	D	1		Operational
	4	SM	280	R25.49	NB	NB Rte 1	C	3		Planned
	4	SM	280	R26.11	NB	Washington Ave	S	1		Planned
	4	SM	280	M26.97L	SB	SB Rte 1	C	2		Planned
●	4	SM	280	M27.01	SB	John Daly Blvd / Alemany Blvd	D	2		Operational
	4	SM	380	T4.89	EB	SB Rte 280	C	2		Planned
	4	SM	380	T4.90	EB	NB Rte 280	C	2		Planned
	4	SM	380	5.30	WB	SB El Camino Real (Rte 82)	S	1		Planned
	4	SM	380	5.41	EB	SB El Camino Real (Rte 82)	L	1		Planned
	4	SM	380	5.52	WB	NB El Camino Real (Rte 82)	L	1		Planned
	4	SM	380	5.60	EB	NB El Camino Real (Rte 82)	S	1		Planned
	4	SM	380	5.98	WB	NB Rte 101	C	2		Planned
	4	SM	380	6.07	WB	SB Rte 101	C	2		Planned
	4	SM	380	6.40	EB	SB Rte 101	C	1		Planned
	4	SM	380	6.41	EB	NB Rte 101	C	1		Planned
	4	SM	380	6.46	WB	N Access Rd	S	1		Planned
	4	SM	380	6.46	WB	S Airport Blvd	S	2		Planned
	4	SOL	80	1.07	WB	SB Sonoma Blvd (Rte 29)	S	1		Planned
	4	SOL	80	1.24	WB	W Lincoln Rd / Sequoia Ave / Maritime Academy Dr / Sonoma Blvd (Rte 29)	H	1		Planned
	4	SOL	80	1.72	EB	E Lincoln Rd / Magazine St	H	1		Planned
	4	SOL	80	1.73	WB	Magazine St / W Lincoln Rd / Pint St	H	1		Planned
	4	SOL	80	2.04	WB	San Mique Rd / San Diego Dr	H	1		Planned
	4	SOL	80	2.15	WB	WB Rte 780	C	1		Planned
	4	SOL	80	2.29	WB	EB Rte 780	C	1		Planned
	4	SOL	80	2.33	EB	EB Rte 780	C	1		Planned
	4	SOL	80	2.33	EB	WB Rte 780	C	1		Planned
	4	SOL	80	2.80	WB	Georgia St / 14th St / Campbell Ave	H	1		Planned
	4	SOL	80	2.97	EB	Georgia St / Miller Ave / Steffan St	H	1		Planned
	4	SOL	80	3.13	WB	Solano Ave / Springs Rd / Mariposa St	S	1		Planned
	4	SOL	80	3.17	EB	Florida St / E Lincoln Rd / Solano Ave / Springs Rd	H	1		Planned
	4	SOL	80	3.42	WB	WB Tennessee St / Mariposa St	L	1		Planned
	4	SOL	80	3.42	WB	EB Tennessee St / Mariposa St	S	1		Planned
	4	SOL	80	3.60	EB	Admiral Callaghan Ln / Tennessee St	H	1		Planned
	4	SOL	80	3.60	EB	Humboldt St / Tennessee St	H	1		Planned
●	4	SOL	80	4.32	WB	Redwood St	S	2	M	Operational
●	4	SOL	80	4.58	EB	Redwood St / Admiral Callaghan Ln	H	1		Operational
●	4	SOL	80	5.53	WB	EB Rte 37 (Columbus Pkwy)	C	1		Operational
●	4	SOL	80	5.71	WB	WB Columbus Pkwy (Rte 37)	L	1		Operational
●	4	SOL	80	5.74	EB	WB Columbus Pkwy (Rte 37)	S	1		Operational
●	4	SOL	80	6.09	EB	EB Columbus Pkwy (Rte 37)	S	2		Operational
●	4	SOL	80	7.95	WB	American Canyon Rd	S	1		Operational
●	4	SOL	80	8.36	EB	American Canyon Rd / Hiddenbrook Pkwy	S	1		Operational
●	4	SOL	80	R11.19	WB	Red Top Rd	S	1		Operational
●	4	SOL	80	R11.51	EB	Red Top Rd	S	1		Operational
●	4	SOL	80	12.26	EB	EB Rte 12 (Lincoln Hwy)	C	2		Operational
●	4	SOL	80	12.60	WB	Green Valley Rd / Lopes Rd	S	1		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	SOL	80	12.92	EB	NB Rte 680 / Lopes Rd / Green Valley Rd (On Rte 80 Seg)	D	3		Operational
●	4	SOL	80	12.98	WB	NB Rte 680	C	1		Operational
●	4	SOL	80	13.64	EB	Pittman Rd / Suisun Valley Rd	S	3	M	Operational
●	4	SOL	80	15.45	WB	WB Rte 12	C	3		Operational
●	4	SOL	80	16.02	WB	Chadbourne Rd / Abernathy Rd / Suisun Pkwy	S	1		Operational
●	4	SOL	80	16.29	EB	Chadbourne Rd / Auto Mall Pkwy / Suisun Pkwy	S	2		Operational
●	4	SOL	80	16.91	EB	Auto Mall Pkwy / Raleigh Dr	S	1		Operational
●	4	SOL	80	17.07	WB	Rockville Rd / W Texas St	S	2	M	Operational
●	4	SOL	80	17.53	EB	Beck Ave / W Texas St	S	2		Operational
●	4	SOL	80	17.86	WB	EB Travis Blvd	H	1		Operational
●	4	SOL	80	17.94	WB	WB Travis Blvd	L	1		Operational
●	4	SOL	80	18.08	EB	Travis Blvd	S	2		Operational
●	4	SOL	80	18.92	WB	Hilborn Rd / Waterman Blvd / Air Base Pkwy	S	3	M	Operational
●	4	SOL	80	19.28	EB	Air Base Pkwy / Waterman Blvd	S	2	M	Operational
●	4	SOL	80	21.02	WB	N Texas St / Lyon Rd / Manuel Campos Pkwy	H	2		Operational
●	4	SOL	80	21.03	EB	Manuel Campos Pkwy / N Texas St	S	2	M	Operational
●	4	SOL	80	R23.06	WB	Cherry Glen Rd / Lagoon Valley Rd	S	1		Operational
●	4	SOL	80	23.24	EB	Lagoon Valley Rd / Cherry Glen Rd	S	1		Operational
●	4	SOL	80	23.73	WB	Cherry Glen Rd / Pleasant Valley Rd / Rivera Rd	S	1		Operational
●	4	SOL	80	23.93	EB	Pena Adobe / Rd Rivera Rd / Pleasant Valley Rd	L	1		Operational
●	4	SOL	80	R25.12	WB	Merchant St / Alamo Dr	S	2		Operational
●	4	SOL	80	R25.38	EB	Alamo Dr / Butcher Rd	S	1		Operational
●	4	SOL	80	R25.83	WB	Hickory Ln / Davis St	S	1		Operational
●	4	SOL	80	R25.86	EB	Bella Vista Rd / Davis St	S	1		Operational
●	4	SOL	80	R26.27	WB	Mason St / Depot St	S	1		Operational
●	4	SOL	80	R26.36	EB	Cliffside Dr / Peabody Rd	H	2		Operational
●	4	SOL	80	R27.12	EB	SB Allison Dr / E Monte Vista Ave	L	2	M	Operational
●	4	SOL	80	R27.30	WB	E Monte Vista Ave / Browns Valley Pkwy	S	2		Operational
●	4	SOL	80	R27.35	EB	NB Allison Dr / Nut Tree Pkwy / Monte Vista	S	2		Operational
●	4	SOL	80	R27.54	WB	E Monta Vista Ave / Nut Tree Village	H	2		Operational
●	4	SOL	80	R28.11	WB	SB Rte 505	C	2		Operational
●	4	SOL	80	R28.27	EB	SB Rte 505 / County Airport Rd / E Monte Vista Ave	S	1		Operational
●	4	SOL	80	R28.39	EB	Orange Dr / Lawrence Dr / Nut Tree	S	2	NM	Non Op
●	4	SOL	80	29.85	EB	EB Vaca Valley Pkwy / SB Leisure Town Rd	L	1		Non Op
●	4	SOL	80	29.86	WB	EB Vaca Valley Pkwy / SB Leisure Town Rd	S	1		Non Op
	4	SOL	80	29.92	WB	NB Leisure Town Rd / WB Vaca Valley Pkwy	L	1		Part Const

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	4	SOL	80	30.02	EB	NB Leisure Town Rd / WB Vaca Valley Pkwy	S	1		Part Const
	4	SOL	80	31.18	WB	N Meridian Rd	S	1		Planned
	4	SOL	80	31.37	EB	N Meridian Rd / Weber Rd	H	1		Planned
	4	SOL	80	31.62	WB	Midway Rd / Oday Rd	H	1		Planned
	4	SOL	80	32.79	EB	Midway Rd / Lewis Rd	S	1		Planned
	4	SOL	80	35.51	EB	W A St / W Dixon Ave / Batavia Rd	H	1		Planned
	4	SOL	80	35.55	WB	W Dixon Ave / W A St / Schroeder Rd	L	1		Planned
	4	SOL	80	36.86	EB	Pitt School Rd / Stratford Ave	S	1		Planned
	4	SOL	80	36.94	WB	Pitt School Rd	H	1		Planned
	4	SOL	80	38.14	WB	Currey Rd / Milk Farm Rd	S	1		Planned
	4	SOL	80	38.28	WB	NB Rte 113 (N 1st St)	H	1		Planned
	4	SOL	80	38.38	EB	NB Rte 113 (N 1st St)	S	1		Planned
	4	SOL	80	39.73	EB	Pedrick Rd / Sparling Rd	L	1		Planned
	4	SOL	80	39.76	WB	Pedrick Rd / Sievers Rd	L	1		Planned
	4	SOL	80	41.02	WB	Kidwell Rd / Olmo Ln	S	1		Planned
	4	SOL	80	41.51	EB	Kidwell Rd / Sparling Rd	S	1		Planned
	4	SOL	80	42.53	WB	SB Rte 113	C	2		Planned
	4	SOL	80	R43.21	WB	Old Davis Rd	S	1		Planned
	4	SOL	80	R43.38	EB	SB Rte 113	C	2		Planned
	4	SOL	80	R43.55	EB	Old Davis Rd	S	2		Planned
	4	SOL	505	R0.19	NB	Oranage Dr / EB Rte 80	D	1		Planned
	4	SOL	505	R0.19	NB	WB Rte 80	C	1		Planned
	4	SOL	505	R1.25	SB	Vaca Valley Pkwy	S	1		Planned
	4	SOL	505	R1.66	NB	Vaca Valley Pkwy	S	1		Planned
	4	SOL	505	R2.94	SB	Midway Rd	S	1		Planned
	4	SOL	505	R3.24	NB	Midway Rd	S	1		Planned
	4	SOL	505	R5.46	SB	Allendale Rd	S	1		Planned
	4	SOL	505	R5.69	NB	Allendale Rd	S	1		Planned
	4	SOL	505	R10.26	SB	Johnson Rd	H	1		Planned
	4	SOL	505	R10.42	NB	Gaddini Rd	H	1		Planned
	4	SOL	680	R0.41	NB	EB Rte 780	C	2		Planned
	4	SOL	680	0.68	SB	EB Rte 780	C	2		Planned
	4	SOL	680	R0.83	SB	Bayshore Rd	S	1		Planned
	4	SOL	680	R1.46	NB	Industrial Way	S	1		Planned
	4	SOL	680	R2.66	SB	Lake Herman Rd / Lopes Rd	S	1		Planned
	4	SOL	680	R2.79	NB	Lake Herman Rd / Goodyear Rd	L	1		Planned
	4	SOL	680	R4.87	SB	Parish Rd / Lopes Rd	S	1		Planned
	4	SOL	680	R5.17	NB	Parish Rd / Goodyear Rd	S	1		Planned
	4	SOL	680	R7.22	SB	Marshview Rd / Lopes Rd	S	1		Planned
	4	SOL	680	R7.43	NB	Marshview Rd / Goodyear Rd	S	1		Planned
	4	SOL	680	R9.87	SB	Gold Hill Rd / Lopes Rd	S	1		Planned
	4	SOL	680	R10.18	NB	Gold Hill Rd / Ramsey Rd	S	1		Planned
	4	SOL	680	12.99	SB	WB Rte 80	C	2		Planned
	4	SOL	680	13.00	SB	EB Rte 12 / Rte 80	C	1		Planned
	4	SOL	780	0.88	WB	NB Rte 680	C	1		Planned
	4	SOL	780	0.88	WB	SB Rte 680	C	1		Planned
	4	SOL	780	1.43	EB	E 5th St	S	1		Planned
	4	SOL	780	1.73	WB	E 5th St	S	1		Planned
	4	SOL	780	1.88	EB	E 2nd St	S	1		Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	4	SOL	780	2.20	WB	E 2nd St	S	1		Planned
	4	SOL	780	3.06	EB	W 7th St / Southhampton Rd	L	1		Planned
	4	SOL	780	3.06	WB	Southhampton Rd / W 7th St	S	1		Planned
	4	SOL	780	3.66	EB	Southhampton Rd / W Military	S	1		Planned
	4	SOL	780	4.16	WB	W K St / W Military	S	1		Planned
	4	SOL	780	4.68	EB	Rose Dr / Columbus Pkwy	S	1		Planned
	4	SOL	780	4.73	WB	Columbus Pkwy	H	1		Planned
	4	SOL	780	5.92	EB	Glen Cove Rd	S	2		Planned
	4	SOL	780	6.09	WB	Glen Cove Rd	S	1		Planned
	4	SOL	780	6.91	EB	Spruce St / Laurel St	H	1		Planned
	4	SOL	780	6.97	WB	Cedar St / Reis Ave / Laurel St	H	1		Planned
	4	SOL	780	7.07	EB	EB Rte 80	C	1		Planned
	4	SOL	780	7.13	WB	EB Rte 80	C	1		Planned
	4	SOL	780	7.25	EB	WB Rte 80	C	1		Planned
	4	SOL	780	7.32	WB	WB Rte 80	C	1		Planned
	4	SON	101	0.19	NB	San Antonio Rd	S	1		Planned
●	4	SON	101	2.63	SB	Kastania Rd / S Petaluma Blvd	S	2		Non Op
	4	SON	101	2.70	NB	S Petaluma Blvd / Kastania Rd	H	2		Planned
	4	SON	101	3.80	SB	Rte 116 / Lakeville St / Caulfield Ln	H	1		Planned
	4	SON	101	3.84	NB	Rte 116 / Lakeville Hwy	S	1		Planned
●	4	SON	101	4.67	SB	E Washington St	S	2	NM	Non Op
●	4	SON	101	4.70	NB	E Washington St	L	1		Non Op
●	4	SON	101	4.70	NB	E Washington St	S	2	NM	Non Op
●	4	SON	101	7.58	SB	NB N Petaluma Blvd / N Old Redwood Hwy	H	1		Non Op
●	4	SON	101	7.63	NB	NB N Old Redwood Hwy	L	1		Non Op
●	4	SON	101	7.67	SB	SB N Petaluma Blvd / N Old Redwood Hwy	L	1		Non Op
●	4	SON	101	7.71	NB	SB N Old Redwood Hwy	S	1		Non Op
●	4	SON	101	8.87	SB	Pepper Rd	S	1		Operational
●	4	SON	101	11.86	SB	W Sierra Ave / W School St	S	2	M	Operational
●	4	SON	101	12.61	SB	Rte 116 / Gravenstein Hwy	S	2	M	Operational
●	4	SON	101	12.87	NB	Rte 116 / Gravenstein Hwy / Old Redwood Hwy / Commerce Blvd	S	3	M	Operational
●	4	SON	101	13.71	SB	Rohnert Park Expy	S	2	M	Operational
●	4	SON	101	13.83	NB	EB Rohnert Park Expy	L	2	M	Operational
●	4	SON	101	13.89	SB	WB Rohnert Park Expy	L	2	M	Operational
●	4	SON	101	14.23	NB	WB Rohnert Park Expy	S	3	M	Operational
●	4	SON	101	14.85	SB	Golf Course Dr / Redwood Dr / Wilfred Ave	S	3	M	Operational
●	4	SON	101	14.86	NB	Commerce Blvd / Golf Course Dr / Roberts Lake Rd	S	2		Operational
●	4	SON	101	16.56	SB	Todd Rd / S Moorland Ave	S	1		Operational
●	4	SON	101	16.62	NB	Todd Rd / Santa Rose Ave	S	2		Operational
●	4	SON	101	18.38	SB	Corby Ave / Hearn Ave	S	2		Operational
●	4	SON	101	18.50	NB	Yolanda Ave / Santa Rosa Ave / Hearn Ave	S	2	M	Operational
●	4	SON	101	18.82	SB	Baker Ave / Corby Ave / Santa Rosa Ave	S	2		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	4	SON	101	18.98	NB	Santa Rosa Ave / Colgan Ave / Baker Ave	S	1		Operational
●	4	SON	101	19.59	SB	EB Rte 12	C	2		Operational
●	4	SON	101	19.59	SB	WB Rte 12	C	2	M	Operational
●	4	SON	101	19.75	NB	EB Rte 12	C	1		Operational
●	4	SON	101	19.76	NB	WB Rte 12	C	1		Operational
●	4	SON	101	19.79	SB	3rd St / Davis St	S	1		Operational
●	4	SON	101	20.42	NB	6th St / Morgan St	S	1		Operational
●	4	SON	101	20.63	SB	College Ave	S	2		Operational
●	4	SON	101	20.90	NB	College Ave	S	2		Operational
●	4	SON	101	21.56	SB	Guerneville Rd / Steele Lane	S	2	M	Operational
●	4	SON	101	21.93	NB	Steele Lane / Guerneville Rd	S	3	M	Operational
●	4	SON	101	22.40	SB	Bicentennial Way / Cleveland Ave	S	3	M	Operational
●	4	SON	101	22.90	SB	Industrial Dr / Mendocino Ave / Cleveland Ave	H	1		Operational
●	4	SON	101	22.96	NB	Mendocino Ave / Fountaingrove	H	2	M	Operational
●	4	SON	101	23.13	SB	Cleveland Ave / Hopper Ave	L	2	M	Operational
●	4	SON	101	24.77	NB	EB River Rd / Mark West Springs Rd	L	1		Operational
●	4	SON	101	24.82	SB	EB River Rd / Mark West Springs Rd	S	2	M	Operational
●	4	SON	101	24.90	NB	WB River Rd / Mark West Springs Rd	S	1		Operational
●	4	SON	101	24.97	SB	WB River Rd / Mark West Springs Rd	L	2	M	Operational
●	4	SON	101	26.28	SB	EB Airport Blvd	S	3	M	Operational
●	4	SON	101	26.42	NB	Airport Blvd	S	3	M	Operational
●	4	SON	101	26.42	SB	WB Airport Blvd	L	2	M	Operational
●	4	SON	101	27.54	NB	EB Shiloh Rd	L	1		Operational
●	4	SON	101	27.58	SB	EB Shiloh Rd	S	2	M	Operational
●	4	SON	101	27.65	NB	WB Shiloh Rd	S	1		Operational
●	4	SON	101	27.69	SB	WB Shiloh Rd	L	1		Operational
●	4	SON	101	29.20	SB	Old Redwood Hwy / Windsor River Rd	S	2	M	Operational
●	4	SON	101	29.56	NB	Old Redwood Hwy / Windsor River Rd	S	1		Non Op
●	4	SON	101	31.06	SB	Arata Lane / Old Redwood Hwy	S	1		Operational
	4	SON	101	33.30	SB	Old Redwood Hwy / Limerick Ln	S	1		Planned
	4	SON	101	33.67	NB	Old Redwood Hwy / Grant Ave / Healdsburg Ave	S	1		Planned
	4	SON	101	34.37	SB	Healdsburg Ave / Exchange Ave	H	1		Planned
	4	SON	101	35.05	NB	Westside Rd / Mill St	S	1		Planned
	4	SON	101	36.13	SB	Dry Creek Rd	S	1		Planned
	4	SON	101	36.48	NB	Dry Creek Rd	S	1		Planned
	4	SON	101	R38.43	SB	Lytton Springs Rd	S	1		Planned
	4	SON	101	R38.71	NB	Lytton Springs Rd	S	1		Planned
	4	SON	101	R39.91	SB	Souverain Rd / Independence Undps	S	1		Planned
	4	SON	101	R40.25	NB	Independence Undps / Souverain Rd / Geyserville Ave	S	1		Planned
●	4	SON	101	R41.24	SB	Geyserville Ave / Geiserville Rd	S	1		Non Op
	4	SON	101	R41.65	NB	Geyserville Ave / Banli Ln	S	1		Planned
	4	SON	101	R43.08	SB	Canyon Rd (Rte 128) / Chianti Rd	S	1		Planned
	4	SON	101	R43.57	NB	Canyon Rd (Rte 128) / Geyserville Ave	S	1		Planned
	4	SON	101	R47.66	SB	Simmons Rd / Asti Store Rd	S	1		Planned
	4	SON	101	R48.06	NB	Asti Store Rd / Simmons Rd	S	1		Planned

● Existing Meter

High Priority



## 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	4	SON	101	R48.92	SB	Theresa Dr / Dutcher Creek Rd	S	1		Planned
	4	SON	101	R49.22	NB	Theresa Dr / Asti Rd	S	1		Planned
	4	SON	101	R50.23	SB	Santana Dr / S Redwood Hwy / S Cloverdale Blvd	S	1		Planned
●	4	SON	101	R50.64	NB	Santana Dr / S Redwood Hwy / Asti	S	1		Non Op
	4	SON	101	R51.46	SB	Citrus Fair Dr / N Cloverdale Blvd	S	1		Planned
	4	SON	101	R51.82	NB	Citrus Fair Dr / Asti Rd	S	1		Planned
	4	SON	101	R53.32	SB	N Redwood Hwy (Rte 128)	H	1		Planned
	4	SON	101	R53.76	NB	N Redwood Hwy (Rte 128)	S	1		Planned

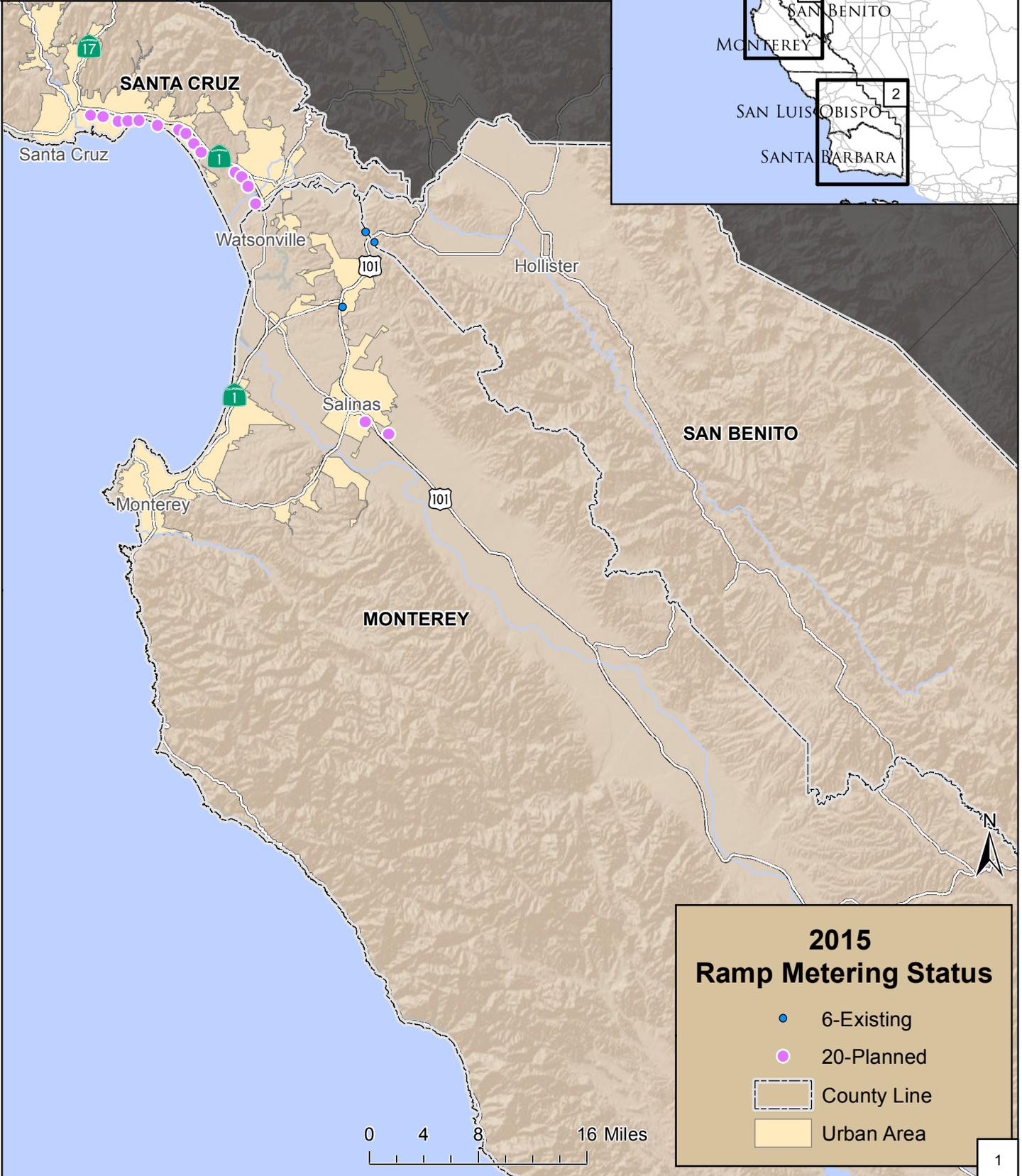
# DISTRICT 5



# District 5

Ramp Metering Development Plan

Division of Traffic Operations  
Data by: Office of Traffic Management  
Map by: Office of Performance



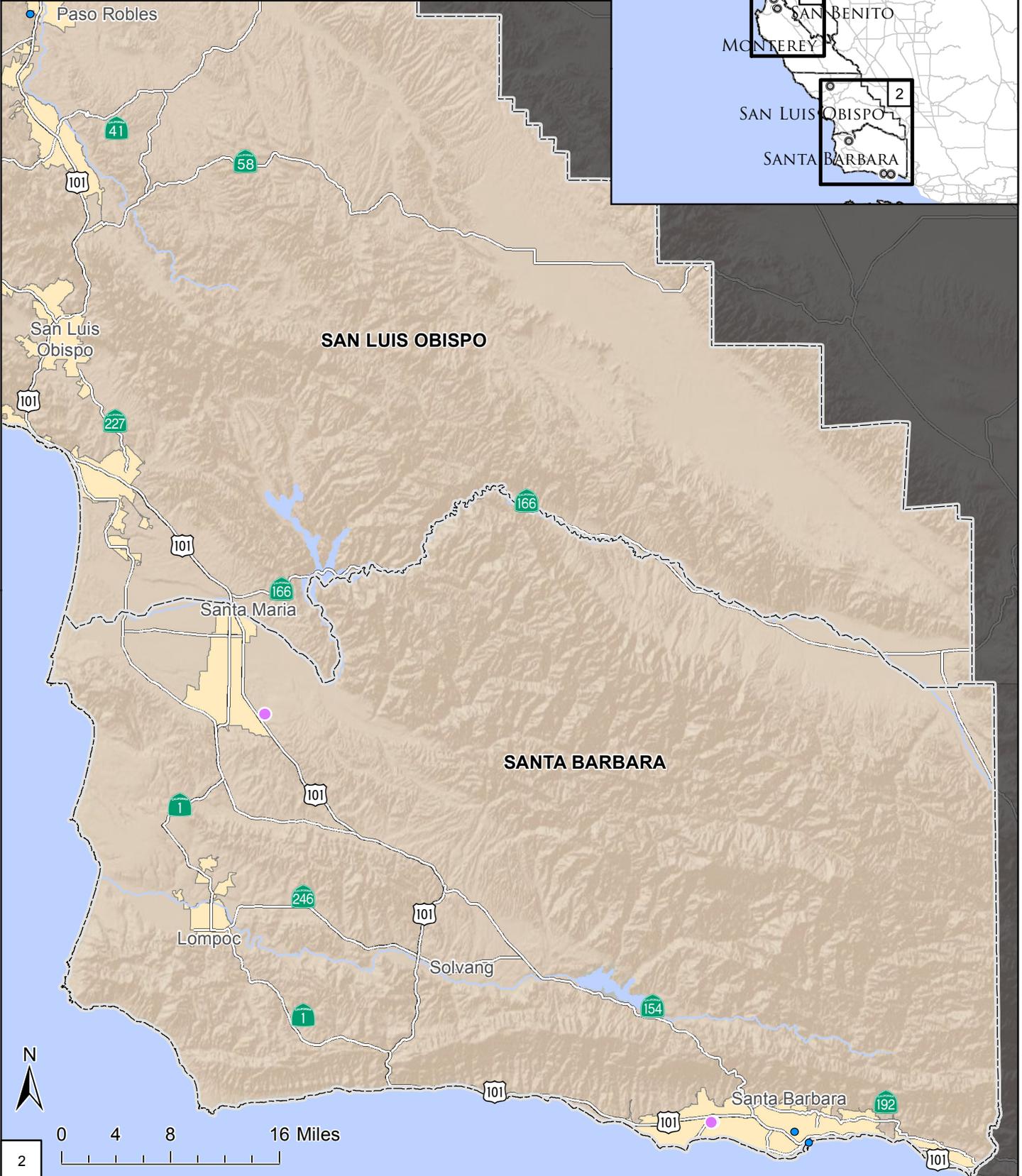
Disclaimer: This information is for discussion and planning purposes, and does not represent a commitment by Caltrans or others to install or operate ramp meters at these locations.



# District 5

Ramp Metering Development Plan

Division of Traffic Operations  
Data by: Office of Traffic Management  
Map by: Office of Performance



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## **DISTRICT 5**

Known as the Central Coast, District 5 is composed of mostly rural coastal counties with widely separated small cities and distinct urbanized areas ranging in population between 50,000 and 150,000. The counties include Monterey, San Benito, San Luis Obispo, Santa Barbara, and Santa Cruz. The population of this District is 1,474,179 in 11,199 square miles for a density of 132 people per square mile. Caltrans manages 1,169 centerline miles and 3,219 total lane miles of highway in District 5.

Primary economic industries in this District include agriculture, tourism, government, military, and education. The Central Coast produces \$6.5 billion in agriculture per year, has a \$5 billion tourism industry, supports six military bases and 25,000 military personnel, and sustains approximately 100,000 students enrolled at twelve colleges and universities.

US Highway 101 is the primary coastal route between the Los Angeles Basin and the San Francisco Bay Area, two of the country's most populous metro areas. It is the only north-south interregional route that supports goods movement through the district. US 101 also serves as a Department of Defense strategic highway network corridor, State focus route, high emphasis route, principal arterial on the National Highway System, and State highway extra legal load route as part of the National Truck Network.

### Current or Planned Ramp Metering Routes

The following routes have or are planned to have ramp metering:  
SR 1 and US 101

There are 6 existing and 20 planned ramp meters on these routes for a projected total of 26 ramp meters for the ten-year period covered by the Ramp Meter Development Plan (RMDP). Currently there are no proposed high priority locations in District 5. Ramp meter locations are illustrated on the District 5 RMDP map.

### Congestion Challenges

Most congestion challenges occur in the urbanized portions of the District. Routine congestion occurs in the urbanized areas of Santa Barbara, Arroyo Grande-Pismo Beach, San Luis Obispo, Salinas, Monterey-Seaside, and Santa Cruz. US 101 serves as a detour route connecting the Central Valley and San Francisco Bay Area with the Los Angeles region during closures of the Interstate 5 mountain pass (Grapevine); therefore, there are occasional heavy congestion levels along large portions of the corridor when closures occur.

### District Ramp Metering Strategies

The District's criteria for selecting ramp metering locations align with the statewide strategies identified in the RMDP. In addition to the statewide strategies, District 5 planners and engineers use the following considerations when evaluating and prioritizing potential ramp metering projects and locations:

1. The project provides an immediate opportunity for operational improvements for the specific ramp or interchange.
2. The project provides corridor-wide benefits within a city, urban area, or region.
3. The project represents a collaborative effort with partner agencies.

The District will also analyze location-specific opportunities necessitated by local development impacts where ramp metering may preserve freeway operations.

#### Supporting Documents

- TCRs, CSMPs, DSMP, and other planning products  
[http://www.dot.ca.gov/dist05/planning/system\\_planning.htm](http://www.dot.ca.gov/dist05/planning/system_planning.htm)
- District 5 MPOs/RTPAs  
<http://www.dot.ca.gov/dist05/planning/index.htm>



## 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	5	Mon	101	84.00	NB	Harris Rd				Planned
	5	Mon	101	84.00	NB	Harris Rd				Planned
	5	Mon	101	86.12	SB	Sanborn Rd/Fairview Ave				Planned
●	5	Mon	101	TBD	SB	San Juan Rd				Operational
●	5	Mon	156	95.43	NB	SR 156 (Prunedale)	L	1		Operational
●	5	SB	101	13.36	SB	Garden St	S	2		Operational
	5	SB	101	21.16	SB	Patterson Avenue				Planned
	5	SB	101	21.41	SB	SR 217				Planned
	5	SB	101	82.10	NB	Clark Ave				Planned
●	5	SB	101	R14.89	NB	Carillo Street	S	2		Operational
●	5	SBt	101	TBD	NB	San Juan Rd				Operational
	5	SCr	1	TBD	SB	Morrissey Blvd				Planned
	5	SCr	1	TBD	SB	Soquel Ave				Planned
	5	SCr	1	TBD	SB	41St Avenue				Planned
	5	SCr	1	TBD	SB	Bay Ave/Porter St				Planned
	5	SCr	1	TBD	SB	Park Ave				Planned
	5	SCr	1	TBD	SB	State Park Dr				Planned
	5	SCr	1	TBD	SB	Rio Del Mar Blvd				Planned
	5	SCr	1	TBD	SB	Freedom Blvd				Planned
	5	SCr	1	TBD	SB	San Andres Blvd/Larkin Valley Blvd.				Planned
	5	SCr	1	TBD	SB	Mar Monte Ave				Planned
	5	SCr	1	TBD	SB	Buena Vista Dr				Planned
	5	SCr	1	TBD	SB	Airport Blvd.				Planned
	5	SCr	1	TBD	SB	Harkins Slough Rd				Planned
	5	SCr	1	TBD	SB	Riverside Dr				Planned
●	5	SLO	101	55.66	SB	Spring Street	S			Operational

● Existing Meter

High Priority

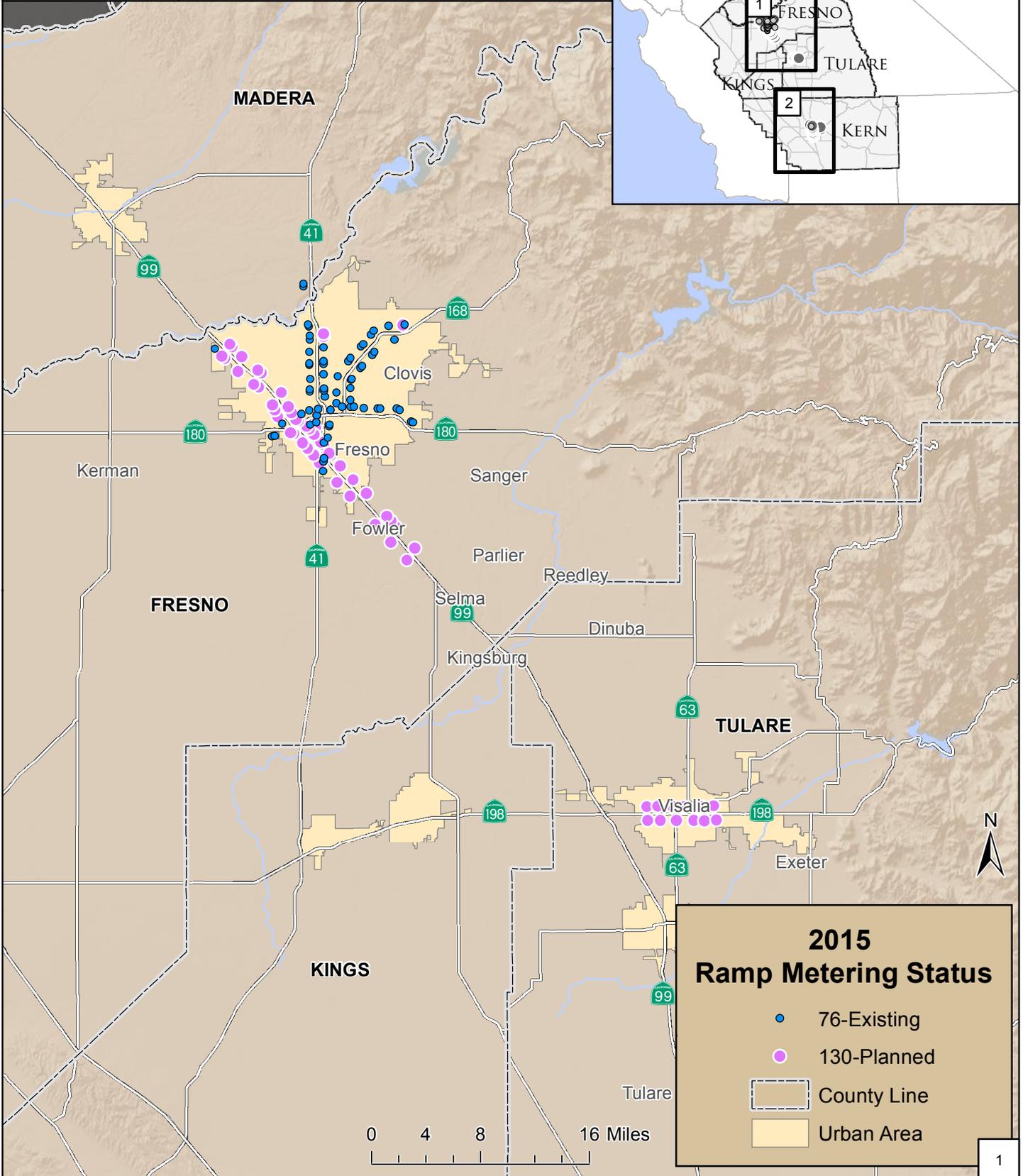
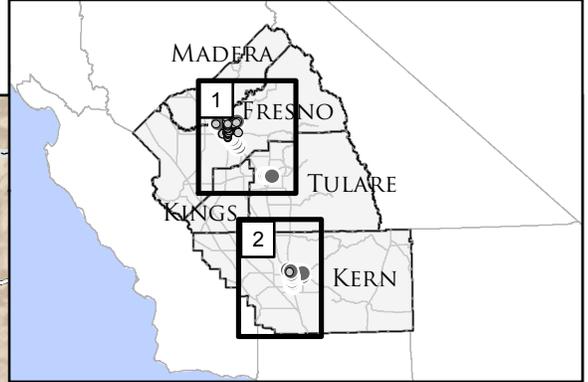
# DISTRICT 6



# District 6

Ramp Metering Development Plan

Division of Traffic Operations  
Data by: Office of Traffic Management  
Map by: Office of Performance



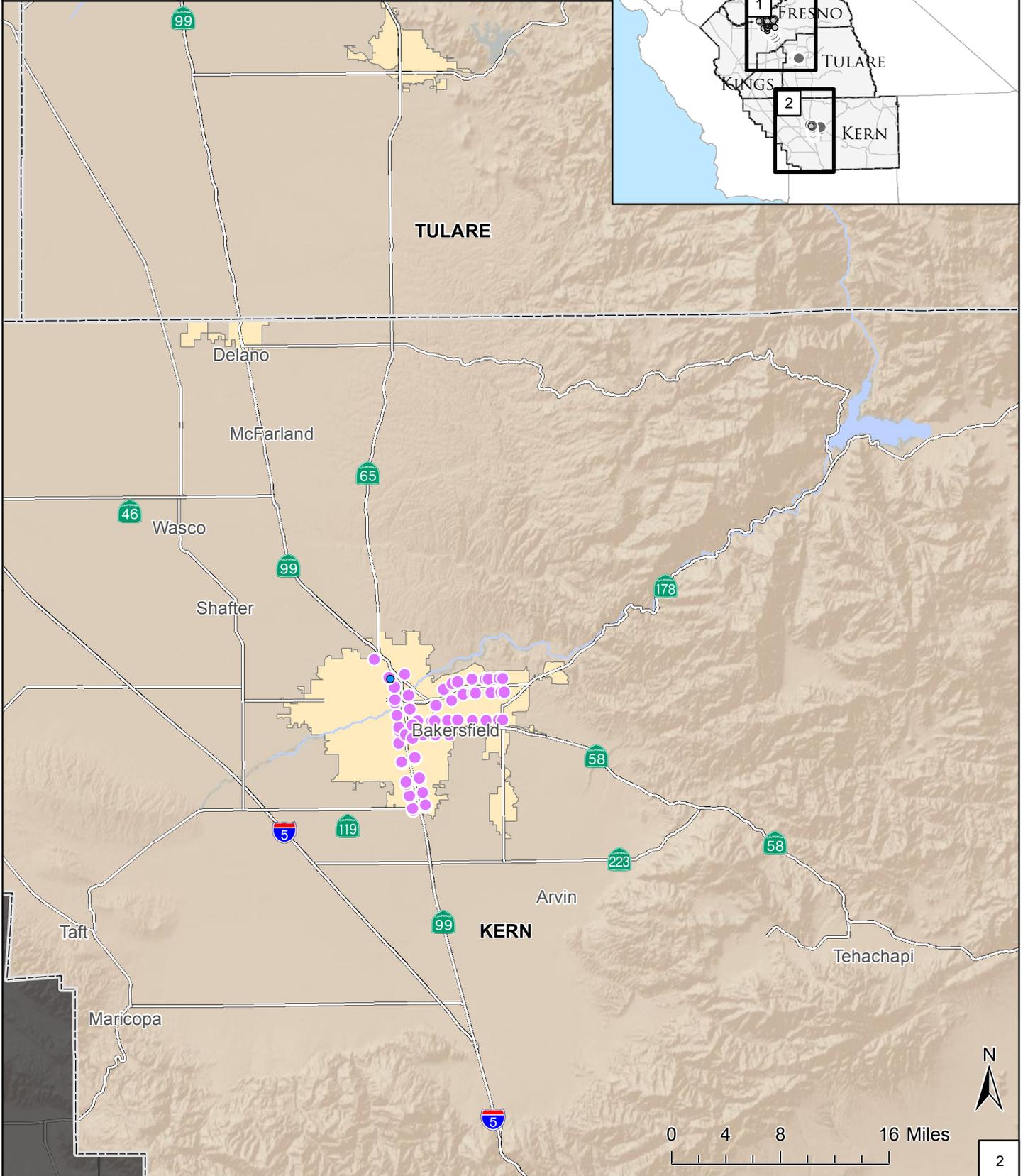
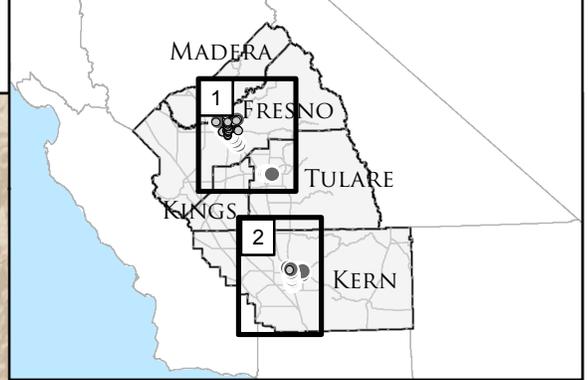
Disclaimer: This information is for discussion and planning purposes, and does not represent a commitment by Caltrans or others to install or operate ramp meters at these locations.



# District 6

Ramp Metering Development Plan

Division of Traffic Operations  
Data by: Office of Traffic Management  
Map by: Office of Performance



Disclaimer: This information is for discussion and planning purposes, and does not represent a commitment by Caltrans or others to install or operate ramp meters at these locations.

## **DISTRICT 6**

District 6 is predominately rural and agricultural, with urbanization focused along the SR 99 corridor. The District includes two of the nine largest cities in California—Fresno and Bakersfield. The five counties in the District are: Fresno, Kern, Kings, Madera, and Tulare. District 6 has a population of 2,516,107 in a land area of 22,457 square miles and a density of 112 people per square mile. Caltrans manages 2,029 centerline miles and 5,770 lane-miles of highway within District 6.

### Current or Planned Ramp Metering Routes

The following routes have or are planned to have ramp metering: SR 41, SR 58, SR 99, SR 168, SR 178, SR 180, and SR 198

District 6 has 76 existing ramp meters (including operational and non-operational) and 130 planned ramp meters for a projected total of 206 ramp meters for the ten-year period covered by the RMDP. Currently there are no proposed high priority locations in District 6. Ramp meter locations are illustrated on the District 6 RMDP map.

### Congestion Challenges

District 6 has considerable congestion during traffic incidents and winter Tule fog conditions. The fog causes visibility issues and occasional major accidents which cause traffic delays. Also, the State highway serves as a “main street” within the city limits of a number of small communities. This can present occasional congestion issues due to busy city traffic. With increasing population in the valley cities, more extensive congestion issues are anticipated.

### District Ramp Metering Strategies

Ramp metering locations are selected by district staff based on criteria established within the District. A freeway onramp (or future onramp) location may be added to the District 6 Ramp Meter Development Plan for any one of the following reasons:

1. The location is within the city limits of the following major cities within District 6: City of Fresno, City of Clovis, City of Bakersfield, and City of Visalia.
2. The location has the following traffic conditions: An annual average peak hour volume of 2000 vehicles per hour per mainline lane or more.
3. The location is projected to have the traffic conditions stated in item #2 within 10 years from the release date of the RMDP (a standard annual traffic volume growth rate of 3 percent per year is used).
4. Engineering observation and judgment determine that ramp metering would be beneficial even though the location does not meet any of the above criteria. Other justifications for adding ramp metering could include gap closure (an un-metered ramp between two metered ramps), seasonal conditions that cause a location to experience high traffic volumes during a certain time of year, locations with merging issues that could be mitigated in whole or part by ramp metering, other operational or safety issues that could be mitigated in whole or part by ramp metering.

It should be noted that, as is the case with MUTCD traffic signal warrants, meeting the above criteria does not automatically mean a location is included in the RMDP. Engineering studies and judgment may preempt the above criteria.

#### Supporting Documents

- ◆ District 6 TCRs, DSMPs, and other planning products:  
<http://www.dot.ca.gov/dist6/planning/tcrs/>
- ◆ CSMPs are located at:  
<http://www.dot.ca.gov/dist6/planning/csmp/>
- ◆ The 2013 Updated Route 99 Business Plan is located at:  
<http://www.dot.ca.gov/dist6/planning/sr99bus>



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lane	HOVPL	Comment
●	6	Fre	41	20.18	NB	North Ave	S	2	M	Operational
●	6	Fre	41	21.07	NB	Jensen Ave	L	2		Operational
●	6	Fre	41	21.22	NB	Jensen Ave	S	2	M	Operational
	6	Fre	41	21.71	SB	SB Rte 99 To SB Rte 41	C			Planned
	6	Fre	41	22.10	NB	NB Rte 99 To NB Rte 41	C			Planned
	6	Fre	41	22.58	SB	Broadway Ave	H			Planned
	6	Fre	41	22.66	SB	M St	S			Planned
●	6	Fre	41	22.70	NB	Broadway Ave	S	1		Operational
●	6	Fre	41	23.06	NB	M St	S	1		Operational
	6	Fre	41	23.54	SB	Tulare Ave/U St	S			Planned
●	6	Fre	41	23.72	NB	Tulare Ave	L	2		Operational
●	6	Fre	41	23.87	NB	Divisadero St	S	3	M	Operational
●	6	Fre	41	24.39	SB	EB Rte 180 To SB Rte 41	C	2		Operational
●	6	Fre	41	24.39	SB	WB Rte 180 To SB Rte 41	C	2		Operational
●	6	Fre	41	24.83	NB	EB Rte 180 To NB Rte 41	C	2		Operational
●	6	Fre	41	24.83	NB	WB Rte 180 To NB Rte 41	C	2		Operational
●	6	Fre	41	25.34	SB	Mckinley Ave	S	2		Operational
●	6	Fre	41	25.39	NB	Mckinley Ave	S	2	M	Operational
●	6	Fre	41	26.35	SB	Shields Ave	S	2		Operational
●	6	Fre	41	26.46	NB	Shields Ave	L	2	M	Operational
●	6	Fre	41	26.49	SB	Shields Ave	L	2		Operational
●	6	Fre	41	26.63	NB	Shields Ave	S	2	M	Operational
●	6	Fre	41	27.35	SB	Ashlan Ave	S	3	M	Operational
●	6	Fre	41	27.59	NB	Ashlan Ave	S	3	M	Operational
●	6	Fre	41	28.37	SB	Shaw Ave	S	2		Operational
●	6	Fre	41	28.43	NB	Shaw Ave	L	2	M	Operational
●	6	Fre	41	28.47	SB	Shaw Ave	L	2		Operational
●	6	Fre	41	28.61	NB	Shaw Ave	S	3	M	Operational
●	6	Fre	41	29.29	SB	Bullard Ave	S	3	M	Operational
●	6	Fre	41	29.62	NB	Bullard Ave	S	3	M	Operational
●	6	Fre	41	30.17	SB	Herndon Ave (EB)	S	2		Operational
	6	Fre	41	30.42	NB	Herndon Ave (EB)	L			Planned
●	6	Fre	41	30.48	SB	Herndon Ave (WB)	L	2		Operational
	6	Fre	41	30.62	NB	Herndon Ave (WB)	S			Planned
●	6	Fre	41	31.50	SB	Friant Rd	S	1		Operational
●	6	Fre	41	31.70	SB	Friant Rd	L	2		Operational
	6	Fre	99	9.04	SB	Manning Ave	S			Planned
	6	Fre	99	9.24	NB	Manning Ave	S			Planned
	6	Fre	99	10.82	SB	Merced St/Fowler Ave	S			Planned
	6	Fre	99	11.25	NB	Merced St	S			Planned
	6	Fre	99	11.88	NB	Adams Ave	S			Planned
	6	Fre	99	12.32	NB	Clovis Ave	S			Planned
	6	Fre	99	12.56	SB	Clovis Ave	S			Planned
	6	Fre	99	14.59	NB	American Ave	S			Planned
	6	Fre	99	15.37	SB	Chestnut Ave	S			Planned
	6	Fre	99	15.96	NB	Central Ave	S			Planned
	6	Fre	99	16.75	SB	Cedar Ave	S			Planned
	6	Fre	99	17.37	NB	North Ave	S			Planned
	6	Fre	99	18.48	NB	Jensen Ave (EB)	S			Planned
	6	Fre	99	18.49	SB	Jensen Ave (EB)	L			Planned
	6	Fre	99	18.64	NB	Jensen Ave (WB)	L			Planned
	6	Fre	99	18.64	SB	Jensen Ave (WB)	S			Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lane	HOVPL	Comment
	6	Fre	99	19.39	SB	SB Rte 41 To SB Rte 99	C			Planned
	6	Fre	99	19.61	NB	NB Rte 41 To NB Rte 99	C			Planned
	6	Fre	99	20.06	SB	Ventura St	S			Planned
	6	Fre	99	20.36	NB	Golden State/Ventura St	S			Planned
	6	Fre	99	20.60	SB	Fresno St	S			Planned
	6	Fre	99	20.90	NB	Fresno St	S			Planned
	6	Fre	99	21.18	NB	Stanislaus St	S			Planned
	6	Fre	99	21.75	NB	EB Rte 180 To NB Rte 99	C			Planned
	6	Fre	99	21.75	SB	EB Rte 180 To SB Rte 99	C			Planned
	6	Fre	99	21.95	SB	WB Rte 180 To SB Rte 99	C			Planned
	6	Fre	99	22.00	NB	WB Rte 180 To NB Rte 99	C			Planned
●	6	Fre	99	22.62	SB	Belmont Ave	S	1		Operational
	6	Fre	99	22.85	NB	Belmont Ave	S			Planned
	6	Fre	99	23.17	SB	Olive Ave	S	2		Construction
	6	Fre	99	23.40	NB	Olive Ave	S	1		Construction
	6	Fre	99	23.72	SB	Mckinley Ave	S			Planned
	6	Fre	99	24.10	SB	Clinton Ave	S			Planned
	6	Fre	99	24.48	NB	Clinton Ave	S			Planned
	6	Fre	99	24.48	NB	Golden State/Motel Dr	S			Planned
	6	Fre	99	26.01	SB	Golden State/Motel Dr	S			Planned
	6	Fre	99	26.42	SB	Ashlan Ave	S			Planned
	6	Fre	99	26.43	NB	Ashlan Ave	S			Planned
	6	Fre	99	26.75	NB	Ashlan Ave	L			Planned
	6	Fre	99	27.91	SB	Shaw Ave	S			Planned
	6	Fre	99	28.32	NB	Shaw Ave	S			Planned
	6	Fre	99	29.25	SB	Veterans Blvd	S			Planned
	6	Fre	99	29.33	NB	Veterans Blvd	L			Planned
	6	Fre	99	29.52	SB	Veterans Blvd	L			Planned
	6	Fre	99	29.59	NB	Veterans Blvd	S			Planned
●	6	Fre	99	30.25	SB	Herndon Ave/PKWY Dr/Grantland Ave	S			Operational
●	6	Fre	168	1.07	WB	Mckinley Ave	L	2	M	Operational
●	6	Fre	168	1.30	EB	Mckinley Ave	S	3	M	Operational
●	6	Fre	168	1.84	WB	Shields Ave	S	3	M	Operational
●	6	Fre	168	2.20	EB	Shields Ave	S	3	M	Operational
●	6	Fre	168	2.84	WB	Ashlan Ave	S	3	M	Operational
●	6	Fre	168	3.02	EB	Ashlan Ave	L	2		Operational
●	6	Fre	168	3.25	EB	Ashlan Ave	S	2	M	Operational
●	6	Fre	168	4.03	WB	Shaw Ave	S	2	M	Operational
●	6	Fre	168	4.25	EB	Shaw Ave	L	2		Operational
●	6	Fre	168	4.30	WB	Shaw Ave	L	2		Operational
●	6	Fre	168	4.50	EB	Shaw Ave	S	2	M	Operational
●	6	Fre	168	5.40	WB	Bullard Ave	S	2	M	Operational
●	6	Fre	168	5.63	EB	Bullard Ave	L	2		Operational
●	6	Fre	168	5.64	WB	Bullard Ave	L	2		Operational
●	6	Fre	168	5.91	EB	Bullard Ave	S	2		Operational
●	6	Fre	168	6.69	WB	Herndon Ave	S	2	M	Operational
●	6	Fre	168	6.90	WB	Herndon Ave	L	2		Operational
	6	Fre	168	6.82	EB	Herndon Ave	L	2		Planned
	6	Fre	168	7.08	EB	Herndon Ave	S	2		Planned
	6	Fre	168	9.32	EB	Temperance Ave	S	2		Planned
●	6	Fre	168	7.76	WB	Fowler Ave	S	3	M	Operational
	6	Fre	168	8.18	EB	Fowler Ave	S	2		Part ConSt

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lane	HOVPL	Comment
	6	Fre	168	8.95	WB	Temperance Ave (SB)	S			Planned
●	6	Fre	168	9.16	WB	Temperance Ave (NB)	L	2		Non Op
●	6	Fre	180	54.59	EB	Marks Ave	L	2		Non Op
●	6	Fre	180	54.84	EB	Marks Ave	S	3	M	Non Op
●	6	Fre	180	57.19	WB	FultonSt	S	2	M	Operational
●	6	Fre	180	57.45	EB	Van Ness Ave	S	2	M	Operational
●	6	Fre	180	57.71	WB	Blackstone Ave	S	2	M	Operational
●	6	Fre	180	58.04	EB	Abby Ave	S	2	M	Operational
	6	Fre	180	60.02	EB	Cedar Ave	L	2		Planned
●	6	Fre	180	60.02	WB	Cedar Ave	L	2	M	Operational
	6	Fre	180	60.67	EB	Chestnut Ave	S	2		Planned
●	6	Fre	180	60.67	WB	Chestnut Ave	S	2		Operational
●	6	Fre	180	60.88	WB	Chestnut Ave	L	2		Operational
	6	Fre	180	61.65	EB	Peach Ave	L	2		Planned
●	6	Fre	180	61.65	WB	Peach Ave	S	3	M	Operational
	6	Fre	180	62.67	EB	Clovis Ave	S	2		Planned
●	6	Fre	180	62.67	WB	Clovis Ave	S	2		Operational
●	6	Fre	180	62.85	WB	Clovis Ave	L	2		Operational
	6	Fre	180	63.69	EB	Fowler Ave	S	2		Planned
●	6	Fre	180	63.96	WB	Fowler Ave	S	2		Operational
●	6	Fre	180	64.14	WB	Fowler Ave	L	2	M	Operational
	6	Fre	180	65.32	EB	Temperance Ave	S	2		Planned
●	6	Fre	180	65.32	WB	Temperance Ave	S	2		Operational
●	6	Fre	180	65.60	WB	Temperance Ave	L	2	M	Operational
	6	Ker	58	52.36	EB	NB/Rte 99 To Rte 58	C			Planned
	6	Ker	58	53.24	WB	H St	S	2		Construction
	6	Ker	58	53.65	EB	Chester Ave	S	2		Construction
	6	Ker	58	54.29	WB	Union Ave	S	1		Construction
	6	Ker	58	54.35	EB	Union Ave	L	1		Construction
	6	Ker	58	54.48	WB	Brundage Ln/UnionAve	H	1		Construction
	6	Ker	58	54.55	EB	Union Ave	S	1		Construction
	6	Ker	58	55.45	WB	Brundage Ln/Cottonwood Rd	H			Planned
	6	Ker	58	55.56	EB	Cottonwood Rd	S			Planned
	6	Ker	58	56.25	WB	Mt. Vernon Ave	S			Planned
	6	Ker	58	57.26	WB	Oswell St	S			Planned
	6	Ker	58	58.28	WB	Fairfax Rd	S			Planned
	6	Ker	58	59.24	WB	Rte 184	S			Planned
	6	Ker	58	59.48	WB	Rte 184	L			Planned
	6	Ker	99	17.41	SB	Rte 119	S			Planned
	6	Ker	99	17.45	NB	Rte 119	L			Planned
	6	Ker	99	17.59	SB	Rte 119	L			Planned
	6	Ker	99	17.60	NB	Rte 119	S			Planned
	6	Ker	99	18.47	SB	Hosking Ave	S	2		Construction
	6	Ker	99	18.52	NB	Hosking Ave	L	2	M	Construction
	6	Ker	99	18.52	NB	Hosking Ave	S	3	M	Construction
	6	Ker	99	18.54	SB	Hosking Ave	L	2		Construction
	6	Ker	99	19.44	SB	Panama Lane	S			Planned
	6	Ker	99	19.50	NB	Panama Lane	L			Planned
	6	Ker	99	19.60	SB	Panama Lane	L			Planned
	6	Ker	99	19.63	NB	Panama Lane	S			Planned
	6	Ker	99	21.01	SB	White Lane	S			Planned
	6	Ker	99	21.06	NB	White Lane	L			Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lane	HOVPL	Comment
	6	Ker	99	21.10	SB	White Lane	L			Planned
	6	Ker	99	21.16	NB	White Lane	S			Planned
	6	Ker	99	22.38	SB	Ming Ave	S			Construction
	6	Ker	99	22.75	NB	Ming Ave	S			Planned
	6	Ker	99	23.35	SB	EB Rte 58 To SB Rte 99	C			Planned
	6	Ker	99	23.55	SB	WB Rte 58 To SB Rte 99	C			Planned
	6	Ker	99	23.69	NB	Wible Rd	S			Planned
	6	Ker	99	23.74	NB	WB Rte 58 To SB Rte 99	C			Planned
	6	Ker	99	24.65	NB	California Ave	L			Planned
	6	Ker	99	24.65	SB	California Ave	L			Planned
	6	Ker	99	24.70	NB	California Ave	S			Planned
	6	Ker	99	25.42	SB	Rosedale Hwy. (58/178)	S			Planned
	6	Ker	99	25.62	SB	Rosedale Hwy. (58/178)	L			Planned
	6	Ker	99	25.95	NB	Buck Owens Blvd/Sillect Ave	S			Planned
	6	Ker	99	26.58	SB	Rte 204/Airport Dr	C			Planned
	6	Ker	99	27.18	NB	Rte 204/Airport Dr	C			Planned
●	6	Ker	99	27.68	SB	Olive Ave	S			Non Op
	6	Ker	99	27.83	SB	Olive Ave	L			Planned
	6	Ker	99	29.54	SB	SB Rte 65 To SB Rte 99	C			Planned
	6	Ker	178	2.60	EB	Monterey St/Union Ave	S			Planned
	6	Ker	178	3.35	WB	Beale Ave/Lincoln St	S			Planned
	6	Ker	178	3.55	EB	Owens St	S			Planned
	6	Ker	178	4.15	WB	Haley St/Height St	L			Planned
	6	Ker	178	4.55	WB	Mt. Vernon Ave	S			Planned
	6	Ker	178	4.70	EB	Mt. Vernon Ave	S			Planned
	6	Ker	178	5.50	WB	Oswell St	S			Planned
	6	Ker	178	5.60	EB	Oswell St	L			Planned
	6	Ker	178	5.75	EB	Oswell St	S			Planned
	6	Ker	178	6.50	WB	Fairfax Rd	S			Planned
	6	Ker	178	6.70	WB	Fairfax Rd	L			Planned
	6	Ker	178	6.90	EB	Fairfax Rd	S			Planned
	6	Ker	178	7.55	WB	Morning Dr	S	2		Part ConSt
	6	Ker	178	7.66	EB	Morning Dr	L			Planned
	6	Ker	178	7.80	WB	Morning Dr	L	2		Part ConSt
	6	Ker	178	7.89	EB	Morning Dr	S	2		Part ConSt
●	6	Mad	41	0.98	SB	Valley Childrens Blvd	S	3	M	Operational
●	6	Mad	41	1.16	SB	Valley Childrens Blvd	L	2		Operational
	6	Tul	198	6.76	EB	Akers St	S			Planned
	6	Tul	198	6.76	WB	Akers St	S			Planned
	6	Tul	198	7.51	WB	Mineral King/Demaree Rd	S			Planned
	6	Tul	198	7.77	EB	Noble Ave/Demaree Rd	S			Planned
	6	Tul	198	8.55	WB	Mineral King/Mooney Blvd (Rte 63)	S			Planned
	6	Tul	198	8.90	EB	Noble Ave/Mooney Blvd (Rte 63)	S			Planned
	6	Tul	198	9.47	WB	Mineral King Ave/West St (Rte 63)	S			Planned
	6	Tul	198	10.20	EB	Noble Ave/Court St (Rte 63)	S			Planned
	6	Tul	198	10.73	WB	Mineral King Ave/Ben Maddox Way	H			Planned
	6	Tul	198	10.96	EB	Noble Ave/Ben Maddox Way	H			Planned
	6	Tul	198	11.70	WB	Mineral King Ave/Lovers Lane	H			Planned
	6	Tul	198	11.93	EB	Lovers Lane (Rte 216)	S			Planned

● Existing Meter

High Priority

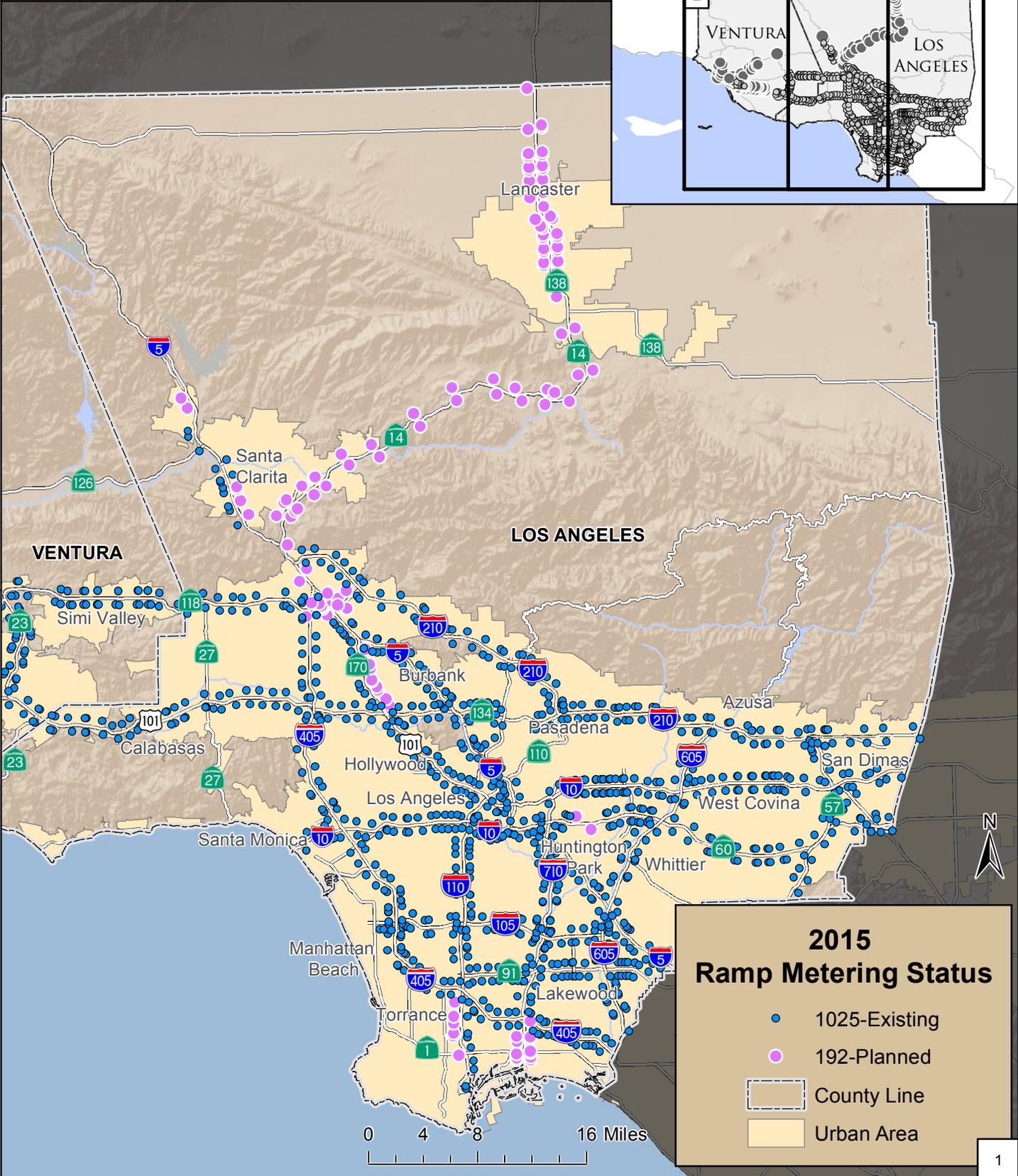
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# DISTRICT 7

# District 7

Ramp Metering Development Plan

Division of Traffic Operations  
Data by: Office of Traffic Management  
Map by: Office of Performance

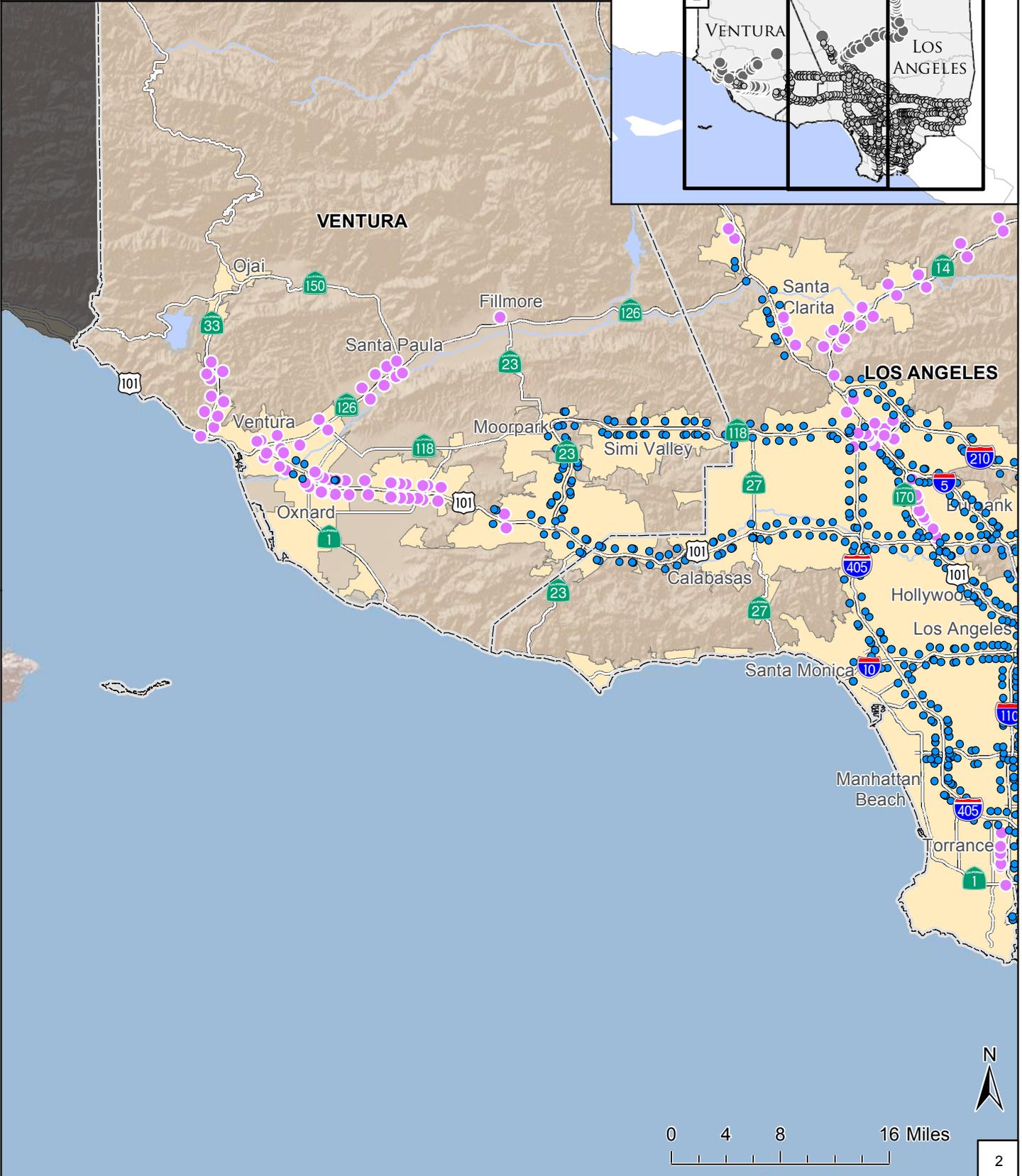


Disclaimer: This information is for discussion and planning purposes, and does not represent a commitment by Caltrans or others to install or operate ramp meters at these locations.

# District 7

Ramp Metering Development Plan

Division of Traffic Operations  
Data by: Office of Traffic Management  
Map by: Office of Performance



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## **DISTRICT 7**

District 7 consists of two highly-urbanized counties, Los Angeles County and Ventura County. Los Angeles County, with over 10.4 million people, is the most populated county in the state. District 7 has a population of 11,285,793 in 5,906 square miles for a density of 1,911 people per square mile. On average, 100 million vehicle miles are traveled daily in District 7. The district manages 1,113 centerline miles and 6,627 total lane-miles of highway.

### Current or Planned Ramp Metering Routes

The following routes have or are planned to have ramp metering:

I-5, I-10, I-105, I-110, I-210, I-405, I-605, I-710, US 101, SR 2, SR 14, SR 23, SR 33, SR 57, SR 60, SR 71, SR 90, SR 91, SR 118, SR 126, SR 134, and SR 170

District 7 has approximately 997 existing ramp meters and 28 existing connector meters. In addition, they have 185 planned ramp meters, 5 planned connector meters and 2 connector meters under construction. For the ten-year period covered by the RMDP, District 7 has a projected total of 1,217 ramp and connector meters. Ramp meter locations are illustrated on the District 7 RMDP map.

The conceptual cost range to install ramp meters at all the District's proposed high-priority locations is \$39,650,000. At this time, the conceptual cost range does not account for right-of-way cost. Actual project estimates will be determined during the project development phases when the scope and schedule are finalized in a project initiation document (PID).

### Congestion Challenges

District 7 employs a variety of strategies to address current congestion challenges including:

- High occupancy vehicle preferential lanes (HOVPL).
- Various ramp metering strategies (ramp HOV, extended, and staggered metering).
- High occupancy express toll lanes (HOT lanes) along I-10 and I-110.
- Dynamic corridor metering with city street traffic signal connectivity (near future).
- Congestion pricing (future).
- Changeable message signs (CMS).

Several regional freeway capacity expansion projects are in the planning process, under development, or in construction which will assist in decreasing congestion. This District currently has 114 projects in construction totaling over \$1 billion including:

- The Golden State Freeway (I-5) HOVPL project.
- The addition of HOVPLs on I-5 from SR 134 to SR 118.
- The San Bernardino Freeway (I-10) HOVPL project.

Constructing an interconnecting HOVPL or managed lane system continues to be a priority. As of 2015, District 7 operated 531 HOVPL miles (452 HOV and 79 Express Lanes) in Los Angeles County, the largest network in the state. An additional 58 miles of HOVPL are under construction and 131 miles are in the design or planning stages.

As with all districts that have large urban areas, District 7 operates a Transportation Management Center (TMC) in coordination with the California Highway Patrol (CHP) to rapidly detect and respond to incidents while managing the resulting congestion. Changeable Message Signs (CMS), closed circuit televisions, and delineators embedded in pavement assist the TMC in coordinating a faster, more efficient transportation management network.

### District Ramp Metering Strategies

In recent District 7 planning studies (CSMPs), ramp metering analysis was completed. The US 101 CSMP recommended ramp metering where adequate storage exists and metering is determined to be effective in reducing congestion. District 7 collects congestion data in order to manage freeway traffic and identify future ramp meter locations. The District will be developing a protocol for incident response where ramp metering will play an integral part in managing traffic demand upstream of incidents as well as on adjacent freeways.

The District is currently engaged in partnerships with local agencies to develop technology and processes by which ramp meter operation can be coordinated or integrated with local street signal operation. This effort is underway along I-110 corridor between I-105 and I-405 and I-210 Corridor between SR 57 and SR 134. In addition, two research projects administered by Headquarters, in cooperation with several Districts including District 7, are aimed at studying the effect of on-ramp traffic backup, queue length and storage, on ramp metering operation and strategies at eight congested ramp metering locations along District 7.

### Supporting Documents

- ◆ District 7 TCRs, CSMPs, CPs, DSMP, and other planning products:  
<http://www.dot.ca.gov/hq/tpp/corridor-mobility/d7-page.html>
- Southern California Association of Governments (SCAG):  
<http://www.scag.ca.gov>



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	LA	2	14.95	WB	Riverside	H	2	NM	Operational
●	7	LA	2	15.92	WB	San Fernando	S	2	NM	Operational
●	7	LA	2	17.04	WB	Verdugo Rd	H	1		Operational
●	7	LA	2	18.23	WB	Colorado	S	2	NM	Operational
●	7	LA	2	18.91	WB	Holly	S	2	NM	Operational
●	7	LA	2	19.83	WB	Mountain	S	2	NM	Operational
●	7	LA	2	22.62	WB	Verdugo Blvd	S	2	NM	Operational
●	7	LA	5	1.06	SB	Valley View	H	1		Operational
●	7	LA	5	1.11	NB	Valley View	H	1		Operational
●	7	LA	5	1.56	NB	Alondra	L	2		Operational
●	7	LA	5	1.67	SB	Alondra & Marquart	H	1		Operational
●	7	LA	5	2.27	SB	Carmenita	H	1		Operational
●	7	LA	5	2.51	NB	Carmenita	H	1		Operational
●	7	LA	5	3.28	SB	Rosecrans	H	1		Operational
●	7	LA	5	3.62	SB	Firestone SB	S	2	NM	Operational
●	7	LA	5	4.28	SB	Norwalk	S	1		Operational
●	7	LA	5	4.36	NB	Norwalk NB	L	1		Operational
●	7	LA	5	4.58	NB	Norwalk SB	H	1		Operational
●	7	LA	5	4.89	SB	Imperial	H	1		Operational
●	7	LA	5	4.96	NB	Imperial	S	1		Operational
●	7	LA	5	5.25	NB	Pioneer	S	1		Operational
●	7	LA	5	6.04	SB	Orr & day	H	1		Operational
●	7	LA	5	6.20	NB	Florence & Orr-day	H	2	NM	Operational
●	7	LA	5	6.50	SB	Florence	H	1		Operational
●	7	LA	5	8.21	SB	Lakewood NB	H	1		Operational
●	7	LA	5	8.27	NB	Lakewood NB	L	2	NM	Operational
●	7	LA	5	8.35	SB	Lakewood SB	L	1		Operational
●	7	LA	5	8.42	NB	Lakewood SB	H	2	NM	Operational
●	7	LA	5	8.92	NB	Paramount	L	2		Operational
●	7	LA	5	8.93	SB	Paramount	H	2	NM	Operational
●	7	LA	5	9.87	SB	Slauson	H	2		Operational
●	7	LA	5	10.76	SB	Garfield / Bandini	H	2		Operational
●	7	LA	5	11.54	SB	Washington	S	2		Operational
●	7	LA	5	12.68	SB	Eastern & Atlantic	H	2	NM	Non Ops
●	7	LA	5	14.35	NB	Downey	H	1		Operational
●	7	LA	5	14.76	SB	Ditman	H	1		Operational
●	7	LA	5	15.77	SB	Concord	H	1		Operational
●	7	LA	5	16.49	SB	Eighth	H	1		Operational
●	7	LA	5	16.60	SB	Seventh	S	1		Operational
●	7	LA	5	17.44	SB	Fourth	H	2		Operational
●	7	LA	5	17.93	SB	Cesar Chavez	H	2		Operational
●	7	LA	5	18.59	SB	Mission	H	2		Operational
●	7	LA	5	18.77	NB	Marengo	H	2		Operational
●	7	LA	5	19.45	SB	Broadway	H	2	NM	Operational
●	7	LA	5	20.00	NB	Pasadena	H	2	NM	Operational
●	7	LA	5	20.33	SB	Ave 26	H	2	NM	Operational
●	7	LA	5	20.70	SB	Duvall	H	1		Operational
●	7	LA	5	21.10	NB	Riverside	H	2		Operational
●	7	LA	5	21.71	SB	Stadium Way	H	1		Operational
●	7	LA	5	21.80	NB	Stadium Way	H	2	NM	Operational
●	7	LA	5	23.20	NB	Fletcher	S	2		Operational
●	7	LA	5	23.58	SB	Glendale	H	1		Operational
●	7	LA	5	23.86	NB	Glendale	S	1		Operational
●	7	LA	5	24.17	SB	Los Feliz	L	2	NM	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	LA	5	24.36	NB	Los Feliz EB	L	2	NM	Operational
●	7	LA	5	24.50	SB	Griffith Pk	H	1		Operational
●	7	LA	5	24.54	NB	Los Feliz WB	S	1		Operational
●	7	LA	5	25.85	SB	Colorado	L	1		Operational
●	7	LA	5	25.90	NB	Colorado	S	2	NM	Non Ops
●	7	LA	5	26.35	SB	Zoo Dr	S	1		Operational
●	7	LA	5	27.66	SB	Western EB	S	2	NM	Operational
●	7	LA	5	27.70	SB	Western WB	L	2	NM	Operational
●	7	LA	5	27.77	NB	Western EB	L	1		Operational
●	7	LA	5	27.92	NB	Western WB	S	2	NM	Operational
●	7	LA	5	28.20	SB	Alameda EB	S	1		Operational
●	7	LA	5	28.30	SB	Alameda WB	L	1		Operational
●	7	LA	5	28.40	NB	Alameda EB	L	1		Operational
●	7	LA	5	28.45	NB	Alameda WB	S	1		Operational
●	7	LA	5	28.90	SB	Verdugo	H	1		Operational
●	7	LA	5	29.27	NB	Olive	H	1		Operational
●	7	LA	5	29.68	SB	Burbank EB	S	2	NM	Operational
●	7	LA	5	29.89	SB	Burbank WB	L	1		Operational
●	7	LA	5	29.97	NB	Burbank Blvd	H	1		Operational
●	7	LA	5	30.69	NB	Lincoln	S	1		Operational
●	7	LA	5	30.69	SB	Lincoln	S	1		Operational
●	7	LA	5	31.41	NB	Buena Vista	H	1		Operational
●	7	LA	5	31.41	SB	Buena Vista	H	2		Operational
●	7	LA	5	32.28	SB	Hollywood way	S	1		Operational
●	7	LA	5	32.41	NB	Hollywood Way	S	3	NM	Operational
●	7	LA	5	33.23	SB	Roscoe	S	2	NM	Operational
●	7	LA	5	33.58	SB	Sunland	S	1		Operational
●	7	LA	5	33.72	NB	Sunland	S	1		Operational
●	7	LA	5	34.24	SB	Penrose	H	1		Operational
●	7	LA	5	34.78	NB	Tuxford	S	1		Operational
●	7	LA	5	34.88	SB	Tuxford	S	2	NM	Operational
●	7	LA	5	35.07	NB	Lankershim	S	1		Operational
●	7	LA	5	35.07	SB	Lankershim	L	1		Operational
●	7	LA	5	35.84	NB	Sheldon	L	1		Operational
●	7	LA	5	35.84	SB	Sheldon	H	1		Operational
●	7	LA	5	36.75	SB	Brandford	S	2	NM	Operational
●	7	LA	5	37.30	SB	Osborne EB	S	2	NM	Operational
●	7	LA	5	37.37	NB	Osborne EB	L	1		Operational
●	7	LA	5	37.47	SB	Osborne WB	L	1		Operational
●	7	LA	5	37.55	NB	Osborne WB	S	1		Operational
●	7	LA	5	37.84	SB	Terra Bella	S	1		Operational
●	7	LA	5	38.34	SB	Van Nuys EB	S	2	NM	Operational
●	7	LA	5	38.55	SB	Van Nuys WB	L	2	NM	Operational
	7	LA	5	39.14	SB	Paxton St				Planned
	7	LA	5	39.31	NB	Paxton St				Planned
	7	LA	5	39.78	SB	Chatsworth				Planned
	7	LA	5	39.91	SB	Brand				Planned
	7	LA	5	40.05	SB	San Fernando Mission EB				Planned
	7	LA	5	40.31	SB	San Fernando Mission WB				Planned
	7	LA	5	40.44	NB	San Fernando Mission				Planned
	7	LA	5	42.48	SB	Roxford				Planned
	7	LA	5	42.79	NB	Roxford				Planned
●	7	LA	5	48.88	SB	Calgrove	S	1		Operational
	7	LA	5	49.22	NB	Calgrove				Part Const

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	LA	5	50.18	SB	EB Lyons	S	2		Operational
	7	LA	5	50.43	NB	Lyons				Part Const
●	7	LA	5	50.47	SB	WB Lyons/Pico Cyn	L	2		Operational
	7	LA	5	51.42	NB	EB Mc Bean Pkwy				Part Const
●	7	LA	5	51.42	SB	Mc Bean Pkwy EB	S	2		Operational
	7	LA	5	51.60	NB	WB Mc Bean Pkwy				Part Const
●	7	LA	5	51.78	SB	Mc Bean Pkwy WB	L	2		Operational
●	7	LA	5	52.30	SB	Valencia Blvd EB	S	2		Operational
●	7	LA	5	52.46	NB	Valencia Bl.	L	2		Non Ops
●	7	LA	5	52.46	SB	Valencia Blvd WB	L	2		Operational
●	7	LA	5	53.40	SB	Magic Mtn Pkwy	S	2		Non Ops
●	7	LA	5	53.65	NB	Magic Mtn Pkwy	S	2		Non Ops
●	7	LA	5	55.39	SB	Rye Cyn	H	1		Operational
●	7	LA	5	56.47	SB	Hasley Canyon	S	2		Non Ops
●	7	LA	5	56.70	SB	Sedona Way/Hasley Cyn	L	2	NM	Non Ops
	7	LA	5	58.83	SB	Parker Rd				Planned
	7	LA	5	59.70	SB	Lake Hughes				Planned
●	7	LA	10	1.80	EB	4th Street	S	2		Operational
●	7	LA	10	2.10	EB	Lincoln	S	2		Operational
●	7	LA	10	2.93	WB	20th Street	S	2	NM	Operational
●	7	LA	10	3.49	EB	Cloverfield	S	2		Non Ops
●	7	LA	10	4.12	WB	Centinela	H	2		Operational
●	7	LA	10	4.50	EB	Centinela	S	2		Operational
●	7	LA	10	4.68	EB	Bundy Dr	S	2	NM	Operational
●	7	LA	10	6.46	WB	Overland	H	2		Operational
●	7	LA	10	6.50	EB	Overland	S	2		Operational
●	7	LA	10	7.20	EB	Manning	H	2	NM	Operational
●	7	LA	10	7.80	WB	Robertson	H	2		Operational
●	7	LA	10	7.90	EB	Robertson/National	L	2	NM	Operational
●	7	LA	10	8.70	EB	La Cienega	H	2		Operational
●	7	LA	10	8.70	WB	La Cienega	S	2		Operational
●	7	LA	10	9.01	EB	Venice	S	2	NM	Operational
●	7	LA	10	9.21	WB	Fairfax	S	2	NM	Operational
●	7	LA	10	9.50	EB	Washington	S	2	NM	Operational
●	7	LA	10	10.30	EB	La Brea SB	L	1		Operational
●	7	LA	10	10.40	WB	La Brea SB	S	2		Operational
●	7	LA	10	10.50	EB	La Brea NB	S	2		Operational
●	7	LA	10	10.50	WB	La Brea NB	L	1		Operational
●	7	LA	10	11.20	WB	Crenshaw	S	2		Operational
●	7	LA	10	11.53	EB	Crenshaw	S	2		Operational
●	7	LA	10	12.23	WB	Arlington	S	2		Operational
●	7	LA	10	12.45	EB	Arlington	S	2		Operational
●	7	LA	10	12.60	WB	Western	S	2	NM	Operational
●	7	LA	10	12.95	EB	Western	S	2	NM	Operational
●	7	LA	10	13.21	WB	Normandie	S	2		Operational
●	7	LA	10	13.44	EB	Normandie	S	2		Operational
●	7	LA	10	13.66	WB	Vermont	S	2		Operational
●	7	LA	10	13.95	EB	Vermont	S	2	NM	Operational
●	7	LA	10	14.10	WB	Hoover/20th St	H	2		Operational
●	7	LA	10	14.30	EB	Hoover	H	2		Operational
●	7	LA	10	15.16	WB	Grand Ave (WB 10)	S	1		Non Ops
●	7	LA	10	15.19	WB	Grand Ave (Rte 110)	S	1		Non Ops
●	7	LA	10	15.33	EB	Flower	H	2		Non Ops
●	7	LA	10	15.64	WB	Maple	S	2		Non Ops

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	LA	10	15.78	EB	Los Angeles	S	2		Non Ops
●	7	LA	10	16.21	WB	Central	S	1		Non Ops
●	7	LA	10	16.22	EB	San Pedro	S	2		Non Ops
●	7	LA	10	16.84	EB	Central	S	2		Non Ops
●	7	LA	10	17.09	WB	Alameda	H	2		Non Ops
●	7	LA	10	17.10	EB	Alameda	L	2		Non Ops
●	7	LA	10	17.43	EB	Olympic	L	1		Non Ops
●	7	LA	10	17.57	WB	Santa Fe	H	1		Non Ops
●	7	LA	10	17.60	EB	Santa Fe	H	1		Non Ops
●	7	LA	10	20.88	EB	Eastern (710 Conn)	H	1		Operational
●	7	LA	10	21.50	WB	Winthrop (710 Conn)	S	1		Non Ops
●	7	LA	10	22.30	WB	Fremont	H	2		Operational
●	7	LA	10	23.28	EB	Atlantic SB	L	1		Operational
●	7	LA	10	23.29	WB	Atlantic SB	S	1		Operational
●	7	LA	10	23.38	EB	Atlantic NB	S	1		Operational
●	7	LA	10	23.38	WB	Atlantic NB	L	1		Operational
●	7	LA	10	23.93	EB	Garfield SB	L	1		Operational
●	7	LA	10	23.96	WB	Garfield SB	S	1		Operational
●	7	LA	10	24.03	EB	Garfield NB	S	1		Operational
●	7	LA	10	24.04	WB	Garfield NB	L	1		Operational
●	7	LA	10	24.77	EB	New SB	L	1		Operational
●	7	LA	10	24.82	WB	New SB	S	1		Operational
●	7	LA	10	24.87	EB	New NB	S	1		Operational
●	7	LA	10	24.89	WB	New NB	L	1		Operational
●	7	LA	10	25.22	WB	Del Mar SB	S	1		Operational
●	7	LA	10	25.26	EB	Del Mar SB	L	1		Operational
●	7	LA	10	25.38	EB	Del Mar NB	S	1		Operational
●	7	LA	10	25.39	WB	Del Mar NB	L	1		Operational
●	7	LA	10	25.77	EB	San Gabriel SB	L	1		Operational
●	7	LA	10	25.80	WB	San Gabriel SB	S	1		Operational
●	7	LA	10	25.89	EB	San Gabriel NB	S	1		Operational
●	7	LA	10	25.90	WB	San Gabriel NB	L	1		Operational
●	7	LA	10	26.29	WB	Walnut Grove	S	1		Operational
●	7	LA	10	26.32	EB	Walnut Grove	S	1		Operational
●	7	LA	10	26.79	EB	Rosemead SB	L	1		Operational
●	7	LA	10	26.79	WB	Rosemead SB	S	1		Operational
●	7	LA	10	26.92	WB	Rosemead NB	L	1		Operational
●	7	LA	10	26.94	EB	Rosemead NB	S	1		Operational
●	7	LA	10	27.10	EB	Flair	H	2		Non Ops
●	7	LA	10	27.67	WB	Temple City	H	1		Operational
●	7	LA	10	28.09	EB	Baldwin	S	2	NM	Operational
●	7	LA	10	28.56	WB	Santa Anita	S	2	NM	Operational
●	7	LA	10	28.78	EB	Santa Anita	S	2	NM	Operational
●	7	LA	10	29.35	WB	Peck	S	1		Operational
●	7	LA	10	29.51	EB	Valley Blvd	L	1		Operational
●	7	LA	10	29.60	WB	Valley	L	1		Operational
●	7	LA	10	29.98	EB	Stewart	S	1		Operational
●	7	LA	10	30.70	EB	Durfee/Garvey	S	2		Operational
●	7	LA	10	31.72	WB	Frazier	H	2	NM	Operational
●	7	LA	10	32.16	WB	Baldwin Park SB	S	2	NM	Operational
●	7	LA	10	32.31	EB	Baldwin Park	S	1		Operational
●	7	LA	10	32.33	WB	Baldwin Park NB	L	1		Operational
●	7	LA	10	32.78	WB	Francisquito	H	2		Operational
●	7	LA	10	33.46	EB	Puente	H	2		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	LA	10	33.48	WB	Puente	H	2		Operational
●	7	LA	10	34.36	WB	Pacific	H	2	NM	Operational
●	7	LA	10	34.44	EB	West Covina Pkwy	L	2	NM	Operational
●	7	LA	10	35.36	EB	Vincent SB	L	2	NM	Operational
●	7	LA	10	35.36	WB	Vincent SB	S	2	NM	Operational
●	7	LA	10	35.45	WB	Vincent NB	L	2	NM	Operational
●	7	LA	10	35.50	EB	Vincent NB	S	2		Operational
●	7	LA	10	36.41	WB	Azusa SB	S	2	NM	Operational
●	7	LA	10	36.46	EB	Azusa SB	L	1		Operational
●	7	LA	10	36.52	WB	Azusa NB	L	2	NM	Operational
●	7	LA	10	36.60	EB	Azusa NB	S	1		Operational
●	7	LA	10	37.43	WB	Citrus SB	S	2	NM	Operational
●	7	LA	10	37.53	WB	Citrus NB	L	2	NM	Operational
●	7	LA	10	37.59	EB	Citrus	H	1		Operational
●	7	LA	10	37.92	WB	Barranca SB	S	2	NM	Operational
●	7	LA	10	38.07	WB	Barranca NB	H	2		Operational
●	7	LA	10	38.09	EB	Barranca	H	2		Operational
●	7	LA	10	38.40	WB	Grand	S	2		Operational
●	7	LA	10	38.48	EB	Grand	L	1		Operational
●	7	LA	10	38.89	WB	Holt SB	S	2	NM	Operational
●	7	LA	10	38.95	EB	Holt SB	L	1		Operational
●	7	LA	10	39.05	WB	Holt NB	L	1		Operational
●	7	LA	10	39.14	EB	Holt NB	S	1		Operational
●	7	LA	10	40.35	WB	Via Verde	S	2	NM	Operational
●	7	LA	10	40.58	EB	Via Verde	S	2	NM	Operational
●	7	LA	10	41.99	WB	Kellogg	S	2		Operational
●	7	LA	10	43.53	WB	Fairplex	S	2		Operational
●	7	LA	10	43.76	EB	Fairplex	S	2		Operational
●	7	LA	10	43.85	WB	Dudley	H	1		Operational
●	7	LA	10	44.13	EB	Dudley	L	1		Operational
●	7	LA	10	45.17	WB	White	S	2	NM	Operational
●	7	LA	10	45.62	WB	Garey	S	2		Operational
●	7	LA	10	46.01	EB	Orange Grove	S	2		Operational
●	7	LA	10	46.23	WB	Towne	S	2		Operational
●	7	LA	10	46.58	EB	Towne	S	2	NM	Operational
●	7	LA	10	47.61	WB	Indian Hill	S	2	NM	Operational
●	7	LA	10	47.87	EB	Indian Hill	S	2	NM	Operational
	7	LA	14	R25.09	NB	Sierra Hwy / Foothill				Planned
	7	LA	14	R26.89	SB	San Fernando Rd				Planned
	7	LA	14	R27.35	NB	San Fernando Rd				Planned
	7	LA	14	R27.88	SB	Placerita Cyn				Planned
	7	LA	14	R28.06	NB	Placerita Cyn EB				Planned
	7	LA	14	R28.12	SB	Sierra Hwy/Placerita				Planned
	7	LA	14	R28.27	NB	Placerita Cyn WB				Planned
	7	LA	14	R29.54	SB	Golden Valley				Planned
	7	LA	14	R29.98	NB	Golden Valley				Planned
	7	LA	14	R30.64	SB	Sierra Hwy				Planned
	7	LA	14	R30.72	SB	Via Princess Way				Planned
	7	LA	14	R31.12	NB	Via Princess Way				Planned
	7	LA	14	R33.40	SB	Sand Cyn				Planned
	7	LA	14	R33.59	NB	Sand Cyn				Planned
	7	LA	14	R35.52	SB	Shadow Pines (Soledad Cyn)				Planned
	7	LA	14	R36.02	NB	Shadow Pines (Soledad Cyn)				Planned
	7	LA	14	R36.02	NB	Shadow Pines (Soledad Cyn)				Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	7	LA	14	R39.65	SB	Agua Dulce Cyn				Planned
	7	LA	14	R40.07	NB	Agua Dulce Cyn				Planned
	7	LA	14	R43.04	NB	Escondido Cyn				Planned
	7	LA	14	R43.48	SB	Escondido Cyn				Planned
	7	LA	14	R46.54	SB	Red Rover Mine Rd				Planned
	7	LA	14	R47.13	NB	Red Rover Mine Rd				Planned
	7	LA	14	R48.47	SB	Crown Valley Rd				Planned
	7	LA	14	R48.81	NB	Crown Valley Rd				Planned
	7	LA	14	R50.62	SB	Santiago Rd				Planned
	7	LA	14	R50.94	NB	Santiago Rd				Planned
	7	LA	14	R51.48	SB	Soledad Cyn Rd				Planned
	7	LA	14	R52.52	NB	Soledad Cyn Rd				Planned
	7	LA	14	R54.25	SB	Pearblossom Hwy				Planned
	7	LA	14	R54.91	NB	Pearblossom Hwy				Planned
	7	LA	14	R58.09	SB	Avenue S				Planned
	7	LA	14	R58.40	NB	Avenue S				Planned
	7	LA	14	R61.27	SB	Avenue P				Planned
	7	LA	14	R63.51	SB	Avenue N EB				Planned
	7	LA	14	R63.63	NB	Avenue N EB				Planned
	7	LA	14	R63.72	SB	Avenue N WB				Planned
	7	LA	14	R63.81	NB	Avenue N WB				Planned
	7	LA	14	R64.54	SB	Avenue M EB				Planned
	7	LA	14	R64.64	NB	Avenue M EB				Planned
	7	LA	14	R64.72	SB	Avenue M WB				Planned
	7	LA	14	R64.83	NB	Avenue M WB				Planned
	7	LA	14	R65.55	SB	Avenue L EB				Planned
	7	LA	14	R65.64	NB	Avenue L EB				Planned
	7	LA	14	R65.73	SB	Avenue L WB				Planned
	7	LA	14	R65.82	NB	Avenue L WB				Planned
	7	LA	14	R66.66	NB	Avenue K EB				Planned
	7	LA	14	R66.66	SB	Avenue K EB				Planned
	7	LA	14	R66.85	SB	Avenue K WB				Planned
	7	LA	14	R66.87	NB	Avenue K WB				Planned
	7	LA	14	R67.51	SB	Avenue J-8				Planned
	7	LA	14	R68.14	NB	Avenue J				Planned
	7	LA	14	R68.78	SB	Avenue I				Planned
	7	LA	14	R69.13	NB	Avenue I				Planned
	7	LA	14	R69.85	SB	Avenue H EB				Planned
	7	LA	14	R69.95	NB	Avenue H EB				Planned
	7	LA	14	R70.03	SB	Avenue H WB				Planned
	7	LA	14	R70.13	NB	Avenue H WB				Planned
	7	LA	14	R70.85	SB	Avenue G EB				Planned
	7	LA	14	R70.95	NB	Avenue G EB				Planned
	7	LA	14	R71.03	SB	Avenue G WB				Planned
	7	LA	14	R71.14	NB	Avenue G WB				Planned
	7	LA	14	R71.85	SB	Avenue F EB				Planned
	7	LA	14	R71.96	NB	Avenue F EB				Planned
	7	LA	14	R72.03	SB	Avenue F WB				Planned
	7	LA	14	R72.14	NB	Avenue F WB				Planned
	7	LA	14	R73.84	SB	Avenue D (138)				Planned
	7	LA	14	R73.96	NB	Avenue D EB				Planned
	7	LA	14	R74.15	NB	Avenue D WB				Planned
	7	LA	14	R76.84	SB	Avenue A				Planned
●	7	LA	57	1.26	NB	Brea Canyon Rd	S	2	NM	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	LA	57	1.82	SB	Diamond Bar Blvd	S	2		Operational
●	7	LA	57	2.20	NB	Diamond Bar Blvd	S	2	NM	Operational
●	7	LA	57	3.05	SB	Pathfinder Rd	S	2	NM	Operational
●	7	LA	57	3.45	NB	Pathfinder Rd	S	2	NM	Operational
●	7	LA	57	5.04	SB	Sunset Crossing	L	2	NM	Operational
●	7	LA	57	5.27	NB	Sunset Crossing	S	1		Operational
●	7	LA	57	5.97	SB	Temple Ave EB	S	1		Operational
●	7	LA	57	6.16	NB	Temple Ave EB	L	2	NM	Operational
●	7	LA	57	6.28	SB	Temple Ave WB	L	2	NM	Operational
●	7	LA	57	6.35	NB	Temple Ave WB	S	2	NM	Operational
●	7	LA	57	7.30	NB	Campus Dr	S	2	NM	Operational
●	7	LA	57	8.78	SB	Via Verde	H	1		Operational
●	7	LA	57	8.83	NB	Via Verde	S	2	NM	Operational
●	7	LA	57	10.08	SB	Covina	S	2	NM	Operational
●	7	LA	57	10.26	NB	Covina	H	1		Operational
●	7	LA	57	10.70	SB	Arrow Hwy EB	S	2	NM	Operational
●	7	LA	57	10.74	NB	Arrow Hwy	H	2	NM	Operational
●	7	LA	57	10.90	SB	Arrow Hwy WB	L	2	NM	Operational
●	7	LA	57	11.41	SB	Auto Center Drive	S	2	NM	Operational
●	7	LA	60	0.42	WB	Soto	L	1		Operational
●	7	LA	60	0.64	EB	Soto	H	1		Operational
●	7	LA	60	1.47	WB	Lorena	L	1		Operational
●	7	LA	60	1.60	EB	Lorena	S	2		Operational
●	7	LA	60	2.05	EB	Indiana	S	1		Operational
●	7	LA	60	2.47	WB	Third St	L	2		Operational
●	7	LA	60	2.50	EB	Third St	H	2		Operational
●	7	LA	60	4.35	EB	Atlantic SB	L	1		Operational
●	7	LA	60	4.35	WB	Atlantic SB	S	2	NM	Operational
●	7	LA	60	4.49	WB	Atlantic NB	L	2	NM	Operational
●	7	LA	60	4.56	EB	Atlantic NB	S	2	NM	Operational
●	7	LA	60	4.94	WB	Findlay	S	2	NM	Operational
	7	LA	60	5.36	WB	Garfield Ave				Planned
	7	LA	60	6.44	EB	Markland				Planned
●	7	LA	60	7.60	WB	Paramount SB	S	2	NM	Operational
●	7	LA	60	7.74	EB	Paramount SB	L	2	NM	Operational
●	7	LA	60	7.82	WB	Paramount NB	L	2	NM	Operational
●	7	LA	60	7.94	EB	Paramount NB	S	2	NM	Operational
●	7	LA	60	8.52	EB	San Gabriel	L	2		Operational
●	7	LA	60	8.59	WB	San Gabriel	L	1		Operational
●	7	LA	60	9.39	WB	Rosemead SB	S	2	NM	Operational
●	7	LA	60	9.47	EB	Rosemead SB	L	2		Operational
●	7	LA	60	9.54	WB	Rosemead NB	L	1		Operational
●	7	LA	60	9.63	EB	Rosemead NB	S	2		Operational
●	7	LA	60	10.13	EB	Santa Anita SB	L	2	NM	Operational
●	7	LA	60	10.14	WB	Santa Anita SB	S	2	NM	Operational
●	7	LA	60	10.28	EB	Santa Anita NB	S	1		Operational
●	7	LA	60	10.35	WB	Santa Anita NB	H	1		Operational
●	7	LA	60	10.91	WB	Peck SB	S	2	NM	Operational
●	7	LA	60	11.00	EB	Peck/Durfee	H	2		Non Ops
●	7	LA	60	11.06	WB	Peck NB	L	1		Operational
●	7	LA	60	12.71	EB	Crossroads Pkwy	S	2		Operational
●	7	LA	60	12.86	WB	Crossroads Pkwy	H	1		Operational
●	7	LA	60	14.12	WB	7th	S	1		Non Ops
●	7	LA	60	14.50	EB	Seventh Ave	S	2	NM	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	LA	60	15.79	WB	Hacienda SB	S	2	NM	Operational
●	7	LA	60	15.91	EB	Hacienda SB	L	2	NM	Operational
●	7	LA	60	15.99	WB	Hacienda NB	L	2		Operational
●	7	LA	60	16.13	EB	Hacienda NB	S	2	NM	Operational
●	7	LA	60	17.77	WB	Azusa SB	S	2		Operational
●	7	LA	60	17.94	EB	Azusa SB	L	2	NM	Operational
●	7	LA	60	18.00	WB	Azusa NB	L	2	NM	Operational
●	7	LA	60	18.15	EB	Azusa NB	S	2	NM	Operational
●	7	LA	60	19.32	WB	Fullerton SB	S	1		Operational
●	7	LA	60	19.44	EB	Fullerton SB	L	1		Operational
●	7	LA	60	19.46	WB	Fullerton NB	L	2		Operational
●	7	LA	60	19.63	EB	Fullerton NB	S	2	NM	Operational
●	7	LA	60	20.34	WB	Nogales SB	S	2	NM	Operational
●	7	LA	60	20.39	EB	Nogales SB	L	2	NM	Operational
●	7	LA	60	20.47	WB	Nogales NB	L	2	NM	Operational
●	7	LA	60	20.53	EB	Nogales NB	S	2	NM	Operational
●	7	LA	60	21.31	WB	Fairway	S	2	NM	Operational
●	7	LA	60	21.46	EB	Fairway SB	L	1		Operational
●	7	LA	60	21.69	EB	Fairway NB	S	2	NM	Operational
●	7	LA	60	22.80	WB	Brea Canyon	S	2		Operational
●	7	LA	60	22.95	EB	Brea Canyon	H	2		Operational
●	7	LA	60	24.44	WB	Grand	L	2		Operational
●	7	LA	60	24.45	EB	Grand	S	2		Operational
●	7	LA	60	25.60	EB	Diamond Bar	S	2	NM	Operational
●	7	LA	60	25.87	WB	Diamond Bar	L	2	NM	Operational
●	7	LA	60	27.80	EB	Phillips Ranch SB	L	1	NM	Operational
●	7	LA	60	27.87	WB	Phillips Ranch SB	S	2		Operational
●	7	LA	60	28.00	WB	Phillips Ranch NB	L	2		Operational
●	7	LA	60	28.97	EB	Phillips Ranch NB	S	2	NM	Operational
●	7	LA	60	29.15	WB	Garey	S	2		Operational
●	7	LA	60	29.51	EB	Garey	S	2		Operational
●	7	LA	60	30.19	WB	Reservoir	S	2	NM	Operational
●	7	LA	60	30.59	EB	Reservoir	S	2		Operational
●	7	LA	71	0.80	NB	Ridgeway St	S	2		Non Ops
●	7	LA	71	1.60	NB	Mission Blvd	S	2		Non Ops
●	7	LA	71	1.70	SB	Mission Blvd	S	1		Non Ops
●	7	LA	71	3.74	NB	Rio Rancho Rd	S	2		Non Ops
●	7	LA	71	3.74	SB	Rio Rancho Rd	S	2		Non Ops
●	7	LA	91	6.94	WB	Main St	L	1		Operational
●	7	LA	91	7.16	EB	Main St	H	2		Operational
●	7	LA	91	7.55	WB	Avalon	L	2		Operational
●	7	LA	91	7.81	EB	Avalon	S	1		Operational
●	7	LA	91	8.27	WB	Central	S	1		Operational
●	7	LA	91	8.58	EB	Central	S	3	NM	Operational
●	7	LA	91	9.10	WB	Wilmington	S	1		Operational
●	7	LA	91	9.11	EB	Wilmington	S	3	NM	Operational
●	7	LA	91	9.67	WB	Acacia St	S	2	NM	Operational
●	7	LA	91	10.13	EB	Alameda	L	2		Operational
●	7	LA	91	10.48	EB	Santa Fe	S	2		Operational
●	7	LA	91	11.03	EB	Long Beach	L	1		Operational
●	7	LA	91	11.03	WB	Long Beach	S	2	NM	Operational
●	7	LA	91	11.78	WB	Atlantic	S	2	NM	Operational
●	7	LA	91	12.21	EB	Atlantic	S	1		Operational
●	7	LA	91	13.01	WB	Cherry	S	2	NM	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	LA	91	13.26	EB	Cherry	S	2		Operational
●	7	LA	91	13.51	WB	Paramount	S	2		Operational
●	7	LA	91	13.69	EB	Paramount	S	2		Operational
●	7	LA	91	14.04	WB	Downey	S	2	NM	Operational
●	7	LA	91	14.21	EB	Downey	S	2		Operational
●	7	LA	91	14.55	WB	Lakewood SB	S	2		Operational
●	7	LA	91	14.59	EB	Lakewood SB	L	2	NM	Operational
●	7	LA	91	14.65	WB	Lakewood NB	L	2	NM	Operational
●	7	LA	91	14.80	EB	Lakewood NB	S	2	NM	Operational
●	7	LA	91	15.22	EB	Clark	S	2	NM	Operational
●	7	LA	91	15.54	WB	Bellflower	S	2		Operational
●	7	LA	91	15.76	EB	Bellflower	S	2	NM	Operational
●	7	LA	91	17.37	EB	Studebaker	S	2	NM	Operational
●	7	LA	91	17.96	EB	Pioneer SB	L	1		Operational
●	7	LA	91	17.96	WB	Pioneer SB	S	2	NM	Operational
●	7	LA	91	18.21	EB	Pioneer NB	S	1		Operational
●	7	LA	91	18.21	WB	Pioneer NB	L	1		Operational
●	7	LA	91	18.50	WB	Norwalk SB	S	1		Operational
●	7	LA	91	18.54	EB	Norwalk SB	L	1		Operational
●	7	LA	91	18.70	WB	Norwalk NB	L	1		Operational
●	7	LA	91	18.77	EB	Norwalk NB	S	1		Operational
●	7	LA	91	19.06	WB	Bloomfield	S	2		Operational
●	7	LA	91	19.30	WB	Artesia WB	S	2	NM	Operational
●	7	LA	91	19.40	EB	Shoemaker	H	2		Operational
●	7	LA	91	20.14	WB	183rd/Carmenita	S	2		Operational
●	7	LA	101	0.19	NB	Mission Rd	H	1		Operational
●	7	LA	101	0.48	SB	Garey St	H	2		Operational
●	7	LA	101	0.64	SB	Los Angeles St	H	1		Operational
●	7	LA	101	2.42	NB	Glendale	H	1		Operational
●	7	LA	101	2.54	SB	Glendale	H	1		Operational
●	7	LA	101	2.72	SB	Alvarado	H	2		Operational
●	7	LA	101	2.97	NB	Alvarado	H	2		Operational
●	7	LA	101	3.24	SB	Rampart	H	1		Operational
●	7	LA	101	3.31	NB	Rampart	H	1		Operational
●	7	LA	101	3.68	SB	Silverlake	H	2	NM	Operational
●	7	LA	101	3.86	NB	Silverlake	H	1		Operational
●	7	LA	101	4.14	SB	Vermont Ave	S	2		Operational
●	7	LA	101	4.53	NB	Vermont	H	2		Operational
●	7	LA	101	4.73	SB	Melrose	H	2	NM	Operational
●	7	LA	101	5.11	NB	Normandie	H	1		Operational
●	7	LA	101	5.45	SB	Santa Monica	H	2	NM	Operational
●	7	LA	101	5.95	NB	Western	H	1		Operational
●	7	LA	101	6.10	SB	Sunset	H	2	NM	Operational
●	7	LA	101	6.38	SB	Hollywood	H	2	NM	Operational
●	7	LA	101	6.58	NB	Hollywood	H	1		Operational
●	7	LA	101	6.99	SB	Argyle Ave	H	2		Operational
●	7	LA	101	7.20	NB	Argyle/Franklin	H	2		Operational
●	7	LA	101	7.27	SB	Cahuenga	H	1		Operational
●	7	LA	101	7.39	NB	Cahuenga	H	1		Operational
●	7	LA	101	7.75	SB	Highland Ave	H	1		Operational
●	7	LA	101	9.75	NB	Universal Center (EB)	L	2		Operational
●	7	LA	101	9.85	NB	Universal Center (WB)	H	1		Operational
●	7	LA	101	9.95	SB	Lankershim	H	1		Operational
●	7	LA	101	10.48	SB	Ventura	L	1		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	LA	101	10.53	NB	Lankershim	H	2		Operational
●	7	LA	101	11.15	SB	Vineland	L	1		Operational
●	7	LA	101	11.53	NB	Moorpark	H	1		Operational
●	7	LA	101	12.00	NB	Tujunga	S	1		Operational
●	7	LA	101	12.75	SB	Laurel Canyon Blvd	S	2		Operational
●	7	LA	101	12.90	NB	Laurel Canyon Blvd	S	2		Operational
●	7	LA	101	13.80	SB	Coldwater Canyon	S	2	NM	Operational
●	7	LA	101	13.98	NB	Coldwater Canyon	S	1		Operational
●	7	LA	101	14.70	SB	Woodman Ave	S	2	NM	Operational
●	7	LA	101	15.00	NB	Woodman Ave	S	1		Operational
●	7	LA	101	15.81	SB	Van Nuys Blvd	S	2	NM	Operational
●	7	LA	101	16.01	NB	Van Nuys Blvd	S	2		Operational
●	7	LA	101	16.70	SB	Sepulveda Blvd	S	2	NM	Operational
●	7	LA	101	16.80	SB	Sepulveda/Greenleaf	L	2		Operational
●	7	LA	101	17.59	NB	Haskell	L	1		Operational
●	7	LA	101	18.40	SB	Hayvenhurst	S	2	NM	Operational
●	7	LA	101	19.00	SB	Balboa	S	2	NM	Operational
●	7	LA	101	19.40	NB	Balboa	S	1		Operational
●	7	LA	101	20.15	SB	White Oak	S	2	NM	Operational
●	7	LA	101	20.34	NB	White Oak	S	1		Operational
●	7	LA	101	20.96	SB	Burbank/ Reseda	S	2	NM	Operational
●	7	LA	101	21.40	NB	Reseda	S	1		Operational
●	7	LA	101	22.07	SB	Van Alden	H	1		Operational
●	7	LA	101	22.36	NB	Tampa	S	1		Operational
●	7	LA	101	23.22	SB	Winnetka	S	2	NM	Operational
●	7	LA	101	23.40	NB	Winnetka	S	1		Operational
●	7	LA	101	24.23	SB	De Soto	S	2		Operational
●	7	LA	101	24.45	NB	De Soto	S	2		Operational
●	7	LA	101	24.76	SB	Canoga	S	2		Operational
●	7	LA	101	25.26	SB	Topanga NB	S	1		Operational
●	7	LA	101	25.39	SB	Topanga SB	L	1		Operational
●	7	LA	101	25.47	NB	Topanga Cyn	H	1		Operational
●	7	LA	101	25.67	SB	Ventura/Shoop	S	2		Operational
●	7	LA	101	26.90	NB	Woodlake	H	1		Operational
●	7	LA	101	27.26	SB	Mulholland	S	2	NM	Operational
●	7	LA	101	27.38	SB	Valley circle	H	2	NM	Operational
●	7	LA	101	27.73	NB	Valley Circle/Long Valley	S	1		Operational
●	7	LA	101	28.20	SB	Pkwy Calabasas NB	S	2	NM	Operational
●	7	LA	101	28.40	NB	Calabasas Pkwy EB	L	2		Non Ops
●	7	LA	101	28.42	SB	Pkwy Calabasas SB	L	2		Operational
●	7	LA	101	28.50	NB	Calabasas Pkwy WB	S	1		Non Ops
●	7	LA	101	31.02	SB	Los Virgenes EB	S	1		Operational
●	7	LA	101	31.10	NB	Los Virgenes	S	1		Non Ops
●	7	LA	101	31.25	SB	Los Virgenes WB	L	1		Operational
●	7	LA	101	31.83	SB	Lost Hills Rd	S	1		Operational
●	7	LA	101	32.07	NB	Lost Hills Rd	S	1		Non Ops
●	7	LA	101	32.55	SB	Liberty Cyn	S	1		Operational
●	7	LA	101	32.91	NB	Liberty Cyn	S	1		Non Ops
●	7	LA	101	33.76	SB	Palo Comado Cyn	H	1		Non Ops
●	7	LA	101	33.80	NB	Palo Comado Cyn	S	1		Non Ops
●	7	LA	101	34.95	SB	Kanan Rd EB	S	1		Operational
●	7	LA	101	35.03	SB	Kanan Rd WB	L	1		Operational
●	7	LA	101	35.03	NB	Kanan Rd EB	L	1		Non Ops
●	7	LA	101	35.18	NB	Kanan Rd WB	S	1		Non Ops

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	LA	101	36.07	SB	Reyes Adobe	S	1		Operational
●	7	LA	101	36.30	NB	Reyes Adobe	S	2		Non Ops
●	7	LA	101	37.35	SB	Lindero Cyn EB	S	1		Operational
●	7	LA	101	37.50	NB	Lindero Cyn EB	L	1		Non Ops
●	7	LA	101	37.58	SB	Lindero Cyn WB	L	2		Operational
●	7	LA	101	37.71	NB	Lindero Cyn WB	S	2		Non Ops
●	7	LA	105	0.95	EB	Hughes Way / Imperial				Non Ops
●	7	LA	105	1.23	EB	Douglas St/Nash	H	2		Operational
●	7	LA	105	1.80	EB	Imperial/Aviation	H	3	NM	Operational
●	7	LA	105	2.50	EB	NB-405 to EB-105	C	2		Operational
●	7	LA	105	2.82	EB	SB-405 to EB-105	C	2		Operational
●	7	LA	105	3.10	EB	SB Hawthorne Bl	H	2	NM	Operational
●	7	LA	105	3.30	WB	Imperial/Prairie Ave	S	2	NM	Operational
●	7	LA	105	3.60	EB	Imperial/Prairie	H	2	NM	Operational
●	7	LA	105	4.50	WB	Crenshaw Blvd SB	S	2	NM	Operational
●	7	LA	105	4.60	EB	Crenshaw SB / 120th	H	2	NM	Operational
●	7	LA	105	4.80	WB	Crenshaw Blvd NB	L	2	NM	Operational
●	7	LA	105	4.90	EB	Crenshaw NB	S	2	NM	Operational
●	7	LA	105	6.50	WB	Vermont Ave	S	2	NM	Operational
●	7	LA	105	6.81	WB	SB-110 to WB-105	C	2		Operational
●	7	LA	105	7.20	EB	Hoover	S	2	NM	Operational
●	7	LA	105	7.55	EB	SB-110 to EB-105	C	2		Operational
●	7	LA	105	7.56	EB	NB-110 to EB-105	C	2		Operational
●	7	LA	105	8.80	WB	Central Ave	S	3	NM	Operational
●	7	LA	105	9.00	EB	Central Ave	S	3	NM	Operational
●	7	LA	105	9.70	EB	Wilmington	H	2	NM	Operational
●	7	LA	105	10.10	WB	Wilmington Ave	H	3	NM	Operational
●	7	LA	105	11.40	WB	Long Beach Blvd SB	H	2	NM	Operational
●	7	LA	105	11.60	WB	Long Beach Blvd NB	L	2	NM	Operational
●	7	LA	105	11.70	EB	Long Beach SB	L	2	NM	Operational
●	7	LA	105	11.90	EB	Long Beach NB	H	2	NM	Operational
●	7	LA	105	13.01	WB	NB-710 to WB-105	C	2		Operational
●	7	LA	105	13.21	WB	SB-710 to WB-105	C	1		Operational
●	7	LA	105	13.80	WB	Garfield Ave	S	2	NM	Operational
●	7	LA	105	13.81	EB	NB-710 to EB-105	C	2		Operational
●	7	LA	105	13.94	EB	SB-710 to EB-105	C	2		Operational
●	7	LA	105	14.10	WB	Garfield Ave (Rte 710)	S	1		Operational
●	7	LA	105	14.80	EB	Paramount	S	2	NM	Operational
●	7	LA	105	15.60	EB	Lakewood SB	H	2	NM	Operational
●	7	LA	105	15.60	WB	Lakewood	S	2	NM	Operational
●	7	LA	105	15.90	EB	Lakewood NB	S	2	NM	Operational
●	7	LA	105	16.50	WB	Bellflower	S	2	NM	Operational
●	7	LA	105	16.80	EB	Bellflower	S	2	NM	Operational
●	7	LA	105	17.90	WB	Hoxie Ave	S	1		Non Ops
●	7	LA	110	1.05	NB	Harbor	S	2		Non Ops
●	7	LA	110	1.58	NB	J. Gibson	H	2		Non Ops
●	7	LA	110	2.84	NB	C St	H	2	NM	Non Ops
●	7	LA	110	3.38	NB	Anaheim St	H	2		Non Ops
	7	LA	110	3.97	SB	Pacific Coast Hwy				Planned
●	7	LA	110	4.17	NB	Pacific Coast Hwy				Non Ops
●	7	LA	110	4.17	NB	Pacific Coast Hwy	H	2		Operational
	7	LA	110	5.29	SB	Sepulveda EB				Planned
●	7	LA	110	5.38	NB	Sepulveda EB	L	2		Operational
	7	LA	110	5.49	SB	Sepulveda WB				Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	LA	110	5.60	NB	Sepulveda WB	S	2	NM	Operational
	7	LA	110	6.36	SB	223rd St				Planned
●	7	LA	110	6.84	NB	220th St	H	2	NM	Operational
	7	LA	110	6.87	SB	Carson				Planned
	7	LA	110	7.78	SB	Torrance				Planned
●	7	LA	110	7.98	NB	Torrance	H	1		Operational
●	7	LA	110	9.21	NB	190th St	S	2	NM	Operational
●	7	LA	110	11.11	SB	Redondo Beach	S	2	NM	Operational
●	7	LA	110	11.22	NB	Redondo Beach	L	2		Operational
●	7	LA	110	11.73	SB	Rosecrans	S	2		Operational
●	7	LA	110	11.83	NB	Rosecrans EB	L	2	NM	Operational
●	7	LA	110	11.97	NB	Rosecrans WB	S	2	NM	Operational
●	7	LA	110	12.78	SB	El Segundo	S	2		Operational
●	7	LA	110	12.86	NB	El Segundo	L	2		Operational
●	7	LA	110	13.44	SB	WB-105 to SB-110	C	2		Operational
●	7	LA	110	13.45	SB	EB-105 to SB-110	C	1		Operational
●	7	LA	110	13.80	SB	Imperial Hwy	S	2	NM	Operational
●	7	LA	110	14.29	NB	Imperial Hwy	S	2	NM	Operational
●	7	LA	110	14.50	NB	EB/WB-105 to NB-110	C	3		Operational
●	7	LA	110	15.10	NB	Century	S	2	NM	Operational
●	7	LA	110	15.88	NB	Manchester EB	L	2	NM	Operational
●	7	LA	110	15.88	SB	Manchester EB	S	2	NM	Operational
●	7	LA	110	15.89	NB	Manchester WB	S	2	NM	Operational
●	7	LA	110	16.02	SB	Manchester WB	L	2	NM	Operational
●	7	LA	110	17.13	NB	Florence	S	2	NM	Operational
●	7	LA	110	17.16	SB	Florence/76th	S	2	NM	Operational
●	7	LA	110	17.30	SB	Gage	S	2	NM	Operational
●	7	LA	110	17.68	NB	Gage	S	2	NM	Operational
●	7	LA	110	17.88	SB	Slauson	S	2	NM	Operational
●	7	LA	110	17.97	NB	Slauson	L	2	NM	Operational
●	7	LA	110	18.64	NB	51St	S	1		Operational
●	7	LA	110	18.89	SB	Vernon	S	1		Operational
●	7	LA	110	19.16	NB	Vernon	S	1	NM	Operational
●	7	LA	110	19.37	SB	M.L. King Blvd	S	2	NM	Operational
●	7	LA	110	19.47	NB	M.L. King Bl.	L	2	NM	Operational
●	7	LA	110	19.80	SB	37th/Exposition	S	2	NM	Operational
●	7	LA	110	20.14	NB	Exposition	S	2		Operational
●	7	LA	110	21.36	NB	Washington	H	1		Operational
●	7	LA	110	21.60	SB	11TH St	S	2		Operational
●	7	LA	110	21.85	NB	11TH St				Non Ops
●	7	LA	110	22.31	SB	8TH St	S	2		Operational
●	7	LA	110	22.39	NB	9TH St				Non Ops
●	7	LA	110	23.04	SB	3RD St				Non Ops
●	7	LA	110	23.23	NB	3RD St	S	1		Non Ops
●	7	LA	110	24.06	NB	Figueroa				Non Ops
●	7	LA	110	24.46	SB	Stadium Way	H	1		Operational
●	7	LA	110	24.56	NB	Hill				Non Ops
●	7	LA	110	24.76	NB	Stadium Way	L	1		Non Ops
●	7	LA	110	25.00	SB	Amador	S	1		Operational
●	7	LA	110	25.41	SB	SB-5 TO SB-110	C	2		Operational
●	7	LA	118	1.65	WB	Topanga Cyn	S	2		Operational
●	7	LA	118	1.95	EB	Topanga Cyn	S	2	NM	Operational
●	7	LA	118	2.72	WB	Desoto Ave	L	2		Operational
●	7	LA	118	2.86	EB	Desoto Ave	S	2		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	LA	118	3.80	EB	Porter Ranch Dr	S	2	NM	Operational
●	7	LA	118	3.86	WB	Porter Ranch Dr	S	2	NM	Operational
●	7	LA	118	4.46	WB	Tampa Ave	S	2		Operational
●	7	LA	118	4.79	EB	Tampa Ave	S	2		Operational
●	7	LA	118	5.65	WB	Reseda Blvd	H	2		Operational
●	7	LA	118	5.97	EB	Reseda Blvd	S	2		Operational
●	7	LA	118	7.61	EB	Balboa Bl. SB	L	2	NM	Operational
●	7	LA	118	7.80	WB	Balboa Blvd	S	2		Operational
●	7	LA	118	7.99	EB	Balboa Bl. NB	S	2	NM	Operational
●	7	LA	118	8.58	EB	Hayvenhurst Ave	S	2	NM	Operational
●	7	LA	118	8.85	WB	Woodley Ave	S	2		Operational
	7	LA	118	9.60	EB	Sepulveda				Planned
	7	LA	118	9.96	WB	Sepulveda				Planned
	7	LA	118	11.60	WB	Laurel Canyon Blvd				Planned
	7	LA	118	12.30	WB	San Fernando				Planned
	7	LA	118	12.31	EB	San Fernando				Planned
	7	LA	118	12.40	EB	Paxton				Planned
	7	LA	118	13.17	WB	Glenoaks				Planned
●	7	LA	134	0.49	EB	Vineland	H	1		Operational
●	7	LA	134	0.95	EB	Cahuenga	S	1		Operational
●	7	LA	134	0.95	WB	Vineland (170 Conn.)	L	1		Non Ops
●	7	LA	134	1.90	WB	Alameda 1 SB	H	1		Operational
●	7	LA	134	1.92	WB	Alameda 2 NB	S	1		Operational
●	7	LA	134	2.11	EB	Hollywood Way	H	1		Operational
●	7	LA	134	2.86	WB	Buena Vista	S	2		Operational
●	7	LA	134	3.04	EB	Buena Vista	S	1		Operational
●	7	LA	134	3.75	WB	Forest Lawn	S	1		Operational
●	7	LA	134	3.87	EB	Forest Lawn	S	1		Operational
●	7	LA	134	4.73	WB	Victory	S	2		Operational
●	7	LA	134	6.00	WB	San Fernando Rd	H	1		Operational
●	7	LA	134	6.10	EB	San Fernando Rd	H	2		Operational
●	7	LA	134	6.50	WB	Pacific	S	1		Operational
●	7	LA	134	6.66	EB	Pacific	S	1		Operational
●	7	LA	134	6.88	WB	Central	S	2		Operational
●	7	LA	134	7.22	EB	Brand	S	2		Operational
●	7	LA	134	7.69	WB	Glendale	H	1		Operational
●	7	LA	134	7.84	EB	Glendale SB	L	2	NM	Operational
●	7	LA	134	7.96	EB	Glendale NB	S	2	NM	Operational
●	7	LA	134	8.58	WB	Harvey	S	2		Operational
●	7	LA	134	9.07	EB	Harvey	S	2	NM	Operational
●	7	LA	134	11.50	WB	Figueroa	H	2		Operational
●	7	LA	134	11.53	EB	Figueroa	H	1		Operational
●	7	LA	134	11.64	EB	Colorado	S	2	NM	Operational
●	7	LA	134	12.27	WB	San Rafael	S	1		Operational
●	7	LA	134	12.45	EB	San Rafael	S	1		Operational
●	7	LA	134	12.78	WB	Orange Grove	H	1	NM	Operational
●	7	LA	134	13.18	EB	Orange Grove	H	1		Operational
	7	LA	170	14.70	NB	Vineland / WB Rte 134				Planned
	7	LA	170	15.03	NB	Tujunga / Riverside				Planned
●	7	LA	170	15.26	SB	Magnolia	S	2	NM	Operational
	7	LA	170	15.50	NB	Magnolia Blvd				Planned
●	7	LA	170	15.96	SB	Burbank Blvd	S	2	NM	Operational
	7	LA	170	16.14	NB	Burbank Blvd				Planned
●	7	LA	170	16.60	SB	Oxnard Blvd	S	2	NM	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	7	LA	170	16.61	NB	Oxnord St				Planned
●	7	LA	170	17.16	SB	Victory Blvd EB	S	2	NM	Non Ops
	7	LA	170	17.19	NB	Victory Blvd EB				Planned
●	7	LA	170	17.30	SB	Victory Blvd WB	L	1		Operational
	7	LA	170	17.42	NB	Victory Blvd WB				Planned
●	7	LA	170	18.19	SB	Sherman Way	S	2		Operational
	7	LA	170	18.21	NB	Sherman Way EB				Planned
	7	LA	170	18.41	NB	Sherman Way WB				Planned
●	7	LA	170	19.62	SB	Roscoe EB	S	2		Operational
	7	LA	170	19.68	NB	Roscoe Blvd				Planned
●	7	LA	170	19.80	SB	Roscoe WB	L	1		Operational
●	7	LA	170	20.27	SB	Arleta	H	2		Operational
●	7	LA	210	0.87	WB	Yarnell	L	1		Operational
●	7	LA	210	1.04	EB	Yarnell	S	2	M	Operational
●	7	LA	210	1.76	WB	Roxford	S	2	M	Operational
●	7	LA	210	2.14	EB	Roxford	S	2	M	Operational
●	7	LA	210	3.11	WB	Polk	S	2	M	Operational
●	7	LA	210	3.44	EB	Polk	S	2		Operational
●	7	LA	210	3.95	WB	Hubbard	S	2	M	Operational
●	7	LA	210	4.28	EB	Hubbard	S	2		Operational
●	7	LA	210	4.79	WB	Maclay	S	2	M	Operational
●	7	LA	210	5.09	EB	Maclay	S	2		Operational
●	7	LA	210	5.51	WB	EB 118 to WB 210	C	2		Operational
●	7	LA	210	5.92	WB	Paxton St	S	2	M	Operational
●	7	LA	210	6.25	EB	Paxton St	S	1		Operational
●	7	LA	210	6.50	EB	EB 118 to EB 210	C	2		Operational
●	7	LA	210	7.73	WB	Osborne	S	1		Operational
●	7	LA	210	8.01	EB	Osborne	S	2	M	Operational
●	7	LA	210	9.30	WB	Wheatland	S	2	M	Operational
●	7	LA	210	9.61	EB	Wheatland	S	2	M	Operational
●	7	LA	210	10.93	WB	Sunland SB	S	2	M	Operational
●	7	LA	210	11.06	EB	Sunland SB	L	1		Operational
●	7	LA	210	11.16	WB	Sunland NB	L	1		Operational
●	7	LA	210	11.36	EB	Sunland NB	S	2	M	Operational
●	7	LA	210	14.05	WB	La Tuna Canyon SB	S	1		Operational
●	7	LA	210	14.24	WB	La Tuna Canyon NB	L	1		Operational
●	7	LA	210	14.41	EB	La Tuna Canyon	S	1		Operational
●	7	LA	210	15.31	WB	Honolulu	H	1		Operational
●	7	LA	210	15.89	EB	Lowell/ Honolulu	S	2		Operational
●	7	LA	210	16.62	WB	Pennsylvania	S	2	M	Operational
●	7	LA	210	17.00	EB	Pennsylvania	S	2		Operational
●	7	LA	210	17.47	EB	La Crescenta	L	1		Operational
●	7	LA	210	17.95	WB	Ocean View	S	1		Operational
●	7	LA	210	18.34	WB	NB 2 to WB 210	C	2		Operational
●	7	LA	210	18.73	EB	Ocean View	S	2	M	Operational
●	7	LA	210	19.10	EB	NB 2 to EB 210	C	2		Operational
●	7	LA	210	19.68	WB	Angeles Crest SB	S	2	M	Operational
●	7	LA	210	19.87	WB	Angeles Crest NB	L	1		Operational
●	7	LA	210	19.89	EB	Angeles Crest SB	L	1		Operational
●	7	LA	210	20.07	EB	Angeles Crest NB	S	1		Operational
●	7	LA	210	20.42	WB	Gould	S	2	M	Operational
●	7	LA	210	21.01	EB	Foothill	S	2		Operational
●	7	LA	210	21.41	WB	Berkshire	S	2	M	Operational
●	7	LA	210	21.65	EB	Berkshire	S	2	M	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	LA	210	22.29	WB	Arroyo	S	1		Operational
●	7	LA	210	22.64	EB	Arroyo	S	2		Operational
●	7	LA	210	23.00	WB	Lincoln	S	1		Operational
●	7	LA	210	23.25	EB	Lincoln	H	2		Operational
●	7	LA	210	23.89	WB	Mountain St	S	2		Operational
●	7	LA	210	24.22	EB	Mountain St	S	2		Operational
●	7	LA	210	24.24	WB	EB 134 to WB 210	C	2		Operational
●	7	LA	210	24.83	WB	Walnut	S	2	M	Operational
●	7	LA	210	25.42	WB	Fair Oaks (Rte 134)	S	2	NM	Operational
●	7	LA	210	25.74	EB	Marengo	S	2		Operational
●	7	LA	210	26.14	WB	Lake	S	2		Operational
●	7	LA	210	26.49	EB	Lake	S	2		Operational
●	7	LA	210	26.82	WB	Hill	S	2		Operational
●	7	LA	210	27.16	EB	Hill	S	2		Operational
●	7	LA	210	27.65	EB	Allen	S	2		Operational
●	7	LA	210	28.05	WB	Altadena	S	2		Operational
●	7	LA	210	28.29	WB	San Gabriel	S	2		Operational
●	7	LA	210	28.70	EB	San Gabriel	S	2		Operational
●	7	LA	210	29.19	WB	Sierra Madre Villa	S	1		Operational
●	7	LA	210	29.46	EB	Madre	S	2	M	Operational
●	7	LA	210	29.59	WB	Rosemead	S	2		Operational
●	7	LA	210	29.72	WB	Foothill - Rosemead	H	2		Operational
●	7	LA	210	29.74	EB	Rosemead	S	2		Operational
●	7	LA	210	29.85	WB	Michillinda	L	2		Operational
●	7	LA	210	30.01	EB	Michillinda	H	2		Operational
●	7	LA	210	30.49	WB	Baldwin - Foothill	H	2		Operational
●	7	LA	210	30.71	WB	Baldwin NB	L	2		Operational
●	7	LA	210	30.95	EB	Baldwin	S	2		Operational
●	7	LA	210	31.73	WB	Santa Anita SB	S	2		Operational
●	7	LA	210	31.91	WB	Santa Anita NB	L	2		Operational
●	7	LA	210	32.06	EB	Santa Anita	S	2		Operational
●	7	LA	210	32.76	WB	Huntington	H	2		Operational
●	7	LA	210	32.86	EB	Huntington WB	L	1		Operational
●	7	LA	210	33.05	EB	Huntington EB	S	2		Operational
●	7	LA	210	33.76	WB	Myrtle	S	2		Operational
●	7	LA	210	34.15	EB	Myrtle	S	2		Operational
●	7	LA	210	34.58	WB	Mountain	S	2		Operational
●	7	LA	210	34.95	WB	Buena Vista	S	2		Operational
●	7	LA	210	35.20	EB	Mountain	S	2		Operational
●	7	LA	210	35.38	EB	Buena Vista	S	2		Operational
●	7	LA	210	36.00	WB	NB 605 to WB 210	C	2		Operational
●	7	LA	210	36.21	WB	Mount Olive	H	2	M	Operational
●	7	LA	210	36.41	EB	Mount Olive	L	2	M	Operational
●	7	LA	210	36.60	EB	NB 605 to EB 210	C	2		Operational
●	7	LA	210	37.78	WB	Irwindale SB	S	2		Operational
●	7	LA	210	37.92	WB	Irwindale NB	L	2		Operational
●	7	LA	210	38.01	EB	Irwindale	S	2		Operational
●	7	LA	210	38.87	WB	Vernon	S	2		Operational
●	7	LA	210	39.15	EB	Vernon	S	2		Operational
●	7	LA	210	39.45	WB	Azusa SB	S	1		Operational
●	7	LA	210	39.62	WB	Azusa NB	H	2		Operational
●	7	LA	210	39.70	EB	Azusa SB	L	2		Operational
●	7	LA	210	39.71	EB	Azusa NB	S	2	M	Operational
●	7	LA	210	40.28	WB	Citrus	H	2		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	LA	210	40.56	EB	Citrus SB	L	2	M	Operational
●	7	LA	210	40.74	EB	Citrus NB	S	1		Operational
●	7	LA	210	41.47	WB	Grand	S	2	M	Operational
●	7	LA	210	41.63	WB	Grand - Baseline	H	2		Operational
●	7	LA	210	41.80	EB	Grand	S	2		Operational
●	7	LA	210	43.10	WB	Sunflower	S	2		Operational
●	7	LA	210	43.39	EB	Sunflower	S	2	M	Operational
●	7	LA	210	43.90	WB	NB 57 to WB 210	C	2		Operational
●	7	LA	210	44.10	WB	Lone Hill	S	2	M	Operational
●	7	LA	210	44.20	EB	Lone Hill	S	2	M	Operational
●	7	LA	210	44.60	EB	NB 57 to EB 210	C	2		Operational
●	7	LA	210	45.06	WB	Foothill SB	S	2	M	Operational
●	7	LA	210	45.17	WB	Foothill NB	L	2		Operational
●	7	LA	210	45.31	WB	San Dimas	S	2		Operational
●	7	LA	210	45.66	EB	San Dimas	S	2		Operational
●	7	LA	210	47.00	EB	Foothill	H	2		Operational
●	7	LA	210	48.00	WB	Fruit	S	2		Operational
●	7	LA	210	48.20	EB	Fruit	S	2		Operational
●	7	LA	210	49.40	WB	Towne	S	2		Operational
●	7	LA	210	49.63	EB	Towne	S	2		Operational
●	7	LA	210	51.85	EB	Baseline	S	2		Operational
●	7	LA	210	51.94	WB	Baseline	L	2		Operational
●	7	LA	405	0.55	NB	Studebaker	S	1		Operational
●	7	LA	405	0.90	SB	Stearns	S	2	NM	Operational
●	7	LA	405	1.10	NB	Palo Verde	L	1		Operational
●	7	LA	405	1.50	SB	Woodruff	S	1		Operational
●	7	LA	405	1.73	NB	Woodruff	S	1		Operational
●	7	LA	405	2.16	NB	Bellflower NB	L	2		Operational
●	7	LA	405	2.19	SB	Bellflower NB	S	1		Operational
●	7	LA	405	2.45	SB	Bellflower SB	L	1		Operational
●	7	LA	405	2.46	NB	Bellflower SB	H	1		Operational
●	7	LA	405	2.97	SB	Willow	H	2	NM	Operational
●	7	LA	405	3.28	NB	Lakewood NB	L	2	NM	Operational
●	7	LA	405	3.44	NB	Lakewood SB	S	2	NM	Operational
●	7	LA	405	3.47	SB	Lakewood SB	L	2	NM	Operational
●	7	LA	405	4.47	SB	Spring	S	2	NM	Operational
●	7	LA	405	4.57	NB	Spring	H	2	NM	Operational
●	7	LA	405	4.81	NB	Cherry NB	L	1		Operational
●	7	LA	405	4.81	SB	Cherry SB	L	1		Operational
●	7	LA	405	4.92	NB	Cherry SB	H	1		Operational
●	7	LA	405	5.38	SB	Orange	L	2	NM	Operational
●	7	LA	405	5.46	NB	Orange	H	1		Operational
●	7	LA	405	5.99	NB	Atlantic NB	L	1		Operational
●	7	LA	405	6.00	SB	Atlantic NB	H	1		Operational
●	7	LA	405	6.15	SB	Atlantic SB	L	1		Operational
●	7	LA	405	6.42	SB	Long Beach	H	2		Operational
●	7	LA	405	6.56	NB	Wardlow	S	2	NM	Operational
●	7	LA	405	7.22	NB	Pacific Pl.	H	2	NM	Operational
●	7	LA	405	8.02	NB	Santa Fe	H	2		Operational
●	7	LA	405	8.05	SB	Santa Fe	H	2		Operational
●	7	LA	405	8.63	SB	Alameda	H	2		Operational
●	7	LA	405	8.69	NB	Alameda	L	2		Operational
●	7	LA	405	9.47	NB	Wilmington	L	1		Operational
●	7	LA	405	9.47	SB	Wilmington	S	2		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	LA	405	10.49	SB	Carson	S	2	NM	Operational
●	7	LA	405	10.66	NB	Carson	S	1		Operational
●	7	LA	405	11.20	SB	Avalon	S	2		Operational
●	7	LA	405	11.32	NB	Avalon	H	2		Operational
●	7	LA	405	11.32	SB	Avalon	L	2		Operational
●	7	LA	405	12.57	SB	Main St	S	2	NM	Operational
●	7	LA	405	13.31	NB	Vermont	S	2	NM	Operational
●	7	LA	405	13.81	NB	Normandie	H	1		Operational
●	7	LA	405	13.81	SB	Normandie	S	2	NM	Operational
●	7	LA	405	14.34	NB	Western	H	1		Operational
●	7	LA	405	14.52	SB	190th/Western	H	1		Operational
●	7	LA	405	15.43	NB	Crenshaw	H	1		Operational
●	7	LA	405	15.51	SB	Crenshaw	L	1		Operational
●	7	LA	405	16.47	SB	Artesia	S	2		Operational
●	7	LA	405	16.66	NB	Artesia	H	1		Operational
●	7	LA	405	17.01	NB	Redondo Beach	S	1		Operational
●	7	LA	405	17.52	NB	Hawthorne	L	3	NM	Operational
●	7	LA	405	17.64	SB	Hawthorne	L	2	NM	Operational
●	7	LA	405	18.20	NB	Inglewood NB	L	2	NM	Operational
●	7	LA	405	18.20	SB	Inglewood NB	H	2	NM	Operational
●	7	LA	405	18.30	SB	Inglewood SB	L	2	NM	Operational
●	7	LA	405	18.35	NB	Inglewood SB	H	2	NM	Operational
●	7	LA	405	19.16	NB	Rosecrans EB	L	1		Operational
●	7	LA	405	19.16	SB	Rosecrans	H	1		Operational
●	7	LA	405	19.36	NB	Rosecrans WB	S	1		Operational
●	7	LA	405	20.13	NB	El Segundo EB	L	2	NM	Operational
●	7	LA	405	20.30	SB	El Segundo EB	S	2	NM	Operational
●	7	LA	405	20.39	NB	El Segundo WB	H	2	NM	Operational
●	7	LA	405	20.60	SB	El Segundo WB	H	2	NM	Operational
●	7	LA	405	21.08	SB	Imperial Hwy EB	H	2	NM	Operational
●	7	LA	405	21.10	NB	Imperial Hwy EB	L	2	NM	Operational
●	7	LA	405	21.30	SB	Imperial Hwy WB	H	2	NM	Operational
●	7	LA	405	21.39	NB	Imperial Hwy WB	H	2	NM	Operational
●	7	LA	405	22.00	SB	Century Blvd EB	H	2		Operational
●	7	LA	405	22.02	SB	Centruy Blvd WB/98th	H	2		Operational
●	7	LA	405	22.30	SB	EB/WB-105 to SB-405	C	2		Operational
●	7	LA	405	22.34	SB	Manchester WB/Olive	H	2		Operational
●	7	LA	405	22.40	NB	WB-105 to NB-405	C	2		Operational
●	7	LA	405	22.68	NB	Century Blvd EB	L	2	NM	Operational
●	7	LA	405	22.70	NB	Century Blvd. WB	Angle	2		Operational
●	7	LA	405	23.36	NB	Manchester EB	L	2	NM	Operational
●	7	LA	405	23.47	NB	Manchester Blvd WB	Angle	2		Operational
●	7	LA	405	23.61	SB	La Cienaga Blvd	H	1		Operational
●	7	LA	405	24.25	NB	La Tijera Blvd	Angle	2	NM	Operational
●	7	LA	405	24.25	SB	La Tijera Blvd	Angle	2	NM	Operational
●	7	LA	405	24.80	NB	Howard Hughes Pkwy	H	2	NM	Operational
●	7	LA	405	25.00	SB	Howard Hughes Pkwy	H	2		Operational
●	7	LA	405	25.83	SB	Jefferson Blvd	Angle	3	NM	Operational
●	7	LA	405	26.00	NB	Jefferson Blvd	Angle	3		Operational
●	7	LA	405	26.84	SB	Braddock Dr	Angle	1		Operational
●	7	LA	405	27.35	NB	Culver Blvd	Angle	2	NM	Operational
●	7	LA	405	27.81	NB	Venice Blvd	H	1		Operational
●	7	LA	405	27.81	SB	Venice Blvd	H	1		Operational
●	7	LA	405	29.16	SB	National Blvd	Angle	2		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	LA	405	30.13	NB	Pico / Olympic Blvd	H	2		Operational
●	7	LA	405	30.80	SB	Santa Monica Blvd	Angle	3	NM	Operational
●	7	LA	405	30.95	NB	Santa Monica Blvd	Angle	2		Operational
●	7	LA	405	31.39	SB	Wilshire Blvd EB	H	2	NM	Operational
●	7	LA	405	31.48	NB	Wilshire Blvd EB	L	1		Operational
●	7	LA	405	31.57	NB	Wilshire Blvd WB	H	1		Operational
●	7	LA	405	31.66	SB	Wilshire Blvd WB	L	2		Operational
●	7	LA	405	32.90	SB	Sunset Blvd EB	Angle	2	NM	Operational
●	7	LA	405	32.96	NB	Sunset Blvd EB	L	1		Operational
●	7	LA	405	33.05	SB	Sunset WB/Church Ln.	L	1		Operational
●	7	LA	405	33.42	NB	Moraga Ave	H	2	NM	Operational
●	7	LA	405	34.71	NB	Getty Center Dr	L	1		Operational
●	7	LA	405	34.73	SB	Getty Center Dr	Angle	2	NM	Operational
●	7	LA	405	36.25	SB	Skirball/Muholland Dr	Angle	2		Operational
●	7	LA	405	36.93	NB	Skirball/Muholland Dr	H	1		Operational
●	7	LA	405	38.42	SB	Valley Vista Blvd	Angle	2		Operational
●	7	LA	405	38.74	NB	Ventura Blvd	H	1		Operational
●	7	LA	405	39.09	SB	Ventura Blvd	L	2	NM	Operational
●	7	LA	405	40.08	SB	Burbank Blvd	H	1		Operational
●	7	LA	405	40.42	NB	Burbank Blvd	H	2		Operational
●	7	LA	405	41.31	SB	Victory Blvd EB	L	1		Operational
●	7	LA	405	41.48	SB	Victory Blvd WB	H	2		Operational
●	7	LA	405	41.49	NB	Victory Blvd	H	2		Operational
●	7	LA	405	42.25	SB	Sherman Way EB	H	1	NM	Operational
●	7	LA	405	42.40	SB	Sherman Way WB	L	2	NM	Operational
●	7	LA	405	42.59	NB	Sherman Way	H	2		Operational
●	7	LA	405	43.61	SB	Roscoe Blvd	H	2		Operational
●	7	LA	405	43.93	NB	Roscoe Blvd	S	2		Operational
●	7	LA	405	44.62	SB	Nordoff St	H	2		Operational
●	7	LA	405	44.92	NB	Nordoff St	S	2		Operational
●	7	LA	405	46.10	SB	Devonshire St EB	S	2		Operational
●	7	LA	405	46.28	SB	Devonshire St WB	H	1		Operational
●	7	LA	405	46.43	NB	Devonshire St WB	H	1		Operational
●	7	LA	405	46.44	NB	Devonshire St EB	L	1		Operational
●	7	LA	405	47.28	SB	San Fernando Mission	L	2		Operational
●	7	LA	405	47.62	SB	Rinaldi St	S	2		Operational
●	7	LA	405	47.94	NB	Rinaldi St	S	2		Operational
●	7	LA	605	0.23	NB	Spring St	L	1		Operational
●	7	LA	605	1.67	SB	Carson EB	L	2		Operational
●	7	LA	605	1.70	NB	Carson EB	L	2		Operational
●	7	LA	605	1.85	SB	Carson WB	L	1	NM	Operational
●	7	LA	605	1.91	NB	Carson WB	S	2	NM	Operational
●	7	LA	605	2.79	SB	Del Amo EB	L	2	NM	Operational
●	7	LA	605	2.81	NB	Del Amo EB	L	2	NM	Operational
●	7	LA	605	2.93	SB	Del Amo WB	L	1		Operational
●	7	LA	605	2.96	NB	Del Amo WB	S	2	NM	Operational
●	7	LA	605	3.68	SB	South EB	L	2	NM	Operational
●	7	LA	605	3.71	NB	South EB	L	1		Operational
●	7	LA	605	3.83	SB	South WB	L	1	NM	Operational
●	7	LA	605	3.86	NB	South WB	S	1		Operational
●	7	LA	605	5.74	SB	Alondra EB	S	2	NM	Operational
●	7	LA	605	5.77	NB	Alondra EB	L	1		Operational
●	7	LA	605	5.85	SB	Alondra WB	L	1		Operational
●	7	LA	605	5.92	NB	Alondra WB	L	2	NM	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	LA	605	6.72	SB	Rosecrans EB	H	2	NM	Operational
●	7	LA	605	6.84	SB	Rosecrans WB	L	2	NM	Operational
●	7	LA	605	6.85	NB	Rosecrans to WB 105	L	1		Operational
●	7	LA	605	6.93	NB	Rosecrans WB	S	2	NM	Operational
●	7	LA	605	7.20	SB	EB-105 to SB-605	C	2		Operational
●	7	LA	605	7.80	NB	Imperial	H	2	NM	Operational
●	7	LA	605	7.90	SB	Imperial	L	2		Operational
●	7	LA	605	8.20	NB	EB-105 to NB-605	C	2		Operational
●	7	LA	605	8.34	SB	Firestone				Non Ops
●	7	LA	605	8.34	SB	Firestone	S	2	NM	Operational
●	7	LA	605	8.50	NB	Firestone	S	1	NM	Operational
●	7	LA	605	9.16	SB	Florence	S	2		Operational
●	7	LA	605	9.30	NB	Florence	H	2		Operational
●	7	LA	605	10.32	SB	Telegraph	L	2		Operational
●	7	LA	605	10.40	NB	Telegraph	S	2	NM	Operational
●	7	LA	605	11.49	SB	Slauson EB	H	2	NM	Operational
●	7	LA	605	11.96	SB	Washington EB	S	2	NM	Operational
●	7	LA	605	11.97	SB	Washington WB	L	1		Operational
●	7	LA	605	12.22	NB	Washington EB	H	1		Operational
●	7	LA	605	12.57	NB	Saragosa	S	2	NM	Operational
●	7	LA	605	13.44	SB	Whittier EB	S	2	NM	Operational
●	7	LA	605	13.51	NB	Whittier EB	L	1		Operational
●	7	LA	605	13.61	SB	Whittier WB	L	1		Operational
●	7	LA	605	13.64	NB	Whittier WB	S	2	NM	Operational
●	7	LA	605	14.30	SB	Beverly EB	S	2	NM	Operational
●	7	LA	605	14.31	SB	Beverly WB	L	1		Operational
●	7	LA	605	14.60	NB	Beverly	H	2		Operational
●	7	LA	605	15.45	SB	Rose Hills	H	1		Operational
●	7	LA	605	15.73	NB	Rose Hills	S	1		Operational
●	7	LA	605	16.54	SB	Peck SB	S	2	NM	Operational
●	7	LA	605	16.75	SB	Peck NB	H	1		Operational
●	7	LA	605	16.78	NB	Peck	H	1		Operational
●	7	LA	605	19.29	SB	Valley EB	S	1		Operational
●	7	LA	605	19.30	SB	Valley WB	L	2		Operational
●	7	LA	605	19.36	NB	Valley EB	L	1		Operational
●	7	LA	605	19.50	NB	Valley WB	H	1		Operational
●	7	LA	605	20.88	SB	Ramona	S	2	NM	Operational
●	7	LA	605	21.23	NB	Ramona	S	2	NM	Operational
●	7	LA	605	21.95	SB	Lower Azusa	S	2		Operational
●	7	LA	605	22.37	NB	Lower Azusa	S	1		Operational
●	7	LA	605	23.35	SB	Live Oak	S	2		Operational
●	7	LA	605	23.95	NB	Arrow Hwy EB	L	1		Operational
●	7	LA	605	24.15	NB	Arrow Hwy WB	H	1		Operational
	7	LA	710	6.28	NB	Anaheim St EB				Planned
	7	LA	710	6.28	SB	Anaheim St EB				Planned
	7	LA	710	6.43	SB	Anaheim St WB				Planned
	7	LA	710	6.51	NB	Anaheim St WB				Planned
	7	LA	710	6.80	SB	WB PCH				Planned
	7	LA	710	6.80	SB	EB PCH				Planned
	7	LA	710	6.83	NB	EB PCH				Planned
	7	LA	710	7.01	NB	WB PCH				Planned
	7	LA	710	7.73	SB	EB Willow St				Planned
	7	LA	710	7.81	NB	EB Willow St				Planned
	7	LA	710	7.96	SB	WB Willow St				Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	7	LA	710	8.06	NB	WB Willow St				Planned
	7	LA	710	9.16	NB	Wardlow Rd				Planned
●	7	LA	710	9.72	NB	Pacific Pl.	H	1		Operational
●	7	LA	710	10.69	NB	Del Amo EB	L	1		Operational
●	7	LA	710	10.95	SB	Del Amo WB	L	2		Operational
●	7	LA	710	11.00	NB	Del Amo WB	S	1		Operational
●	7	LA	710	11.89	SB	Long Beach	S	2	NM	Operational
●	7	LA	710	12.13	NB	Long Beach	S	2	NM	Operational
●	7	LA	710	12.80	SB	Artesia Blvd	S	1		Operational
●	7	LA	710	13.29	NB	Atlantic	H	1		Non Ops
●	7	LA	710	13.83	SB	Alondra Blvd	S	1		Operational
●	7	LA	710	14.10	NB	Alondra Blvd	S	2		Operational
●	7	LA	710	14.90	NB	Rosecrans EB	L	2	NM	Operational
●	7	LA	710	14.90	SB	Rosecrans EB	H	2	NM	Operational
●	7	LA	710	15.10	NB	Rosecrans WB	H	2	NM	Operational
●	7	LA	710	15.10	SB	Rosecrans WB	L	2	NM	Operational
●	7	LA	710	15.25	SB	EB/WB-105 to SB-710	C	3		Operational
●	7	LA	710	15.90	SB	King	S	2	NM	Operational
●	7	LA	710	16.10	NB	EB/WB-105 to NB-710	C	2		Operational
●	7	LA	710	16.90	NB	Imperial EB	L	1		Operational
●	7	LA	710	16.92	SB	Imperial EB	S	2	NM	Operational
●	7	LA	710	16.98	SB	Imperial WB	L	1		Operational
●	7	LA	710	17.05	NB	Imperial WB	S	2	NM	Operational
●	7	LA	710	18.42	NB	Firestone EB	L	2	NM	Operational
●	7	LA	710	18.42	SB	Firestone EB	S	2	NM	Operational
●	7	LA	710	18.51	NB	Firestone WB	S	2	NM	Operational
●	7	LA	710	18.51	SB	Firestone WB	L	2	NM	Operational
●	7	LA	710	19.30	SB	Florence EB	S	2	NM	Operational
●	7	LA	710	19.50	NB	Florence EB	L	2	NM	Operational
●	7	LA	710	19.76	NB	Florence WB	S	2	NM	Operational
●	7	LA	710	19.76	SB	Florence WB	L	2	NM	Operational
●	7	LA	710	21.68	SB	Atlantic NB	H	2		Operational
●	7	LA	710	21.95	SB	Atlantic SB	L	1		Non Ops
●	7	LA	710	22.15	NB	Atlantic				Non Ops
●	7	LA	710	22.53	SB	Washington Blvd	H	2		Non Ops
●	7	LA	710	22.54	NB	Washington	S	1		Operational
●	7	LA	710	23.47	SB	Olympic Blvd	H	1		Operational
●	7	LA	710	23.50	NB	Olympic Blvd	S	1		Operational
●	7	LA	710	24.43	NB	Third St	H	1		Operational
●	7	LA	710	24.54	SB	Third St	L	1		Operational
●	7	LA	710	24.89	SB	Cesar Chavez	S	1		Non Ops
●	7	LA	710	25.03	SB	Floral (to WB & EB 60)				Non Ops
●	7	Ven	23	3.93	NB	Hillcrest	S	2		Operational
●	7	Ven	23	4.89	SB	Janss EB	S	1		Operational
●	7	Ven	23	5.05	NB	Janss EB	H	1		Operational
●	7	Ven	23	5.09	SB	Janss WB	H	1		Operational
●	7	Ven	23	5.25	NB	Janss WB	S	1		Operational
●	7	Ven	23	5.87	SB	Los Arboles EB	S	1		Operational
●	7	Ven	23	6.02	NB	Los Arboles EB	H	1		Operational
●	7	Ven	23	6.06	SB	Los Arboles WB	H	1		Operational
●	7	Ven	23	6.22	NB	Los Arboles WB	S	1		Operational
●	7	Ven	23	7.01	SB	Sunset Hills EB	S	1		Operational
●	7	Ven	23	7.14	NB	Sunset Hills EB	H	1		Operational
●	7	Ven	23	7.20	SB	Sunset Hills WB	H	1		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	Ven	23	7.37	NB	Sunset Hills WB	S	1		Operational
●	7	Ven	23	7.90	SB	Olsen EB	S	2		Operational
●	7	Ven	23	8.21	SB	Olsen WB	H	1		Operational
●	7	Ven	23	8.30	NB	Olsen EB	H	1		Operational
●	7	Ven	23	8.51	NB	Olsen WB	S	1		Operational
●	7	Ven	23	9.92	SB	Tierra Rejada EB	S	1		Operational
●	7	Ven	23	10.12	SB	Tierra Rejada WB	H	1		Operational
●	7	Ven	23	10.16	NB	Tierra Rejada EB	H	1		Operational
●	7	Ven	23	10.36	NB	Tierra Rejada WB	S	1		Operational
●	7	Ven	23	11.21	SB	New Los Angeles	S	2		Non Ops
●	7	Ven	23	11.43	NB	New Los Angeles	L	2		Operational
	7	Ven	33	0.00	SB	Connector to SB101				Planned
	7	Ven	33	0.00	SB	Connector to NB102				Planned
	7	Ven	33	0.40	NB	Main St				Planned
	7	Ven	33	1.57	SB	Stanley				Planned
	7	Ven	33	1.72	NB	Stanley				Planned
	7	Ven	33	2.71	SB	Shell Rd				Planned
	7	Ven	33	2.82	NB	Shell Rd				Planned
	7	Ven	33	4.33	SB	Canada Larga Rd				Planned
	7	Ven	33	4.65	NB	Canada Larga Rd				Planned
	7	Ven	33	5.47	SB	Casitas Vista				Planned
	7	Ven	33	5.89	NB	Vista Rd				Planned
●	7	Ven	101	0.46	SB	Westlake EB	S	1		Operational
●	7	Ven	101	0.63	SB	Westlake WB	L	2		Operational
●	7	Ven	101	0.68	NB	Westlake EB	L	1		Non Ops
●	7	Ven	101	0.79	NB	Westlake WB	S	1		Non Ops
●	7	Ven	101	1.49	SB	Hampshire	S	1		Operational
●	7	Ven	101	1.78	NB	Hampshire	S	2		Non Ops
●	7	Ven	101	3.06	SB	Rancho Rd	S	1		Operational
●	7	Ven	101	3.17	NB	Rancho	S	1		Non Ops
●	7	Ven	101	3.92	SB	Moorpark	S	3		Non Ops
●	7	Ven	101	4.28	NB	Moorpark	S	2		Non Ops
●	7	Ven	101	5.17	NB	Lynn Rd	S	2		Non Ops
	7	Ven	101	6.89	SB	Borchard / R.Cornejo				Planned
	7	Ven	101	7.23	NB	Borchard				Planned
●	7	Ven	101	7.70	SB	Wendy Dr	S	1		Non Ops
●	7	Ven	101	7.86	NB	Wendy 1	L	1		Non Ops
●	7	Ven	101	8.06	NB	Wendy 2	S	1		Non Ops
	7	Ven	101	12.31	SB	Pleasant Valley				Planned
	7	Ven	101	12.40	NB	Pleasant Valley				Planned
	7	Ven	101	13.23	NB	Flynn Rd				Planned
	7	Ven	101	13.56	SB	Dawson Dr				Planned
	7	Ven	101	13.69	NB	Dawson				Planned
	7	Ven	101	13.91	SB	Fulton / Somis				Planned
	7	Ven	101	14.66	SB	Carmen				Planned
	7	Ven	101	14.87	NB	Carmen				Planned
	7	Ven	101	15.20	SB	Springville Rd				Planned
	7	Ven	101	15.30	NB	Springville Rd				Planned
	7	Ven	101	15.80	SB	Los Posas WB				Planned
	7	Ven	101	15.86	NB	Las Posas EB				Planned
	7	Ven	101	15.93	SB	Los Posas EB				Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	7	Ven	101	15.99	NB	Las Posas WB				Planned
	7	Ven	101	17.59	SB	Central				Planned
	7	Ven	101	17.90	NB	Central				Planned
	7	Ven	101	19.02	SB	Del Norte				Planned
	7	Ven	101	19.32	NB	Del Norte				Planned
●	7	Ven	101	20.03	NB	Rice 1	L	2		Non Ops
	7	Ven	101	20.03	SB	Rice				Part Const
	7	Ven	101	20.05	NB	Rice				Part Const
●	7	Ven	101	20.15	NB	Rice 2	S	1		Non Ops
	7	Ven	101	20.54	NB	Rose EB				Planned
	7	Ven	101	20.80	SB	Rose WB				Planned
	7	Ven	101	20.97	SB	Rose EB				Planned
	7	Ven	101	21.06	NB	Rose WB				Planned
	7	Ven	101	21.78	SB	Vineyard WB				Planned
	7	Ven	101	21.97	NB	Vineyard EB				Planned
	7	Ven	101	22.03	SB	Vineyard EB				Planned
	7	Ven	101	22.18	NB	Vineyard WB				Planned
●	7	Ven	101	22.48	SB	Oxnard Blvd	S	2	NM	Non Ops
●	7	Ven	101	22.94	NB	Oxnard Blvd	S	3		Non Ops
●	7	Ven	101	23.46	SB	Johnson Dr	L	1		Non Ops
●	7	Ven	101	23.71	NB	Johnson Dr	H	1		Non Ops
	7	Ven	101	24.01	SB	Victoria EB				Planned
	7	Ven	101	24.51	SB	Victoria WB				Planned
	7	Ven	101	24.80	NB	Victoria Ave				Planned
	7	Ven	101	25.86	SB	Telephone Rd				Planned
	7	Ven	101	26.60	NB	Rte 126				Planned
●	7	Ven	118	19.60	EB	Princeton Ave	S	2	NM	Operational
●	7	Ven	118	19.75	WB	Princeton Ave	S	2	NM	Operational
●	7	Ven	118	19.87	WB	CollinsDr	S	2	NM	Operational
●	7	Ven	118	20.60	EB	Collins Dr	L	2	NM	Operational
●	7	Ven	118	22.86	WB	Madera Rd	S	2	NM	Operational
●	7	Ven	118	22.90	EB	Madera Rd SB	L	1		Operational
●	7	Ven	118	23.20	EB	Madera Rd NB	S	2		Operational
●	7	Ven	118	23.63	WB	First St NB	L	2	NM	Operational
●	7	Ven	118	23.63	WB	First St SB	S	2	NM	Operational
●	7	Ven	118	23.78	EB	First St SB	L	2	NM	Operational
●	7	Ven	118	23.97	EB	First St NB	S	2	NM	Operational
●	7	Ven	118	24.78	EB	Erringer Rd SB	L	2	NM	Operational
●	7	Ven	118	24.80	WB	Erringer Rd NB	L	2	NM	Operational
●	7	Ven	118	24.93	WB	Erringer Rd SB	S	2	NM	Operational
●	7	Ven	118	24.97	EB	Erringer Rd NB	S	2	NM	Operational
●	7	Ven	118	25.78	EB	Sycamore Dr SB	L	2	NM	Operational
●	7	Ven	118	25.83	WB	Sycamore Dr NB	L	2	NM	Operational
●	7	Ven	118	25.83	WB	Sycamore Dr SB	S	2	NM	Operational
●	7	Ven	118	25.89	EB	Sycamore Dr NB	S	2	NM	Operational
●	7	Ven	118	27.20	EB	Tapo Cyn SB	L	2	NM	Operational
●	7	Ven	118	27.30	WB	Tapo Cyn NB	L	2	NM	Operational
●	7	Ven	118	27.30	WB	Tapo Cyn SB	S	2	NM	Operational
●	7	Ven	118	27.40	EB	Tapo Cyn NB	S	2	NM	Operational
●	7	Ven	118	28.70	EB	Stearns St SB	L	2	NM	Operational

● Existing Meter

High Priority



## 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	7	Ven	118	28.80	WB	Stearns St NB	L	2	NM	Operational
●	7	Ven	118	28.86	WB	Stearns St SB	S	2	NM	Operational
●	7	Ven	118	28.90	EB	Stearns St NB	S	2	NM	Operational
●	7	Ven	118	29.50	WB	Yosemite Ave NB	L	2	NM	Operational
●	7	Ven	118	29.50	WB	Yosemite Ave SB	S	2	NM	Operational
●	7	Ven	118	29.53	EB	Yosemite Ave SB	L	2	NM	Operational
●	7	Ven	118	29.73	EB	Yosemite Ave NB	S	2	NM	Operational
●	7	Ven	118	30.38	WB	Kuehner Dr	S	2	NM	Operational
●	7	Ven	118	30.82	EB	Kuehner Dr	S	2	NM	Operational
●	7	Ven	118	32.48	WB	Rockey Peak Rd	S	2	NM	Operational
●	7	Ven	118	32.53	EB	Rockey Peak Rd	S	2	NM	Operational
	7	Ven	126	0.00	EB	Main St				Planned
	7	Ven	126	0.00	WB	Connector to NB 101				Planned
	7	Ven	126	0.00	WB	Connector to NB 102				Planned
	7	Ven	126	1.36	WB	SB Victoria				Planned
	7	Ven	126	1.36	WB	NB Victoria				Planned
	7	Ven	126	1.44	EB	SB Victoria				Planned
	7	Ven	126	1.52	EB	NB Victoria				Planned
	7	Ven	126	2.91	EB	Kimball Rd				Planned
	7	Ven	126	4.91	WB	SB Wells Rd				Planned
	7	Ven	126	4.91	WB	NB Wells Rd				Planned
	7	Ven	126	5.08	EB	SB Wells Rd				Planned
	7	Ven	126	5.08	EB	NB Wells Rd				Planned
	7	Ven	126	8.84	WB	Briggs Rd				Planned
	7	Ven	126	8.96	EB	Briggs Rd				Planned
	7	Ven	126	10.27	WB	Peck/Acacia				Planned
	7	Ven	126	10.37	EB	Peck/Acacia				Planned
	7	Ven	126	11.28	WB	Palm Ave				Planned
	7	Ven	126	11.48	EB	Palm Ave				Planned
	7	Ven	126	11.95	WB	10th St (Rte 150)				Planned
	7	Ven	126	12.14	EB	10th St (Rte 150)				Planned
	7	Ven	126	20.61	WB	Kimball Rd				Planned

● Existing Meter

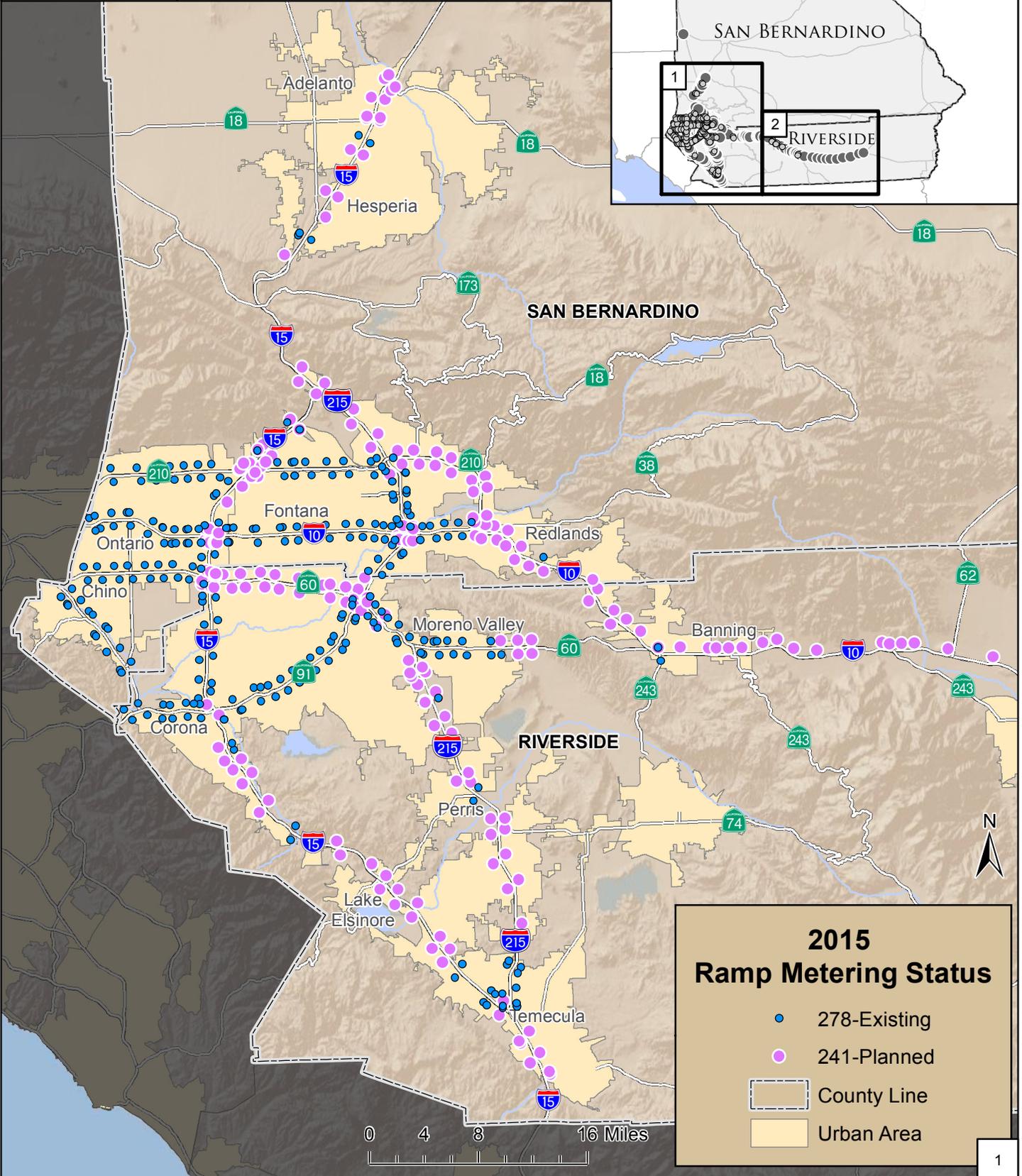
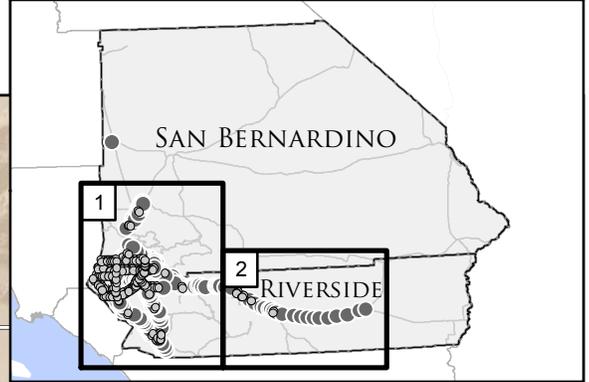
High Priority

# DISTRICT 8

# District 8

Ramp Metering Development Plan

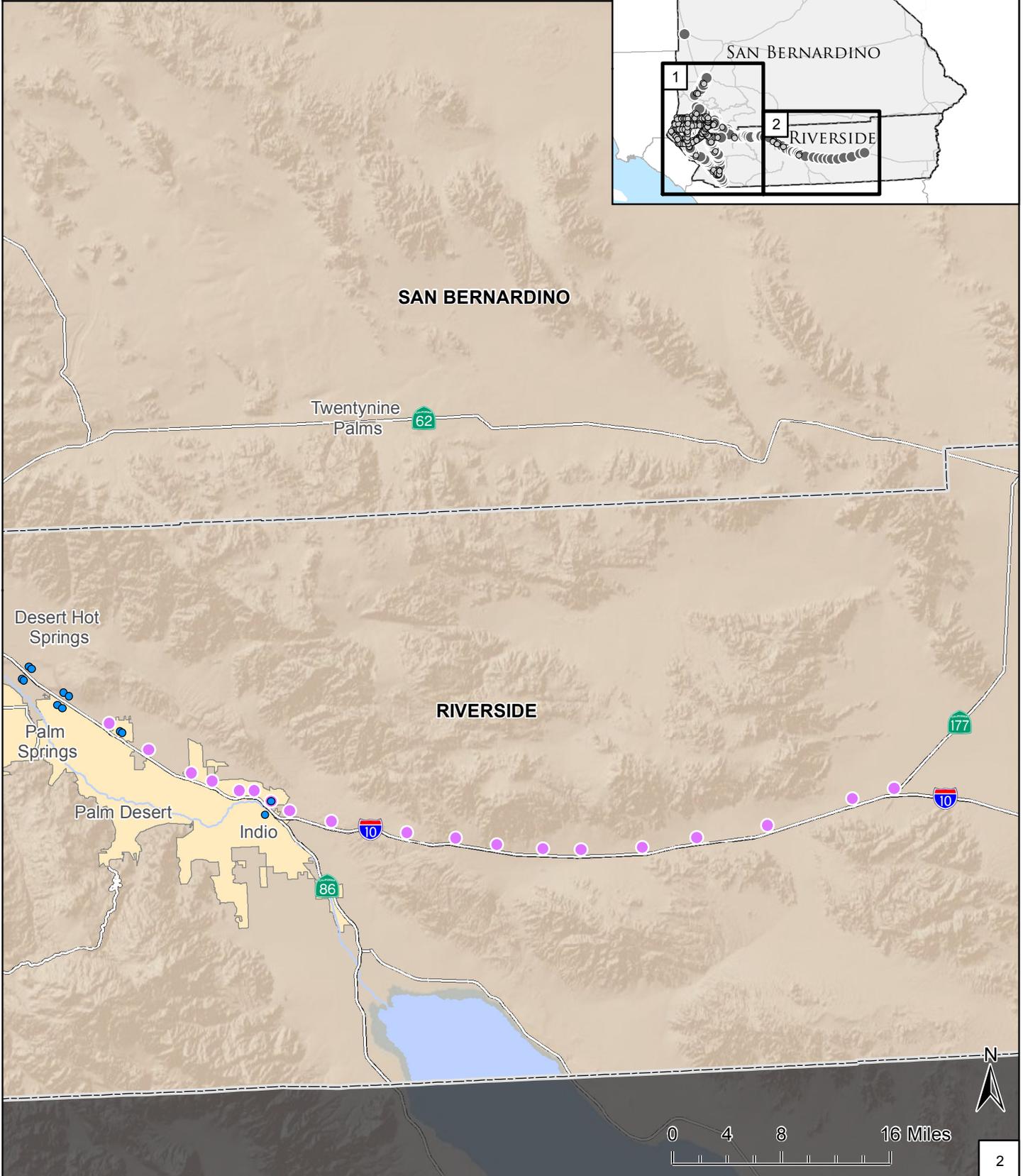
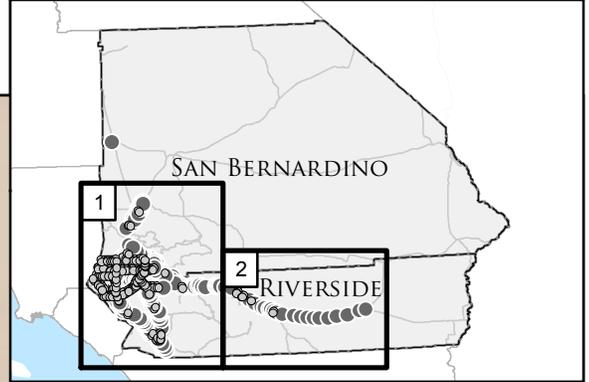
Division of Traffic Operations  
Data by: Office of Traffic Management  
Map by: Office of Performance



Disclaimer: This information is for discussion and planning purposes, and does not represent a commitment by Caltrans or others to install or operate ramp meters at these locations.

# District 8

Ramp Metering Development Plan



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## DISTRICT 8

District 8, located in Southern California, is comprised of Riverside and San Bernardino counties and includes 49 incorporated cities. Just east of the Los Angeles Metropolitan Area and Orange County, the southwest portion of the district is largely urbanized valleys surrounded by hills and high mountains. The greater portion of the district is comprised of rural expanses of desert and mountains. The land area of District 8 is the largest of the districts encompassing 28,650 square miles. It has a population of approximately 4.3 million and a population density of 136 people per square mile. District 8 manages 1,919 centerline miles and 6,719 lane-miles of highway.

### Current or Planned Ramp Metering Routes

The following routes have or are planned to have ramp metering:  
I-10, I-15, I-215, SR 60, SR 71, SR 91, SR 210, SR 259, and US 395

District 8 has 278 existing ramp meters and 241 planned ramp meters for a projected total of 519 ramp meters for the ten-year period covered by the RMDP. Ramp meter locations are illustrated on the District 8 RMDP map.

The conceptual cost estimate, excluding civil work and right-of-way cost, to install ramp meters at all of the district's proposed high-priority locations is \$10,640,000. Actual project cost will be determined during the project development phases when the scope and schedule are finalized.

County	Route	Direction	Location	Lanes	Electrical Cost Only
Sbd	15	SB	210 WB to 15 SB Connector	1	\$380,000.00
Sbd	15	SB	210 EB to 15 SB Connector	1	\$380,000.00
Sbd	15	NB	210 WB to 15 NB Connector	1	\$380,000.00
Sbd	15	NB	210 EB to 15 NB Connector	1	\$380,000.00
Sbd	10	EB	15 SB to 10 EB Connector	1	\$380,000.00
Sbd	10	EB	15 NB to 10 EB Connector	1	\$380,000.00
Sbd	10	WB	15 NB to 10 WB Connector	1	\$380,000.00
Sbd	10	WB	15 SB to 10 WB Connector	1	\$380,000.00
Sbd	15	SB	10 WB to 15 SB Connector	1	\$380,000.00
Sbd	15	SB	10EWB to 15 SB Connector	1	\$380,000.00
Sbd	15	NB	10 WB to 15 NB Connector	1	\$380,000.00
Sbd	15	NB	10 EB to 15 NB Connector	1	\$380,000.00
RIV	60	WB	15 SB to 60 WB Connector	1	\$380,000.00
RIV	60	WB	15 NB to 60 WB Connector	1	\$380,000.00
RIV	60	EB	15 SB to 60 EB Connector	1	\$380,000.00
RIV	60	EB	15 NB to 60 EB Connector	1	\$380,000.00
RIV	15	NB	60 WB to 15 NB Connector	1	\$380,000.00
RIV	15	NB	60 EB to 15 NB Connector	1	\$380,000.00
RIV	15	SB	60 EB to 15 SB Connector	1	\$380,000.00
RIV	15	SB	60 WB to 15 SB Connector	1	\$380,000.00

SBD	215	NB	10 WB to 215 NB Connector	1	\$380,000.00
SBD	215	NB	10 EB to 215 NB Connector	1	\$380,000.00
SBD	215	SB	10 EB to 215 SB Connector	1	\$380,000.00
SBD	215	SB	10 WB to 215 SB Connector	1	\$380,000.00
SBD	10	WB	215 SB to 10 WB Connector	1	\$380,000.00
SBD	10	WB	215 NB to 10 WB Connector	1	\$380,000.00
SBD	10	EB	215 NB to 10 EB Connector	1	\$380,000.00
SBD	10	EB	215 SB to 10 EB Connector	1	\$380,000.00
				TOTAL	<b>\$10,640,000.00</b>

### Congestion Challenges

Highway congestion is a common occurrence in the District due to commute traffic within and in between other urban areas of Southern California. Congestion is further exacerbated by large volumes of goods movement traffic-mostly originating from local manufacturing and the ports of Los Angeles and Long Beach-with destinations within District 8 and out of the district and the State. Interstate 15 through the rural desert areas and the mountain routes experiences congestion due to seasonal recreational uses and weekend travel to Las Vegas.

### District Ramp Metering Strategies

District 8 is committed to using ramp metering as an effective traffic management strategy. In order to maximize freeway capacity and optimize mobility through the freeway system, ramp meters throughout the District 8 metropolitan area are operating in traffic-responsive mode to reduce congestion.

Ramp meters automatically turn on when traffic volume and density on mainline lanes reach a specific threshold and turn off when these conditions are no longer present. The variable ramp discharge rate is proportional to:

- ◆ Volumes in the main lanes.
- ◆ Density of mainline traffic (collected using mainline detection).
- ◆ Weaving analysis and geometrics of the ramp location.
- ◆ Traffic demands at the ramp.

In District 8, the Transportation Management Center (TMC), communication networks, and detection coverage are essential in determining the state of congestion across the managed corridors. Based on the state of congestion, ramp meters are placed at locations that mitigate congestion issues in the urban network.

Ramp meters are also added to all new and reconstructed interchanges even in locations that are not yet urbanized. These ramp meters may not activate often if the congestion levels are low. However the real time data collected at these locations is transmitted to the central systems, advanced transportation management systems (ATMS), and Ramp Metering Information System (RMIS) for traffic analysis and traveler information.

District 8 works closely with local partners to minimize back-ups on city streets and to maximize coordination with city engineers, traffic signal engineers, and ramp metering engineers on the management of the arterial system.

Supporting Documents

- ◆ District 8 TCRs, CSMPs, DSMP, and other planning products:  
<http://www.dot.ca.gov/d8/index.html>
- ◆ District/Deputy Directives:  
[http://admin.dot.ca.gov/bfams/admin\\_svcs/sw\\_policy](http://admin.dot.ca.gov/bfams/admin_svcs/sw_policy)



# 2013 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	8	Riv	10	R0.71	WB	Calimesa Blvd				Planned
	8	Riv	10	R1.03	EB	Calimesa Blvd				Planned
	8	Riv	10	R2.90	WB	Cherry Valley Blvd				Planned
	8	Riv	10	R3.19	EB	Cherry Valley Blvd				Planned
	8	Riv	10	R4.06	WB	Brookside Rd				Planned
	8	Riv	10	R5.38	WB	Oak Valley Parkway				Planned
	8	Riv	10	7.44	WB	Beaumont/79				Planned
●	8	Riv	10	7.44	WB	Beaumont Ave				Operational
●	8	Riv	10	7.70	EB	Beaumont Ave				Operational
	8	Riv	10	9.15	WB	Highland Springs				Planned
	8	Riv	10	R11.84	WB	22nd St				Planned
	8	Riv	10	11.17	WB	Sunset Ave				Planned
	8	Riv	10	12.73	WB	8th St/243				Planned
	8	Riv	10	13.75	WB	Hargrave St				Planned
	8	Riv	10	R15.41	WB	N Truck Insp				Planned
	8	Riv	10	R16.31	WB	Fields				Planned
	8	Riv	10	R17.50	WB	Apache Trail				Planned
	8	Riv	10	R19.52	WB	Main St				Planned
	8	Riv	10	R24.40	WB	Verbenia Ave				Planned
	8	Riv	10	R24.88	WB	NB Rte 111				Planned
	8	Riv	10	25.98	WB	White Water Rd				Planned
	8	Riv	10	27.01	WB	White Water Rd				Planned
	8	Riv	10	29.41	WB	SB Rte 62				Planned
	8	Riv	10	32.88	WB	Indian Ave				Planned
●	8	Riv	10	35.96	WB	Gene Autry Trail (Diamond)	S	1		Operational
●	8	Riv	10	36.10	EB	Gene Autry Trail (Loop)	L	1		Operational
●	8	Riv	10	36.20	WB	Gene Autry Trail (Loop)	L	1		Operational
●	8	Riv	10	36.29	EB	Gene Autry Trail (Diamond)	S	1		Operational
●	8	Riv	10	39.24	WB	Date Palm Dr	T			Operational
●	8	Riv	10	39.28	EB	Date palm Dr(L)	L			Operational
●	8	Riv	10	39.70	EB	Date Palm Dr				Operational
●	8	Riv	10	39.71	wb	Date palm Dr(L)	L			Operational
	8	Riv	10	43.20	WB	Ramon Rd				Planned
●	8	Riv	10	44.28	WB	Monterey Ave				Operational
●	8	Riv	10	44.50	WB	Monterey Ave				Operational
	8	Riv	10	46.74	WB	SB Cook St				Planned
	8	Riv	10	50.46	WB	Varner Road				Planned
	8	Riv	10	R52.17	WB	Jefferson/86				Planned
	8	Riv	10	R54.60	WB	Monroe St				Planned
	8	Riv	10	R55.62	WB	Jackson St				Planned
●	8	Riv	10	R56.83	WB	Golf Center Dr	S	1		Operational
	8	Riv	10	R56.83	WB	Auto Ctr Dr				Planned
●	8	Riv	10	R57.07	EB	Golf Center Dr	S	1		Operational
	8	Riv	10	R58.77	WB	Dilloin Rd				Planned
	8	Riv	10	R62.62	WB	Echo Ditch 56 475				Planned
	8	Riv	10	R68.32	WB	Brown Arroyo 56 204				Planned
	8	Riv	10	R72.03	WB	Cactus City Rd				Planned
	8	Riv	10	R75.08	WB	Frontage Rd				Planned
	8	Riv	10	R78.54	WB	Buried Mtn. Wash Br				Planned
	8	Riv	10	R81.39	WB	Cottonwood Springs				Planned
	8	Riv	10	R85.90	WB	Chiriaco Summit				Planned
	8	Riv	10	R90.00	WB	Hayfield Rd				Planned
	8	Riv	10	R95.37	WB	Red Cloud Rd				Planned

● Existing Meter

High Priority



# 2013 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	8	Riv	10	R101.93	WB	Eagle Mtn. Rd				Planned
	8	Riv	10	R104.97	WB	RICE RD/177				Planned
	8	Riv	15	3.33	NB	Rte 79/Front				Planned
	8	Riv	15	3.58	NB	Rte 79/Front				Planned
	8	Riv	15	4.83	SB	Rancho California				Planned
	8	Riv	15	5.13	NB	Rancho California				Planned
	8	Riv	15	6.45	SB	79/Winchester				Planned
	8	Riv	15	6.65	SB	79/Winchester				Planned
	8	Riv	15	6.81	NB	79/Winchester				Planned
	8	Riv	15	9.34	SB	Murrieta Hot Springs				Planned
	8	Riv	15	9.59	NB	Murrieta Hot Springs				Planned
●	8	Riv	15	10.42	NB	California Oaks (Loop)	L			Operational
●	8	Riv	15	10.44	SB	California Oaks (Loop)	L			Operational
●	8	Riv	15	10.76	SB	California Oaks	S			Operational
●	8	Riv	15	10.78	NB	California Oaks	S			Operational
●	8	Riv	15	13.47	SB	Clinton Keith Rd	T			Operational
●	8	Riv	15	13.80	NB	Clinton Keith Rd	T			Operational
	8	Riv	15	14.90	SB	Baxter Rd				Planned
	8	Riv	15	15.23	NB	Baxter Rd				Planned
	8	Riv	15	16.14	SB	Bundy Cyn				Planned
	8	Riv	15	16.47	NB	Bundy Cyn				Planned
	8	Riv	15	18.93	SB	Railroad Cyn				Planned
	8	Riv	15	19.31	NB	Railroad Cyn				Planned
	8	Riv	15	20.66	SB	Main St				Planned
	8	Riv	15	21.14	NB	Main St				Planned
	8	Riv	15	22.08	SB	74/Central				Planned
	8	Riv	15	22.43	NB	74/Central				Planned
	8	Riv	15	24.04	NB	Nichols Rd				Planned
	8	Riv	15	26.51	SB	Lake St				Planned
	8	Riv	15	26.91	NB	Lake St				Planned
●	8	Riv	15	30.25	SB	Indian Trail Rd	S	1		Operational
●	8	Riv	15	30.60	NB	Indian Trail Rd	S	2		Operational
	8	Riv	15	33.09	SB	Temescual Cyn				Planned
	8	Riv	15	33.47	NB	Temescual Cyn				Planned
	8	Riv	15	35.50	SB	Weirick Rd				Planned
	8	Riv	15	35.87	NB	Weirick Rd				Planned
	8	Riv	15	36.93	SB	Cajalco Rd				Planned
	8	Riv	15	36.96	NB	Cajalco Rd				Planned
	8	Riv	15	37.68	SB	Cerrito Rd				Planned
●	8	Riv	15	38.02	NB	El Cerrito	S	2		Operational
	8	Riv	15	38.56	SB	Ontario Ave				Planned
●	8	Riv	15	38.91	NB	Ontario Ave	S	2		Operational
●	8	Riv	15	40.38	NB	Magnolia Ave	S	2		Operational
●	8	Riv	15	40.48	NB	Magnolia Ave	S	2		Operational
●	8	Riv	15	42.76	SB	Hidden Valley Blvd	S	2		Operational
●	8	Riv	15	43.02	NB	Hidden Valley Blvd	S	2		Operational
●	8	Riv	15	43.77	NB	Second St NB	S	1		Operational
●	8	Riv	15	43.86	SB	Second St NB	S	2		Operational
●	8	Riv	15	45.40	SB	Sixth St	S	1		Operational
●	8	Riv	15	45.71	NB	Sixth St	S	1		Operational
●	8	Riv	15	48.05	SB	Limonite Ave	S	2		Operational
●	8	Riv	15	48.37	NB	Limonite Ave	S	1		Operational
●	8	Riv	15	49.80	SB	Cantu Galleano SB	S	2		Operational

● Existing Meter

High Priority



# 2013 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	8	Riv	15	50.10	NB	Cantu Galleano NB	L	3		Operational
●	8	Riv	15	50.20	SB	Cantu Galleano SB	L	2		Operational
	8	Riv	15	TBD	NB	WB 60 Connector				Planned
	8	Riv	15	TBD	NB	EB 60 Connector				Planned
	8	Riv	15	TBD	SB	WB 60 Connector				Planned
	8	Riv	15	TBD	SB	EB 60 Connector				Planned
	8	Riv	60	R0.20	WB	Milliken Ave				Planned
●	8	Riv	60	R0.23	EB	Milliken Ave	S	1		Operational
	8	Riv	60	R0.55	WB	Rte 15 Connector				Planned
	8	Riv	60	R0.98	EB	Rte 15 Connector				Planned
	8	Riv	60	R1.56	WB	Van Buren Blvd				Planned
	8	Riv	60	R2.22	EB	Etiwanda Ave				Planned
	8	Riv	60	R2.87	WB	Country Village				Planned
	8	Riv	60	R3.19	EB	Country Village				Planned
	8	Riv	60	R4.35	WB	Pedley Rd				Planned
	8	Riv	60	R4.71	EB	Pedley Rd				Planned
	8	Riv	60	R5.40	WB	Pyrite St				Planned
	8	Riv	60	R5.82	EB	Pyrite St				Planned
	8	Riv	60	7.36	WB	Valley Way				Planned
	8	Riv	60	7.66	EB	Valley Way				Planned
	8	Riv	60	9.39	WB	Rubidoux Blvd				Planned
	8	Riv	60	9.83	EB	Rubidoux Blvd				Planned
	8	Riv	60	10.86	WB	Market St				Planned
	8	Riv	60	11.28	EB	Market St				Planned
●	8	Riv	60	11.80	EB	Main St	S	1		Operational
	8	Riv	60	11.94	EB	Orange St				Planned
●	8	Riv	60	13.39	WB	Day St	L	1		Operational
●	8	Riv	60	13.45	EB	Day St	S	2		Operational
●	8	Riv	60	14.17	WB	Pigeon Pass Rd	S	2		Operational
●	8	Riv	60	14.41	WB	Pigeon Pass Rd	L	1		Operational
●	8	Riv	60	14.53	EB	Pigeon Pass Rd/Fredrick	S	2		Operational
●	8	Riv	60	15.17	WB	Heacock Ave	S	2		Operational
●	8	Riv	60	15.60	EB	Heacock Ave	S	1		Operational
●	8	Riv	60	16.14	WB	Perris Blvd	S	2		Operational
●	8	Riv	60	16.60	EB	Perris Blvd	S	1		Operational
●	8	Riv	60	18.37	WB	Nasson St (Loop)	L			Operational
●	8	Riv	60	18.37	EB	Nasson St (T)	T			Operational
	8	Riv	60	19.12	WB	Moreno Beach Dr				Planned
●	8	Riv	60	19.12	EB	Moreno Beach (T)	T			Operational
	8	Riv	60	20.37	WB	Redlands Blvd				Planned
	8	Riv	60	20.37	EB	Redlands Blvd				Planned
	8	Riv	60	21.37	WB	Theodore St				Planned
	8	Riv	60	21.37	EB	Theodore St				Planned
	8	Riv	60	TBD	EB	NB 15 Connector				Planned
	8	Riv	60	TBD	EB	SB 15 Connector				Planned
	8	Riv	60	TBD	WB	NB 15 Connector				Planned
	8	Riv	60	TBD	WB	SB 15 Connector				Planned
●	8	Riv	91	R1.00	WB	Green River Rd	S	3	M	Operational
●	8	Riv	91	R1.06	EB	Green River Rd	S	2	M	Operational
●	8	Riv	91	R1.98	WB	Rte 71	S	2		Operational
●	8	Riv	91	R2.54	EB	Rte 71	S	2		Operational
●	8	Riv	91	R3.69	WB	Serfas Club Dr	S	3	M	Operational
●	8	Riv	91	R3.73	EB	Serfas Club Dr	S	2	M	Operational

● Existing Meter

High Priority



# 2013 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	8	Riv	91	4.21	WB	Maple St	S	2	M	Operational
●	8	Riv	91	4.21	EB	Maple St	S	2		Operational
●	8	Riv	91	5.30	WB	Lincoln Ave	S	3	M	Operational
●	8	Riv	91	5.50	EB	Lincoln Ave	S	2		Operational
●	8	Riv	91	5.86	WB	W. Grand Ave	S	1		Operational
●	8	Riv	91	6.27	WB	Main St	S	2	M	Operational
●	8	Riv	91	6.46	EB	Main St	S	3	M	Operational
	8	Riv	91	7.03	WB	Rte 15 Connector				Planned
	8	Riv	91	7.71	EB	Rte 15 Connector				Planned
●	8	Riv	91	9.02	WB	Mckinley Ave	S	3	M	Operational
●	8	Riv	91	9.22	EB	Mckinley Ave	L	2	M	Operational
●	8	Riv	91	9.36	EB	Mckinley Ave	S	1		Operational
●	8	Riv	91	10.72	WB	Pierce St	S	2	M	Operational
●	8	Riv	91	11.05	WB	Magnolia Ave	S	1		Operational
●	8	Riv	91	11.22	EB	Magnolia Ave	S	1		Operational
●	8	Riv	91	11.93	WB	La Sierra Ave	S	3	M	Operational
●	8	Riv	91	12.17	EB	La Sierra Ave	S	3	M	Operational
●	8	Riv	91	13.01	WB	Tyler St	S	2	M	Operational
●	8	Riv	91	13.06	EB	Tyler St	S	2	M	Operational
●	8	Riv	91	14.07	WB	Van Buren St	S	2	M	Operational
●	8	Riv	91	14.10	EB	Van Buren St	S	2	M	Operational
●	8	Riv	91	14.10	EB	Van Buren St (Loop)	L			Operational
●	8	Riv	91	15.57	EB	Adams St	S	2	M	Operational
●	8	Riv	91	15.71	WB	Adams St	S	2	M	Operational
●	8	Riv	91	16.59	WB	Madison St	S	2	M	Operational
●	8	Riv	91	16.75	EB	Madison St	S	2	M	Operational
●	8	Riv	91	17.72	WB	Arlington Ave	S	2		Operational
●	8	Riv	91	17.93	EB	Arlington Ave	S	2		Operational
●	8	Riv	91	18.34	WB	Central Ave	S	2	M	Operational
●	8	Riv	91	18.52	EB	Central Ave	S	1		Operational
●	8	Riv	91	19.83	WB	14th St	S	2		Operational
●	8	Riv	91	20.12	EB	14th St	S	2		Operational
●	8	Riv	91	20.29	WB	9th St	S	2		Operational
●	8	Riv	91	20.60	EB	Mission Inn	S	2		Operational
	8	Riv	91	21.30	EB	La Cadena Dr				Planned
●	8	Riv	91	21.47	WB	Spruce	S	2		Operational
	8	Riv	91	21.51	WB	Rte 60				Planned
●	8	Riv	215	9.33	SB	Murrieta Hot Springs	S	1		Operational
●	8	Riv	215	9.46	NB	Murrieta Hot Springs	S	1		Operational
●	8	Riv	215	9.54	SB	Murrieta Hot Springs	S	1		Operational
●	8	Riv	215	9.71	NB	Murrieta Hot Springs	S	1		Operational
●	8	Riv	215	10.45	SB	Los Alamos	S	3	M	Operational
●	8	Riv	215	10.84	NB	Los Alamos	S	3	M	Operational
●	8	Riv	215	12.31	NB	Clinton Keith Road (L)	L			Operational
●	8	Riv	215	12.32	SB	Clinton Keith Road	T			Operational
●	8	Riv	215	12.73	NB	Clinton Keith Road	T			Operational
●	8	Riv	215	12.77	SB	Clinton Keith Road (L)	L			Operational
	8	Riv	215	15.70	NB	Scott Road				Planned
	8	Riv	215	18.30	SB	Newport Road				Planned
	8	Riv	215	18.70	NB	Newport Road				Planned
	8	Riv	215	20.59	SB	McCall Blvd				Planned
	8	Riv	215	21.07	NB	McCall Blvd				Planned
	8	Riv	215	22.58	SB	Ethanac Road				Planned

● Existing Meter

High Priority



# 2013 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	8	Riv	215	22.94	NB	Ethanac Road				Planned
	8	Riv	215	23.72	SB	Rte 74				Planned
	8	Riv	215	23.73	NB	Rte 74				Planned
●	8	Riv	215	26.19	SB	Redlands Ave (Diamond)	S	3	M	Operational
●	8	Riv	215	26.39	NB	Redlands Ave (Diamond)	S	3	M	Operational
	8	Riv	215	27.38	NB	D St				Planned
	8	Riv	215	27.70	SB	Nuevo Road				Planned
	8	Riv	215	28.03	NB	Nuevo Road				Planned
	8	Riv	215	R30.76	SB	Ramona Expwy.				Planned
	8	Riv	215	R31.08	NB	Ramona Expwy.				Planned
	8	Riv	215	R32.20	SB	Harley Knox				Planned
	8	Riv	215	R32.49	NB	Harley Knox				Planned
	8	Riv	215	R33.989	SB	Van Buren Ave				Planned
	8	Riv	215	R33.99	SB	Van Buren Ave				Planned
●	8	Riv	215	R34.022	NB	Van Buren Ave				Operational
	8	Riv	215	R34.06	SB	Van Buren Ave				Planned
	8	Riv	215	R34.34	NB	Van Buren Ave				Planned
	8	Riv	215	R34.399	NB	Van Buren Ave (T)				Planned
	8	Riv	215	R35.51	SB	Cactus Ave				Planned
	8	Riv	215	R35.89	NB	Cactus Ave				Planned
	8	Riv	215	R36.32	SB	Alesandro Blvd				Planned
	8	Riv	215	R36.47	SB	Alesandro Blvd				Planned
	8	Riv	215	R36.59	NB	Alesandro Blvd				Planned
	8	Riv	215	R37.23	SB	Eucalyptus Ave				Planned
●	8	Riv	215	R37.61	NB	Eucalyptus Ave	S	1		Operational
●	8	Riv	215	38.63	NB	Box Spring	S	1		Operational
●	8	Riv	215	38.77	SB	Sycamore (Box Spring)	S	2		Operational
●	8	Riv	215	39.34	SB	Central	S	3	M	Operational
●	8	Riv	215	39.65	NB	Central	S	2	M	Operational
●	8	Riv	215	40.76	SB	M.Luther King	S	2		Operational
●	8	Riv	215	40.93	NB	M.Luther King	S	2		Operational
	8	Riv	215	41.11	SB	Pennsylvania Ave				Planned
	8	Riv	215	41.24	NB	Pennsylvania Ave				Planned
●	8	Riv	215	41.45	SB	University Ave	S	2		Operational
●	8	Riv	215	41.56	NB	University Ave	S	2	M	Operational
●	8	Riv	215	42.07	SB	Blaine St	S	2		Operational
●	8	Riv	215	42.25	NB	Blaine St	S	2		Operational
	8	Riv	215	43.14	SB	Rte 91				Planned
	8	Riv	215	43.23	NB	Rte 60				Planned
	8	Riv	215	43.34	NB	Rte 215				Planned
	8	Riv	215	43.39	SB	Rte 215				Planned
	8	Riv	215	43.43	SB	Rte 60				Planned
	8	Riv	215	43.96	SB	Columbia Ave				Planned
●	8	Riv	215	43.97	NB	Columbia Ave	S	2		Operational
	8	Riv	215	44.91	SB	Center St				Planned
●	8	SBd	10	0.58	WB	Monte Vista Ave	S	2	M	Operational
●	8	SBd	10	0.81	EB	Monte Vista Ave	S	2		Operational
●	8	SBd	10	1.15	EB	Central Ave	S	2	M	Operational
●	8	SBd	10	1.15	WB	Central Ave	S	2	M	Operational
●	8	SBd	10	2.26	WB	Mountain Ave	S	2	M	Operational
●	8	SBd	10	2.39	EB	Mountain Ave	S	2	M	Operational
●	8	SBd	10	3.34	WB	Euclid Ave	S	1		Operational
●	8	SBd	10	3.55	WB	Euclid Ave	L	1		Operational

● Existing Meter

High Priority



# 2013 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	8	SBd	10	3.60	EB	Euclid Ave	S	1		Operational
●	8	SBd	10	5.21	WB	4th St	S	2		Operational
●	8	SBd	10	5.29	EB	4th St	S	2	M	Operational
●	8	SBd	10	6.04	WB	Vineyard Ave	S	1		Operational
●	8	SBd	10	6.12	WB	Vineyard Ave	L	1		Operational
●	8	SBd	10	6.53	EB	Vineyard Ave	S	2	M	Operational
●	8	SBd	10	6.98	EB	Holt Ave	S	2		Operational
●	8	SBd	10	7.19	WB	Archibald Ave	S	1	M	Operational
●	8	SBd	10	7.29	EB	Archibald Ave	S	3		Operational
●	8	SBd	10	8.08	WB	Haven Ave WB	S	2	M	Operational
●	8	SBd	10	8.11	EB	Haven Ave EB	L	2	M	Operational
●	8	SBd	10	8.22	WB	Haven Ave EB	S	2	M	Operational
●	8	SBd	10	8.23	EB	Haven Ave WB	L	2		Operational
●	8	SBd	10	8.99	WB	Milliken Ave	S	2		Operational
●	8	SBd	10	9.12	EB	Milliken Ave	S	2		Operational
	8	SBd	10	9.56	EB	EB Off to NB Rte 15	C			Planned
	8	SBd	10	9.58	WB	WB On from NB Rte 15				Planned
	8	SBd	10	9.76	EB	EB Off to SB Rte 15				Planned
	8	SBd	10	9.77	WB	WB On from SB Rte 15				Planned
	8	SBd	10	10.13	EB	EB On from NB Rte 15				Planned
	8	SBd	10	10.23	EB	EB On from SB 15				Planned
	8	SBd	10	10.40	WB	WB Off to Rte 15				Planned
●	8	SBd	10	11.04	WB	Etiwanda Ave (T)	L	2		Operational
●	8	SBd	10	11.08	EB	Etiwanda Ave (Loop)	S	2		Operational
●	8	SBd	10	11.19	WB	Etiwanda Ave (Loop)	S	2	M	Operational
●	8	SBd	10	11.20	EB	Etiwanda Ave (T)	L	2		Operational
●	8	SBd	10	11.53	WB	Valley Blvd	S	2		Operational
●	8	SBd	10	13.04	WB	Cherry Ave				Operational
●	8	Sbd	10	13.23	WB	Cherry Ave				Operational
●	8	SBd	10	13.35	EB	Cherry Ave				Operational
●	8	SBd	10	15.06	WB	Citrus Ave (Loop)	L			Operational
●	8	SBd	10	15.20	WB	Citrus Ave (T)	T			Operational
●	8	SBd	10	15.35	EB	Citrus Ave (T)	T			Operational
●	8	SBd	10	16.24	WB	Sierra EB On	S	3	M	Operational
●	8	SBd	10	16.34	EB	Sierra WB On	S	3	M	Operational
●	8	SBd	10	18.40R	WB	Ceder Ave (T)	T			Operational
●	8	SBd	10	18.66R	EB	Ceder Ave (T)	T			Operational
●	8	SBd	10	19.85	WB	Riverside Ave	S	3	M	Operational
●	8	SBd	10	20.15	EB	Riverside Ave	S	3	M	Operational
●	8	SBd	10	20.88	WB	Pepper Ave	T		M	Operational
●	8	SBd	10	21.08	EB	Pepper Ave	T		M	Operational
●	8	SBd	10	21.88R	WB	Rancho Ave (T)	T			Operational
●	8	SBd	10	22.05R	EB	Rancho Ave (T)	T			Operational
●	8	SBd	10	22.55R	WB	La Cadena Dr (T)	T			Operational
●	8	SBd	10	22.77R	EB	9th St (T)	T			Operational
●	8	SBd	10	23.19R	WB	Mt. Vernon Ave (T)	T			Operational
●	8	SBd	10	23.42R	EB	Mt. Vernon Ave (Loop)	L			Operational
	8	SBd	10	23.81R	EB	EB Off to 215				Planned
	8	SBd	10	24.07R	WB	WB from SB 215				Planned
	8	SBd	10	24.307R	WB	WB On from NB 215				Planned
	8	SBd	10	24.423R	EB	EB On from NB 215				Planned
	8	SBd	10	24.621R	EB	EB On from SB 215				Planned
	8	SBd	10	R24.31	EB	Rte 215 Connector				Planned

● Existing Meter

High Priority



# 2013 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	8	SBd	10	R24.54	WB	Hunts Lane	S	1		Operational
	8	SBd	10	24.81	WB	WB Off to Rte 215				Planned
●	8	SBd	10	25.40	EB	Waterman Ave	S	2		Operational
●	8	SBd	10	25.45	WB	Hospitality	S	2		Operational
●	8	SBd	10	26.15	WB	Tippecanoe Ave	S	2		Operational
●	8	SBd	10	26.43	EB	Tippecanoe Ave	S	2		Operational
●	8	SBd	10	27.15	WB	Mt. View Ave	S	2		Operational
●	8	SBd	10	27.42	EB	Mt. View Ave	S	1		Operational
●	8	SBd	10	28.18	WB	California St	S	2		Operational
●	8	SBd	10	28.43	EB	California St	S	1		Operational
●	8	SBd	10	29.16	WB	Alabama	S	2		Operational
	8	SBd	10	29.42	EB	EB Off to WB Rte 210				Planned
	8	SBd	10	29.43	WB	WB On from Rte 210				Planned
	8	SBd	10	29.65	WB	Rte 30				Planned
	8	SBd	10	29.83	EB	Rte 30				Planned
	8	SBd	10	29.94	WB	WB Off to WB Rte 215				Planned
	8	SBd	10	29.99	EB	Tennessee St				Planned
	8	SBd	10	30.12	EB	EB On from EB Rte 210				Planned
	8	SBd	10	30.92	WB	Orange St				Planned
	8	SBd	10	31.20	EB	Sixth St				Planned
	8	SBd	10	31.76	WB	University Ave				Planned
	8	SBd	10	32.30	EB	Cypress Ave				Planned
	8	SBd	10	32.98	WB	Ford St				Planned
	8	SBd	10	33.39	EB	Redlands Blvd				Planned
	8	SBd	10	34.43	EB	Wabash Ave				Planned
●	8	SBd	10	35.36	WB	Yucaipa Blvd	S	1		Operational
	8	SBd	10	35.61	EB	Yucaipa Blvd				Planned
	8	SBd	10	R39.04	WB	County Line Rd				Planned
	8	SBd	10	TBD	EB	NB 215 Connector				Planned
	8	SBd	10	TBD	EB	SB 215 Connector				Planned
	8	SBd	10	TBD	EB	NB 15 Connector				Planned
	8	SBd	10	TBD	EB	SB 15 Connector				Planned
	8	SBd	10	TBD	WB	NB 215 Connector				Planned
	8	SBd	10	TBD	WB	SB 215 Connector				Planned
	8	SBd	10	TBD	WB	NB 15 Connector				Planned
	8	SBd	10	TBD	WB	SB 15 Connector				Planned
●	8	SBd	15	0.77	SB	Jurupa Ave	S	2		Operational
●	8	SBd	15	1.18	NB	Jurupa Ave	S	2		Operational
	8	SBd	15	2.04	SB	Rte 10 Connector				Planned
	8	SBd	15	2.55	NB	Rte 10 Connector				Planned
●	8	SBd	15	3.14	SB	4th St	L	2		Operational
●	8	SBd	15	3.31	NB	4th St	S	2		Operational
●	8	SBd	15	5.09	SB	Foothill Blvd	L	1		Operational
●	8	SBd	15	5.32	SB	Foothill Blvd	S	1		Operational
	8	SBd	15	5.52	NB	Foothill Blvd				Planned
●	8	SBd	15	6.53	SB	Baseline Rd	S	1		Operational
	8	SBd	15	7.03	NB	Baseline Rd				Planned
	8	SBd	15	8.99	NB	Cherry Ave				Planned
●	8	SBd	15	9.66	SB	Summit Blvd	S	1		Operational
	8	SBd	15	9.86	NB	Summit Blvd				Planned
●	8	SBd	15	12.71	SB	Sierra Ave	S	1		Operational
●	8	SBd	15	13.02	NB	Sierra Ave				Operational
	8	SBd	15	13.03	NB	Sierra Ave				Planned

● Existing Meter

High Priority



# 2013 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	8	Sbd	15	13.03	NB	15@Sierra Ave NB				Planned
	8	SBd	15	R14.79	SB	Kenwood Ave				Planned
	8	SBd	15	R15.21	NB	Kenwood Ave				Planned
	8	SBd	15	R28.46	SB	Oak Hill Rd				Planned
●	8	SBd	15	30.21	SB	Ranchero Rd				Operational
●	8	SBd	15	30.41	SB	Ranchero Rd				Operational
●	8	Sbd	15	30.54	NB	Ranchero Rd				Operational
	8	SBd	15	32.52	NB	Palm Ave				Planned
	8	SBd	15	34.09	SB	Phelan Rd				Planned
	8	SBd	15	34.23	NB	Phelan Rd				Planned
	8	SBd	15	37.60	SB	Bear Valley Cutoff				Planned
	8	SBd	15	37.85	NB	Bear Valley Cutoff				Planned
●	8	SBd	15	38.79	NB	Nisquali Rd/La Mesa Rd (T)	T			Operational
●	8	SBd	15	38.91	SB	Nisquali Rd (Loop)	L			Operational
	8	SBd	15	40.43	SB	Jct Rte 18 Palmdale Rd				Planned
	8	SBd	15	40.48	NB	W Jct Rte 18				Planned
	8	SBd	15	40.56	SB	W Jct Rte 18				Planned
	8	SBd	15	40.68	NB	Jct Rte 18 Palmdale Rd				Planned
	8	SBd	15	41.90	SB	Mojave Dr				Planned
	8	SBd	15	42.16	NB	Mojave Dr				Planned
	8	SBd	15	43.28	NB	E Jct 18 D Street				Planned
	8	SBd	15	43.35	SB	E Jct 18 D Street				Planned
	8	SBd	15	43.72	NB	E Jct 18 D Street				Planned
	8	SBd	15	43.75	SB	E Jct 18 D Street				Planned
	8	SBd	15	R14.79	SB	Kenwood Ave				Planned
	8	SBd	15	R15.21	NB	Kenwood Ave				Planned
	8	SBd	15	R28.46	SB	Oak Hill Rd				Planned
	8	SBd	15	TBD	NB	EB 10 Connector				Planned
	8	SBd	15	TBD	NB	WB 10 Connector				Planned
	8	SBd	15	TBD	NB	EB 210 Connector				Planned
	8	SBd	15	TBD	NB	WB 210 Connector				Planned
	8	SBd	15	TBD	SB	EB 10 Connector				Planned
	8	SBd	15	TBD	SB	WB 10 Connector				Planned
	8	SBd	15	TBD	SB	EB 210 Connector				Planned
	8	SBd	15	TBD	SB	WB 210 Connector				Planned
●	8	SBd	60	R1.17	WB	Ramona Ave	S	1		Operational
●	8	SBd	60	R1.49	EB	Ramona Ave	S	1		Operational
●	8	SBd	60	R2.17	WB	Central Ave	S	1		Operational
●	8	SBd	60	R2.55	EB	Central Ave	S	1		Operational
●	8	SBd	60	R3.42	WB	Mountain Ave	S	1		Operational
●	8	SBd	60	R3.80	EB	Mountain Ave	S	1		Operational
●	8	SBd	60	R4.39	WB	Euclid Ave	S	1		Operational
●	8	SBd	60	R4.79	EB	Euclid Ave	S	1		Operational
●	8	SBd	60	R5.69	WB	Grove Ave	S	2	M	Operational
●	8	SBd	60	R6.06	EB	Grove Ave	S	2	M	Operational
●	8	SBd	60	R6.69	WB	Vinyard Ave	S	1		Operational
●	8	SBd	60	R7.07	EB	Vinyard Ave	S	1		Operational
●	8	SBd	60	R7.71	WB	Archibald Ave	S	2	M	Operational
●	8	SBd	60	R8.08	EB	Archibald Ave	S	2	M	Operational
●	8	SBd	60	R9.10	EB	Haven Ave	S	1		Operational
●	8	SBd	60	R9.10	WB	Haven Ave	S	2	M	Operational
●	8	SBd	60	R9.75	WB	Milliken Ave	S	1		Operational
●	8	SBd	71	R0.87	NB	Chino Ave	S	3		Operational

● Existing Meter

High Priority



# 2013 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	8	SBd	71	R1.10	SB	Chino Ave	S	3	M	Operational
●	8	SBd	71	R1.66	NB	Grand Ave	S	3	M	Operational
●	8	SBd	71	R1.88	NB	Grand Ave	L	2	M	Operational
●	8	SBd	71	R2.01	SB	Grand Ave	S	2	M	Operational
●	8	SBd	71	R3.19	SB	Chino Hill Pkwy	S	2	M	Operational
●	8	SBd	71	R3.75	SB	Ramona Ave	S	2	M	Operational
●	8	SBd	71	R4.69	NB	Soquel Canyon	S	2	M	Operational
●	8	SBd	71	R4.88	NB	Soquel Canyon	L	2	M	Operational
●	8	SBd	71	R4.90	SB	Soquel Canyon	L	2	M	Operational
●	8	SBd	71	R5.10	SB	Soquel Canyon	S	2	M	Operational
●	8	SBd	71	R6.34	NB	Pine Ave	S	2	M	Operational
●	8	SBd	71	R6.71	SB	Pine Ave	S	2	M	Operational
●	8	SBd	71	R7.96	NB	Euclid Ave	L	2	M	Operational
●	8	SBd	71	R8.00	SB	Euclid Ave	L	2	M	Operational
●	8	SBd	71	R8.23	NB	Euclid Ave	S	2	M	Operational
●	8	SBd	210	1.40	WB	Mountain Ave	S	2		Operational
●	8	SBd	210	1.60	EB	Mountain Ave	S	2		Operational
●	8	SBd	210	3.30	WB	Campus Ave	S	2		Operational
●	8	SBd	210	3.60	EB	Campus Ave	S	2	M	Operational
●	8	SBd	210	4.50	WB	Carnelian	S	2		Operational
●	8	SBd	210	4.70	EB	Carnelian	S	2		Operational
●	8	SBd	210	5.70	WB	Archibald Ave	S	2		Operational
●	8	SBd	210	6.00	EB	Archibald Ave	S	2		Operational
●	8	SBd	210	6.80	WB	Haven Ave	S	2		Operational
●	8	SBd	210	7.00	EB	Haven Ave	S	2		Operational
●	8	SBd	210	7.80	WB	Milliken Ave	S	2		Operational
●	8	SBd	210	8.00	EB	Milliken Ave	S	2		Operational
●	8	SBd	210	8.80	WB	Day Creek	S	2		Operational
●	8	SBd	210	9.40	EB	Day Creek	S	2		Operational
	8	SBd	210	11.77	WB	Cherry Ave				Planned
	8	SBd	210	12.11	EB	Cherry Ave				Planned
●	8	SBd	210	13.66	WB	Citrus Ave	S	2		Operational
●	8	SBd	210	14.15	EB	Citrus Ave	S	2		Operational
●	8	SBd	210	14.70	WB	Sierra Ave SB	S	2		Operational
●	8	SBd	210	14.88	EB	Sierra Ave SB	L	2	M	Operational
●	8	SBd	210	14.90	WB	Sierra Ave SB	S	2		Operational
●	8	SBd	210	14.91	EB	Sierra Ave NB	S	2	M	Operational
●	8	SBd	210	R15.73	WB	Alder	S	2	M	Operational
●	8	SBd	210	R16.16	EB	Alder	S	2	M	Operational
●	8	SBd	210	R17.25	WB	Ayala	S	2	M	Operational
●	8	SBd	210	R17.68	EB	Ayala	S	2	M	Operational
●	8	SBd	210	R18.53	WB	Riverside	S	3		Operational
●	8	SBd	210	R18.88	EB	Riverside	S	2		Operational
●	8	SBd	210	R20.54	WB	State	S	3		Operational
●	8	SBd	210	R20.76	EB	State	S	2		Operational
●	8	SBd	210	21.51	WB	215 NB to 210 WB Connector	S	2		Operational
	8	SBd	210	R22.77	WB	H St				Planned
	8	SBd	210	R23.10	EB	H St				Planned
	8	SBd	210	R23.94	WB	Waterman Ave				Planned
	8	SBd	210	R24.38	EB	Waterman Ave				Planned
	8	SBd	210	R25.58	EB	Del Rosa Ave				Planned
	8	SBd	210	R25.58	WB	Del Rosa Ave				Planned
	8	SBd	210	R26.64	WB	Highland Ave				Planned

● Existing Meter

High Priority



# 2013 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	8	SBd	210	R27.05	EB	Highland Ave				Planned
	8	SBd	210	R29.23	WB	Baseline St				Planned
	8	SBd	210	R29.49	EB	Baseline St				Planned
	8	SBd	210	R30.12	WB	Fifth St				Planned
	8	SBd	210	R30.40	EB	Fifth St				Planned
	8	SBd	210	R32.14	WB	San Bernardino Ave				Planned
	8	SBd	210	R32.27	EB	San Bernardino Ave				Planned
	8	SBd	210	TBD	EB	15 NB Connector				Planned
	8	SBd	210	TBD	EB	15 SB Connector				Planned
	8	SBd	210	TBD	WB	15 NB Connector				Planned
	8	SBd	210	TBD	WB	15 SB Connector				Planned
●	8	SBd	215	0.06	SB	La Cadena	S	1		Operational
●	8	SBd	215	0.51	NB	Iowa Ave	S	2		Operational
●	8	SBd	215	1.17	SB	Barton Rd	S	2		Operational
●	8	SBd	215	1.44	NB	Barton Rd	S	1		Operational
●	8	SBd	215	2.57	SB	Mt. Vernon Ave	S	1		Operational
●	8	SBd	215	2.66	NB	Washington Ave (Loop)	S	2		Operational
●	8	SBd	215	2.90	NB	Washington Ave (Hook)	S	2		Operational
●	8	SBd	215	4.85	SB	Orange Show Rd	S	1		Operational
●	8	SBd	215	5.06	SB	Orange Show Rd	L	1		Operational
●	8	SBd	215	5.12	NB	Orange Show Rd	S	2		Operational
●	8	SBd	215	5.43	SB	Inland Center Dr	S	2		Operational
●	8	SBd	215	5.53	NB	Inland Center Dr	S	2		Operational
●	8	SBd	215	6.20	NB	Mill St	S	2		Operational
●	8	SBd	215	6.68	SB	2nd St	S	1		Operational
●	8	SBd	215	7.00	NB	3rd St	S	1		Operational
●	8	SBd	215	7.10	SB	5th St	T			Operational
●	8	SBd	215	7.30	NB	5th St	S	2		Operational
●	8	SBd	215	7.98	SB	Baseline Road	T			Operational
●	8	SBd	215	8.50	NB	Baseline Road	T			Operational
	8	SBd	215	9.13	SB	Massachusetts Ave				Planned
●	8	SBd	215	9.42	SB	27th St	S	2		Operational
●	8	SBd	215	9.73	SB	210 EB to 215 SB Connector	S	2		Operational
●	8	SBd	215	9.85	NB	27th St	S	2		Operational
	8	SBd	215	11.43	SB	University Pkwy				Planned
	8	SBd	215	11.81	NB	University Pkwy				Planned
	8	SBd	215	13.80	SB	Palm Ave				Planned
	8	SBd	215	14.30	NB	Palm Ave				Planned
	8	SBd	215	17.10	NB	Devor Rd/Cajon Blvd				Planned
	8	SBd	215	17.25	SB	Devor Rd				Planned
	8	SBd	215	TBD	NB	EB 10 Connector				Planned
	8	SBd	215	TBD	NB	WB 10 Connector				Planned
	8	SBd	215	TBD	SB	EB 10 Connector				Planned
	8	SBd	215	TBD	SB	WB 10 Connector				Planned
●	8	SBd	259	L0.07	NB	Baseline Road	T			Operational
	8	SBd	395	45.95	NB	Rte 395 at Hwy 58				Planned

● Existing Meter

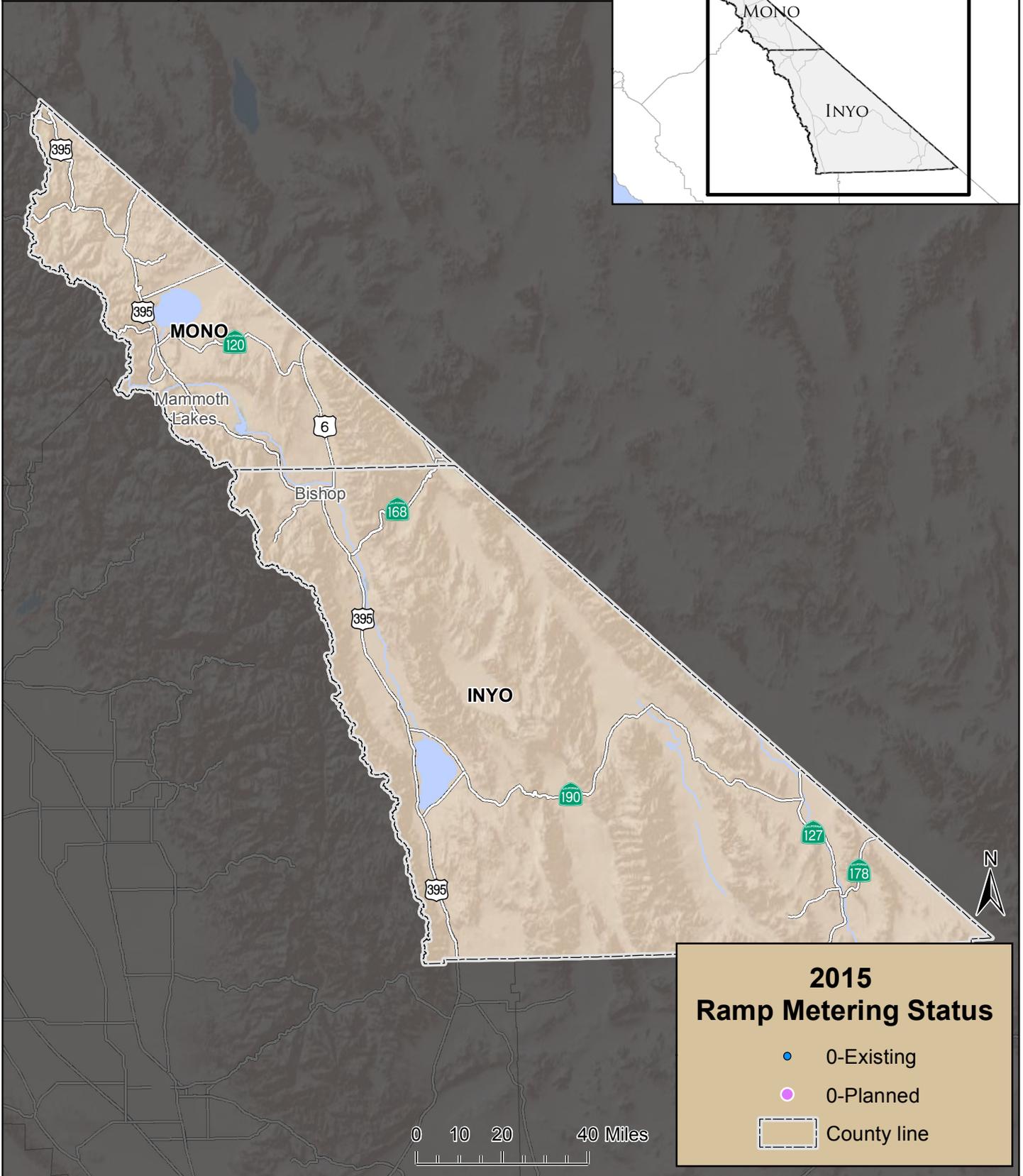
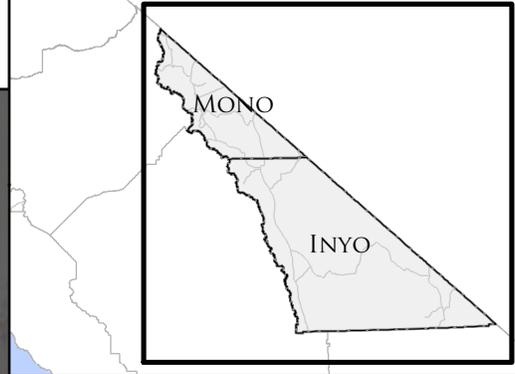
High Priority

# DISTRICT 9

# District 9

Ramp Meter Development Plan

Division of Traffic Operations  
Data by: Office of Traffic Management  
Map by: Office of Performance



**2015  
Ramp Metering Status**

- 0-Existing
- 0-Planned
- County line

Disclaimer: This information is for discussion and planning purposes, and does not represent a commitment by Caltrans or others to install or operate ramp meters at these locations.

## **DISTRICT 9**

District 9 is rural district which serves Inyo, Mono, and eastern Kern Counties and has planning, maintenance and operations responsibilities in northern San Bernardino County. With a population of 32,541 people and 13,359 square miles (Inyo and Mono Counties), the district is the least populated in the state and has the lowest population density of all of Caltrans' districts with 2.4 people per square mile. District 9 manages 761 centerline miles and 1,778 total lane-miles of highway.

### Current or Planned Ramp Metering Routes

No routes have current or planned ramp metering in District 9 as illustrated on the District's RMDP map.

### Congestion Challenges

Recreation and goods movement account for the majority of freeway travel within District 9. Domestic and international tourism is the major economic activity with over 13 million visitor-days generated annually. The following destinations are located in District 9: Yosemite and Death Valley National Parks; Inyo and Humboldt-Toiyabe National Forests; Red Rock and Bodie State Parks; Mammoth Mountain Ski Area; and Mono Lake Basin National Scenic Area. Tourism-related seasonal congestion and major holiday congestion occurs but does not necessitate ramp metering at this time.

### District Ramp Metering Strategies

Currently, District 9 has no ramp meters located within its planning, maintenance and operations area.

### Supporting Documents

- ◆ District 9 TCRs, DSMP, and other planning products:  
<http://www.dot.ca.gov/dist9/planning/index.html>

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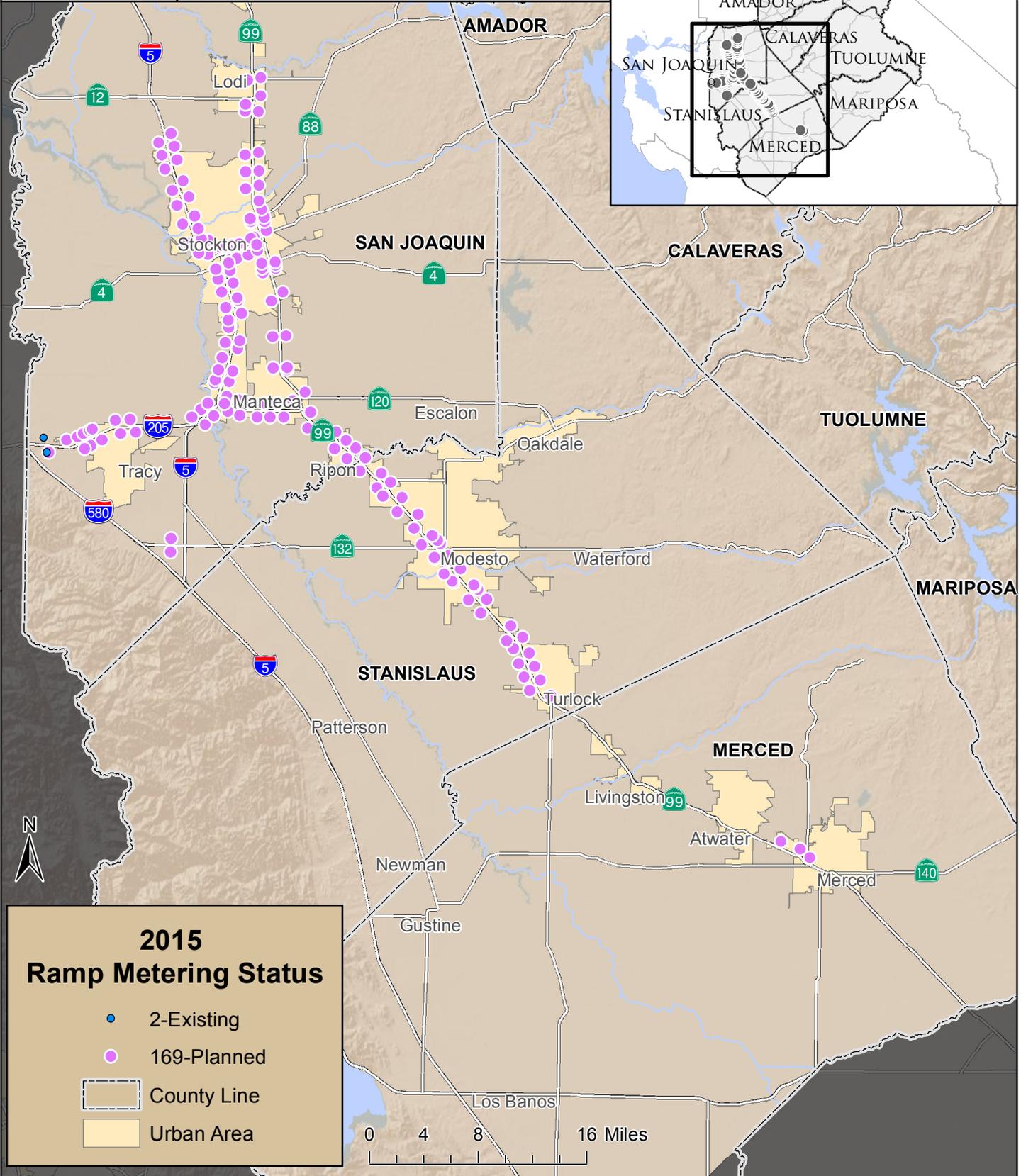
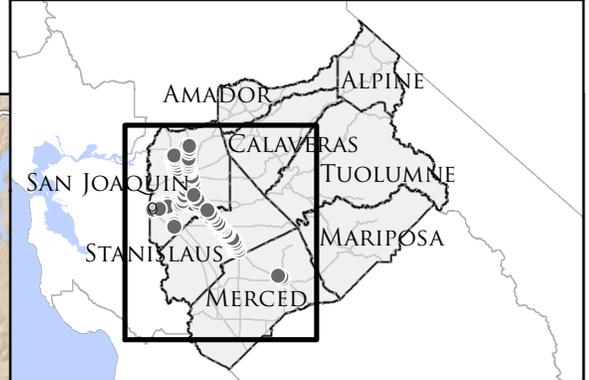
# DISTRICT 10



# District 10

Ramp Metering Development Plan

Division of Traffic Operations  
 Data by: Office of Traffic Management  
 Map by: Office of Performance



**2015 Ramp Metering Status**

- 2-Existing
- 169-Planned
- County Line
- Urban Area

Disclaimer: This information is for discussion and planning purposes, and does not represent a commitment by Caltrans or others to install or operate ramp meters at these locations.

## **DISTRICT 10**

District 10 is primarily a rural district composed of eight counties; Alpine, Amador, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus, and Tuolumne Counties. With a total population of 1.6 million people in 10,862 square miles, the district has an average population density of 151 people per square mile. District 10 is responsible for maintaining 3,670 lane miles of State routes.

### Current or Planned Ramp Metering Routes

The following routes have or are planned to have ramp metering:

I-5, I-205, SR 4, SR 99, SR 120, and SR 132

District 10 has 2 existing ramp meters and 169 planned ramp meters for a projected total of 171 ramp meters for the ten-year period covered by the RMDP. Currently there are no new proposed high-priority locations in District 10. Ramp meter locations are illustrated on the District 10 RMDP map.

### Congestion Challenges

Interstates 5 and 205 are the most congested routes in the district. They serve as commuter routes to Sacramento and the Bay Area, respectively. State Route 99, a conventional freeway, also has serious congestion. All three routes are primary targets for ramp metering. Ramp metering is currently used to meet congestion challenges on I-205 at the Mountain House Parkway interchange.

### District Ramp Metering Strategies

While some segments in District 10 are candidates for the immediate implementation of ramp metering, the necessary equipment has not yet been installed, and therefore, a lead time of two years was assumed for high-priority segments.

In San Joaquin County, high-priority segments (5 to 10 years) include westbound and eastbound I-205, northbound I-5 (I-205 to SR 4), and northbound SR 99 (SR 120 to Hammer Lane). These segments were defined as being of high-priority because they are projected to experience high demands and severe congestion. Furthermore, there are a number of improvement projects currently planned within these segments that provide the opportunity to install metering equipment and implement necessary ramp improvements.

In both Stanislaus and Merced Counties, no segments were identified as being high-priority for the implementation of ramp metering.

Medium priority segments in San Joaquin County include most of southbound I-5, northbound I-5 north of SR 4, portions of southbound SR 99 through Stockton and south of SR 120, northbound SR 99 south of SR 120 and north of Hammer Lane, SR120, and SR4. Some medium priority segments are projected to experience high demands by 2016, but metering equipment

installations are not scheduled with currently planned projects. In other cases, operational issues are more prevalent in the long term, but currently-planned projects provide an opportunity to install metering equipment and implement necessary ramp improvements.

A majority of SR 99 in Stanislaus County has been identified as medium priority for ramp metering implementation. This includes the portion of SR 99 from Mitchell Road to the San Joaquin County line. The segment for northbound SR 99 from Briggsmore Avenue to the county line, and southbound SR 99 from the county line to Kiernan Avenue, may be considered a slightly higher priority.

In Merced, northbound SR 99 starting at Mission Avenue has been identified as being a medium priority for ramp metering implementation.

Low-priority segments in San Joaquin County include southbound I-5 north of Eight Mile Road, southbound SR 99 north of Hammer Lane, and southbound SR 99 between Arch Road and SR 120. In Stanislaus County, the portion of SR 99 south of Mitchell has been identified as a low priority. In Merced County, southbound SR 99 has been identified as a low priority.

### Ramp Metering Priorities

District 10's high priority ramp metering locations on SR 99 are currently under construction. Once construction is complete, the entire SR 99 corridor in San Joaquin County will be metered. The ramp metering locations are highlighted in District 10's RMDP data. The following construction projects include all 23 high priority ramp locations on SR 99:

1. SR-99 Ramp Metering (Minor A funded) – NB between SR-4 (Crosstown) and Hammer Lane – Construction FY 2014/15.
2. SR-99 Ramp Metering (SHOPP funded) – SB between SR-4 (Crosstown) and Hammer Lane – Construction FY 2014/15.
3. SR-99 South Stockton Widening Project (STIP funded) – NB & SB between Arch Road and SR-4 (Crosstown) – Under Construction.
4. SR-99 Manteca Widening (STIP, Prop 1 B funded) – NB & SB between Austin Road and Arch Road – Under Construction

District 10 ramp metering priorities are based on the approved *Final Report, Northern San Joaquin Valley Regional Ramp Metering and HOV Master Plan*, dated February 27, 2009. This plan was signed by the District 10 Director and the San Joaquin Council of Governments (SJCOG), Stanislaus Council of Governments (StanCOG), and Merced County Association of Governments (MCAG) Executive Directors.

Completing the installation of ramp meters on SR-99 is also consistent with District 10's signed memorandum of understanding for *The Implementation of Ramp Metering in San Joaquin County* with SJCOG dated May 2, 2011.

### Supporting Documents

- ◆ District 10 Directive C-13 Ramp Metering Elements (March 22, 2011):  
[http://district10.onramp.dot.ca.gov/downloads/district10/files/Directives\\_C-13RampMeteringFinal3-11.pdf](http://district10.onramp.dot.ca.gov/downloads/district10/files/Directives_C-13RampMeteringFinal3-11.pdf)
- ◆ MPO Ramp Metering – Northern San Joaquin Valley Regional Ramp Metering and High Occupancy Vehicle (HOV) Master Plan (February 27, 2009):  
<http://www.sjcog.org/documentcenter/view/51>
- ◆ District 10 TCRs, CSMPs, DSMP, and other planning products:  
<http://www.dot.ca.gov/dist10/divisions/Planning/advancedplanning/pages/tcrs.html>
- ◆ Memorandum of Understanding (MOU) District 10 and San Joaquin Council of Governments (May 2011)  
<http://www.sjcog.org/documentcenter/view/51>



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	10	Mer	99	15.95	NB	V Street	S	2		Planned
	10	Mer	99	16.89	NB	16th Street	S	2		Planned
	10	Mer	99	18.43	NB	Franklin Road	H	1		Planned
	10	SJ	4	16.21	WB	NB Rte 5 Connector	C	3		Planned
	10	SJ	4	16.48	WB	Center Street	S	1		Planned
	10	SJ	4	16.80	EB	El Dorado Street	S	1		Planned
	10	SJ	4	17.05	WB	Stanislaus Street	S	1		Planned
	10	SJ	4	17.27	EB	Stanislaus Street	S	2		Planned
	10	SJ	4	17.59	WB	Wilson Way	S	2		Planned
	10	SJ	4	17.97	EB	Wilson Way	S	1		Planned
	10	SJ	4	18.60	WB	Filbert Street	S	1		Planned
	10	SJ	4	18.89	EB	Filbert Street	S	1		Planned
	10	SJ	4	19.44	EB	NB Rte 99 connector	C	2		Planned
	10	SJ	5	13.65	SB	Manthey Road	H	1		Planned
	10	SJ	5	14.18	NB	Mossdale Road	H	1		Planned
	10	SJ	5	14.34	SB	WB Rte 120	C	2		Planned
	10	SJ	5	15.04	NB	WB Rte 120	C	1		Planned
	10	SJ	5	16.26	SB	Louise Avenue	S	2		Planned
	10	SJ	5	16.50	SB	Louise Avenue Loop	L	2		Planned
	10	SJ	5	16.74	NB	Louise Avenue	S	2		Planned
	10	SJ	5	17.28	SB	Lathrop Road	S	2		Planned
	10	SJ	5	17.60	NB	Lathrop Road Loop	L	2		Planned
	10	SJ	5	18.30	SB	Lathrop Road Loop	L	2		Planned
	10	SJ	5	19.18	NB	Lathrop Road	S	2		Planned
	10	SJ	5	19.39	SB	Roth Road	S	1		Planned
	10	SJ	5	19.81	NB	Roth Road	S	1		Planned
	10	SJ	5	20.50	SB	El Dorado Street	C	2		Planned
	10	SJ	5	21.30	SB	Matthews Road	S	1		Planned
	10	SJ	5	21.61	NB	Matthews Road	S	1		Planned
	10	SJ	5	22.34	SB	French Camp Road	S	2		Planned
	10	SJ	5	22.52	NB	French Camp Road loop	L	2		Planned
	10	SJ	5	22.72	NB	French Camp Road	S	3		Planned
	10	SJ	5	23.50	SB	Downing Avenue	S	2		Planned
	10	SJ	5	23.86	NB	Downing Avenue	S	2		Planned
	10	SJ	5	24.49	SB	Eighth Street	S	1		Planned
	10	SJ	5	24.82	NB	Eighth Street	S	1		Planned
	10	SJ	5	25.20	SB	Charter Way/ Rte 4	S	1		Planned
	10	SJ	5	25.50	NB	Charter Way/ Rte 4	S	1		Planned
	10	SJ	5	26.98	SB	Pershing Avenue	H	2		Planned
	10	SJ	5	27.22	NB	Pershing Avenue	S	1		Planned
	10	SJ	5	27.81	SB	Mt. Diablo	S	1		Planned
	10	SJ	5	28.06	NB	Mt. Diablo	S	1		Planned
	10	SJ	5	28.42	SB	Country Club Blvd	S	1		Planned
	10	SJ	5	29.18	NB	Alpine Avenue	S	1		Planned
	10	SJ	5	29.88	SB	March Lane	S	2		Planned
	10	SJ	5	30.14	NB	March Lane	S	2		Planned
	10	SJ	5	31.32	SB	Ben Holt	S	2		Planned
	10	SJ	5	31.60	NB	Ben Holt	S	2		Planned
	10	SJ	5	32.52	SB	Hammer Lane	S	3		Planned
	10	SJ	5	32.85	NB	Hammer Lane	S	2		Planned
	10	SJ	5	34.10	SB	Otto Drive	S	2		Planned
	10	SJ	5	34.50	NB	Otto Drive	S	2		Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	10	SJ	5	35.15	SB	Eight Mile Road	S	3		Planned
	10	SJ	5	35.51	NB	Eight Mile Road	S	1		Planned
	10	SJ	5	36.10	SB	North Gateway Blvd	S	2		Planned
	10	SJ	5	36.50	NB	North Gateway Blvd	S	2		Planned
	10	SJ	99	0.74	SB	Main Street	S	1		Planned
	10	SJ	99	0.79	NB	Main Street	H	1		Planned
	10	SJ	99	1.59	NB	Milgeo Avenue	H	1		Planned
	10	SJ	99	2.00	SB	Jack Tone Road	S	1		Planned
	10	SJ	99	2.49	NB	Jack Tone Road	S	1		Planned
	10	SJ	99	4.50	SB	Austin Road	S	1		Planned
	10	SJ	99	5.03	NB	Austin Road	S	1		Planned
	10	SJ	99	6.49	SB	Yosemite Ave/ Rte 120	S	2		Planned
	10	SJ	99	6.84	NB	Yosemite Ave/ Rte 120	S	2		Planned
	10	SJ	99	9.07	NB	N. Manteca OC	S	1		Planned
	10	SJ	99	9.31	SB	Lathrop Road	S	2		Construction
	10	SJ	99	9.34	SB	Lathrop Road	L	1		Construction
	10	SJ	99	9.36	NB	Lathrop Road	L	1		Construction
	10	SJ	99	11.62	SB	French Camp Road	L	2		Construction
	10	SJ	99	11.66	NB	French Camp Road	S	1		Construction
	10	SJ	99	14.47	SB	Arch Road	S	2		Planned
	10	SJ	99	14.76	NB	Arch Road	S	2		Planned
	10	SJ	99	16.55	SB	Mariposa / Rte 4 WB	S	2		Construction
	10	SJ	99	16.70	NB	French Camp Road loop	L	2		Construction
	10	SJ	99	16.80	SB	French Camp Road loop	L	2		Construction
	10	SJ	99	16.80	SB	French Camp Road loop	S	2		Construction
	10	SJ	99	16.94	NB	Mariposa / Rte 4 WB	S	2		Planned
	10	SJ	99	17.14	SB	Golden Gate Avenue	S	2		Construction
	10	SJ	99	17.18	NB	Golden Gate Avenue	L	2		Construction
	10	SJ	99	19.33	SB	WB Fremont/ Rte 26 EB	L	1		Construction
	10	SJ	99	19.45	NB	WB Fremont/ Rte 26 EB	S	2		Construction
	10	SJ	99	20.25	SB	EB Waterloo / Rte 88	S	1		Construction
	10	SJ	99	20.31	NB	EB Waterloo / Rte 88	L	1		Construction
	10	SJ	99	20.36	SB	WB Waterloo / Rte 88	L	2		Construction
	10	SJ	99	20.47	NB	WB Waterloo / Rte 88	S	2		Construction
	10	SJ	99	20.72	SB	Cherokee Road	S	2		Construction
	10	SJ	99	21.03	NB	Cherokee Road	S	2		Construction
	10	SJ	99	21.72	NB	Wilson Way	C	1		Planned
	10	SJ	99	22.77	SB	Hammer Lane	S	2		Construction
	10	SJ	99	23.02	NB	Hammer Lane	S	2		Construction
	10	SJ	99	24.04	SB	Morada Lane	H	2		Planned
	10	SJ	99	24.10	NB	Morada Lane	H	2		Planned
	10	SJ	99	25.30	SB	Eight Mile Road	H	2		Planned
	10	SJ	99	25.39	NB	Eight Mile Road	H	2		Planned
	10	SJ	99	28.47	NB	Harney Lane	H	1		Planned
	10	SJ	99	28.50	SB	Harney Lane	H	1		Planned
	10	SJ	99	28.87	SB	Cherokee Lane	S	1		Planned
	10	SJ	99	28.87	SB	Kettleman Lane/ Rte 12 WB	S	1		Planned
	10	SJ	99	29.68	NB	Kettleman Lane/ Rte 12 WB	S	1		Planned
	10	SJ	99	30.79	SB	Victor Road/ Rte 12 EB	S	1		Planned
	10	SJ	99	30.92	NB	Victor Road/ Rte 12 EB	H	1		Planned
	10	SJ	120	1.19	WB	Yosemite Avenue	S	2		Planned
	10	SJ	120	1.49	EB	Yosemite Avenue	S	2		Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	10	SJ	120	2.00	WB	Mckinley Avenue	S	1		Planned
	10	SJ	120	2.40	EB	Mckinley Avenue	S	1		Planned
	10	SJ	120	3.08	WB	Airport Way	S	1		Planned
	10	SJ	120	3.58	EB	Airport Way	S	1		Planned
	10	SJ	120	4.12	WB	Union Road	S	1		Planned
	10	SJ	120	4.52	EB	Union Road	S	1		Planned
	10	SJ	120	5.07	WB	South Main Street	S	1		Planned
	10	SJ	120	5.56	EB	South Main Street	S	1		Planned
	10	SJ	132	2.24	EB	Bird Road	S	1		Planned
	10	SJ	132	2.24	WB	Bird Road	S	1		Planned
●	10	SJ	205	1.17	WB	Mountain House Pkwy	S	1		Operational
●	10	SJ	205	1.50	EB	Mountain House Pkwy	L	1		Operational
	10	SJ	205	1.62	EB	Mountain House Pkwy	S	1		Planned
	10	SJ	205	2.92	WB	West 11th St	C	1		Planned
	10	SJ	205	4.00	WB	Lamers Road	S	2		Planned
	10	SJ	205	4.20	EB	Lamers Road	L	2		Planned
	10	SJ	205	4.50	WB	Lamers Road Loop	L	3		Planned
	10	SJ	205	4.70	EB	Lamers Road	S	2		Planned
	10	SJ	205	5.01	WB	Grant Line Road	S	1		Planned
	10	SJ	205	5.21	WB	Naglee Road	S	1		Planned
	10	SJ	205	5.57	EB	Grant Line Road	S	1		Planned
	10	SJ	205	6.84	WB	Tracy Blvd	S	1		Planned
	10	SJ	205	7.22	EB	Tracy Blvd	S	1		Planned
	10	SJ	205	7.97	WB	Mcarthur Drive	S	1		Planned
	10	SJ	205	8.29	EB	Mcarthur Drive	S	1		Planned
	10	SJ	205	13.10	EB	Paradise Cut	S	2		Planned
	10	SJ	205	13.10	WB	Paradise Cut	S	2		Planned
	10	Sta	99	1.83	NB	Lander Avenue	S	1		Planned
	10	Sta	99	3.33	SB	West Main Street	S	1		Planned
	10	Sta	99	3.63	NB	West Main Street	S	1		Planned
	10	Sta	99	4.39	SB	Fulkerth Road	S	1		Planned
	10	Sta	99	4.70	NB	Fulkerth Road	S	1		Planned
	10	Sta	99	5.45	SB	Monte Vista	S	1		Planned
	10	Sta	99	5.81	NB	Monte Vista	S	1		Planned
	10	Sta	99	6.60	SB	Taylor	S	1		Planned
	10	Sta	99	6.89	NB	Taylor	S	1		Planned
	10	Sta	99	7.59	SB	Keyes Road	S	1		Planned
	10	Sta	99	8.02	NB	Keyes Road	S	1		Planned
	10	Sta	99	9.97	SB	Mitchell Road	S	1		Planned
	10	Sta	99	10.35	NB	Mitchell Road	S	1		Planned
	10	Sta	99	11.38	SB	2nd & North	S	1		Planned
	10	Sta	99	11.41	NB	Pine Street	H	1		Planned
	10	Sta	99	11.70	NB	Whitmore Avenue Loop	L	2		Planned
	10	Sta	99	11.82	NB	Whitmore Avenue	S	2		Planned
	10	Sta	99	13.03	SB	9th Street	S	2		Planned
	10	Sta	99	13.16	SB	Hatch Road	S	1		Planned
	10	Sta	99	13.39	NB	Hatch Road	H	1		Planned
	10	Sta	99	14.31	SB	Crows Landing	S	1		Planned
	10	Sta	99	14.47	NB	Crows Landing	L	1		Planned
	10	Sta	99	15.21	SB	Tuolumne Blvd	L	1		Planned
	10	Sta	99	15.21	NB	Tuolumne Blvd	H	1		Planned
	10	Sta	99	15.45	SB	5th & G street	S	1		Planned

● Existing Meter

High Priority



## 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	10	Sta	99	15.63	SB	5th & H street	S	1		Planned
	10	Sta	99	15.97	NB	6th & I street	S	2		Planned
	10	Sta	99	16.26	NB	6th & L street	S	1		Planned
	10	Sta	99	16.75	NB	Kansas Avenue	H	1		Planned
	10	Sta	99	16.93	SB	Kansas Avenue	L	1		Planned
	10	Sta	99	18.36	SB	Carpenter/Briggsmore	S	1		Planned
	10	Sta	99	18.65	NB	Carpenter/Briggsmore	S	1		Planned
	10	Sta	99	20.03	SB	Beckwith Road	S	1		Planned
	10	Sta	99	20.46	NB	Beckwith Road	S	1		Planned
	10	Sta	99	21.55	SB	Pelandale Road	S	1		Planned
	10	Sta	99	21.93	NB	Pelandale Road	S	1		Planned
	10	Sta	99	22.38	SB	Kiernan Sn/ Rte 219	S	2		Construction
	10	Sta	99	22.74	NB	kiernan Sn/ Rte 219	S	2		Construction
	10	Sta	99	24.07	SB	Hammett Road	S	2		Planned
	10	Sta	99	24.43	NB	Hammett Road	S	2		Planned

- Existing Meter

High Priority

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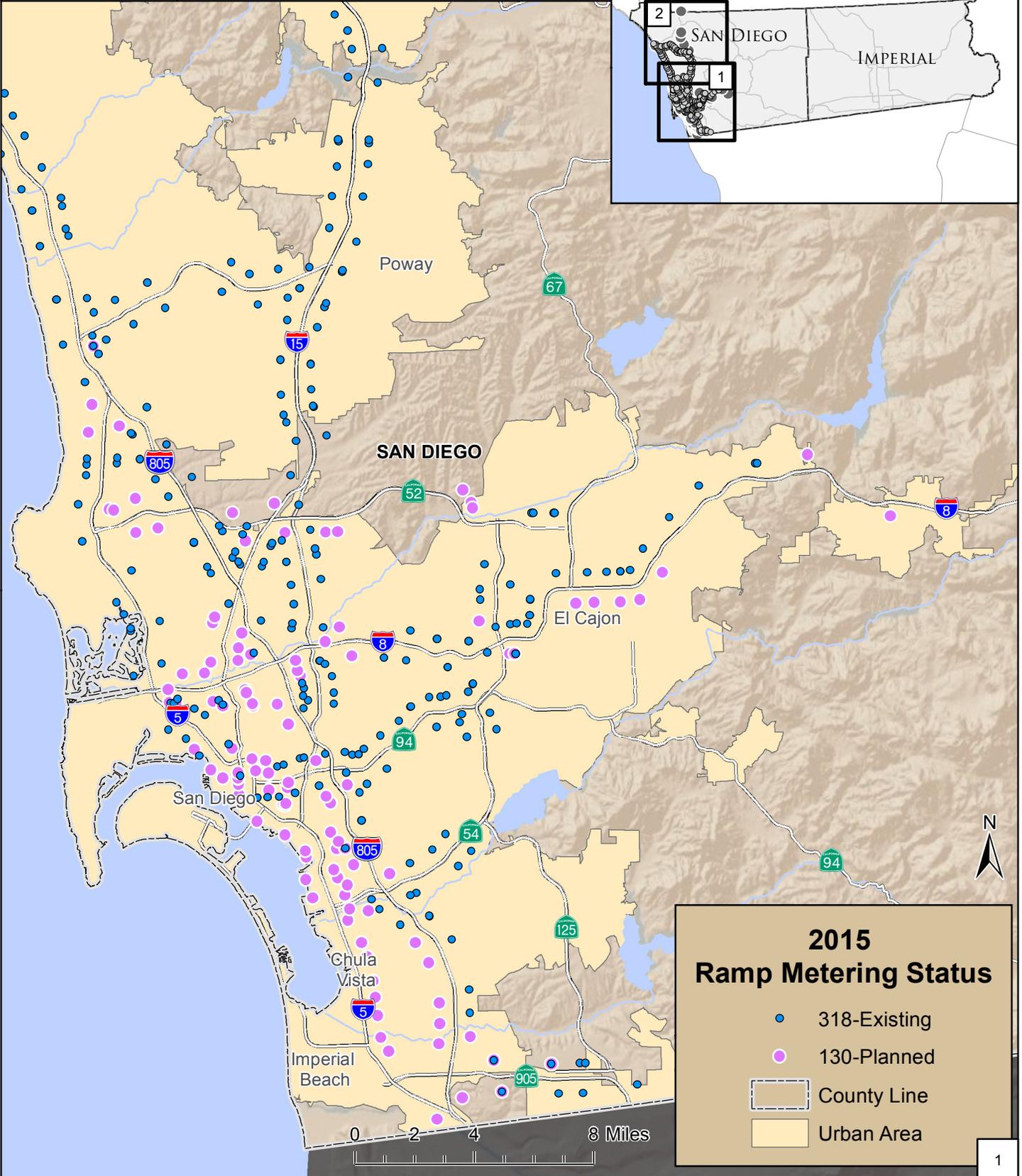
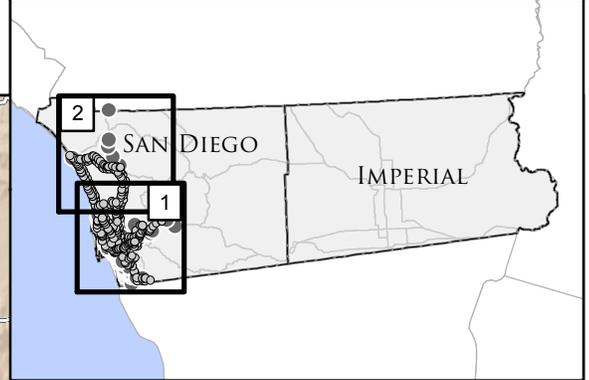
# DISTRICT 11



# District 11

Ramp Meter Development Plan

Division of Traffic Operations  
Data by: Office of Traffic Management  
Map by: Office of Performance



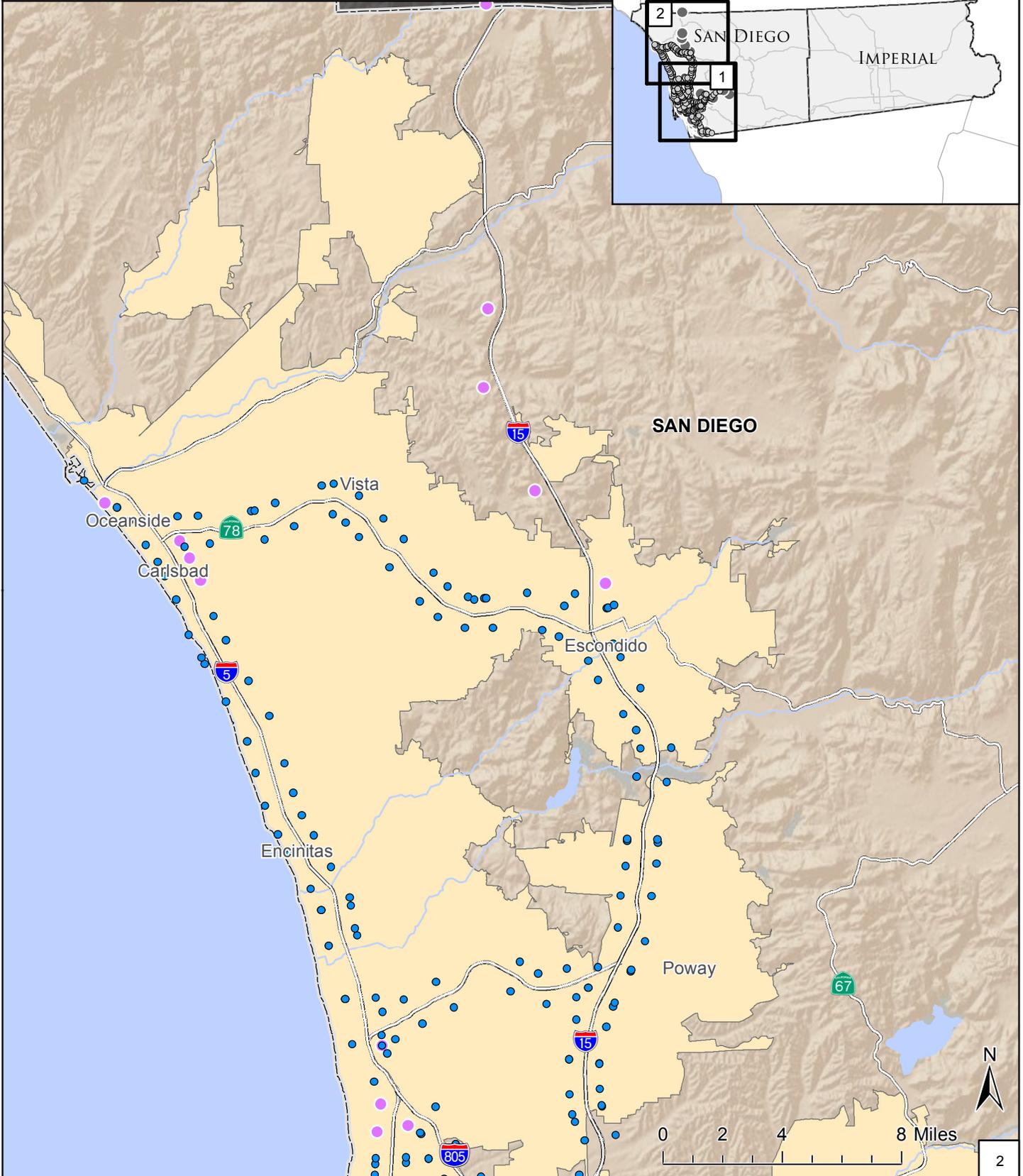
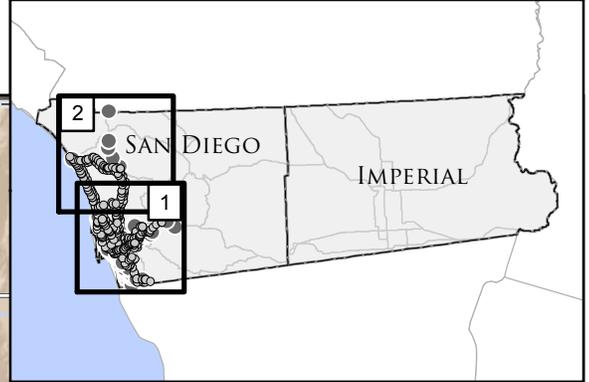
Disclaimer: This information is for discussion and planning purposes, and does not represent a commitment by Caltrans or others to install or operate ramp meters at these locations.



# District 11

Ramp Meter Development Plan

Division of Traffic Operations  
Data by: Office of Traffic Management  
Map by: Office of Performance



Disclaimer: This information is for discussion and planning purposes, and does not represent a commitment by Caltrans or others to install or operate ramp meters at these locations.

## **DISTRICT 11**

District 11 is the southernmost district in the State and includes San Diego and Imperial Counties. District 11 has a population of 3,383,000 people in a land area of 8,379 square miles and a density of 404 people per square mile. District 11 manages 1,029 centerline miles and 4,069 total lane-miles of highway.

The district is among the most varied geographical regions of the state stretching from coastal cliffs and beaches to mountain ranges and arid deserts. San Diego County's urban character consists of 18 incorporated cities and ranks as the 13th largest metropolitan area in the country. Beyond the metropolitan area, the rural character of San Diego County includes the Cleveland National Forest, the Anza-Borrego Desert State Park, and several smaller rural communities. While Imperial County has seven incorporated cities, it is mostly rural with large tracts of agricultural and desert land.

### Current or Planned Ramp Metering Routes

The following routes have or are planned to have ramp metering:

I-5, I-8, I-15, SR-52, SR-54, SR-56, SR-78, SR-94, SR-125, SR-163, I-805, and SR-905.

District 11 currently has 318 existing ramp meters. There are 27 priority locations as shown in the following District 11's priority metering location section that currently need further study before proceeding. An additional 103 urban onramps or connectors are candidates for the ten-year period covered by the RMDP for a total of 448 projected ramp meters if funding is available and regional priorities and needs coincide.

The conceptual ramp meter infrastructure cost estimate to install the ramp meters at all of the district's proposed high-priority locations, excluding civil work, is approximately \$2,320,000. At this time, the conceptual cost estimate does not account for right-of-way costs. Actual project cost estimates will be determined during the project development phases when the scope and schedules are finalized.

### Congestion Challenges

Several San Diego metropolitan area freeways experience consistent and recurrent congestion during the morning and afternoon peak-period travel times. In particular, I-5, SR 78, and I-805 experience over 4,000 average daily vehicle hours of delay during these peak periods. TMS elements, HOV lanes, and variable toll pricing have been or will be implemented to add efficiencies to the system. Highway improvements such as managed lanes, as well as additional multimodal and operational improvements, may further improve mobility in the San Diego region.

### District Ramp Metering Strategies

District 11 coordinates with local and regional partner agencies regarding strategies to deploy future ramp metering. District 11 currently meters traffic Monday through Friday during the congested morning and afternoon commute periods, this is typically from 5:30 – 9:30 a.m., and 3:00 – 7:00 p.m. On more congested freeways including I-5 and SR 78, metering can last until 11:00 a.m. or start at 2:00 p.m. Metering strategies to consider include extended hours and weekends to assist with heavily congested corridors.

San Diego County meters a majority (71%) of its urban ramps that include nine freeway-to-freeway connector meters. The majority (57%) of these entrance ramps contain an HOV preferential lane which is metered. The metered on-ramps with more than one lane operate with a staggered discharge. Over half (57%) of the meters operate as two cars per green and 43% operate as one car per green. Imperial County does not currently warrant ramp meters.

District 11 utilizes several types of communication methods to manage the ramp meters including telephone lease lines, digital subscriber lines (DSL), and fiber optics. The district is transitioning to state-owned fiber communication on new projects. In addition, the 170 controllers will be converted to 2070 controllers at various locations where fiber optics have been installed.

The first 4-lane meter was deployed in San Diego in the fall of 2013 at Mira Mesa Blvd to SB I-805, and consists of two SOV, one HOV, and one transit (bus) only lane.

### Future Strategies

#### Hardware

- Continue deployment of 2070 controller implementation where fiber or high bandwidth communication is available.
- Use virtual machine servers for the central system, testing, and reporting features.

#### Software

- Develop dynamic corridor ramp metering with a flexible “harness” to allow the addition of various corridor metering algorithms.
- Develop queue dissipation with mid-ramp detection for unique conditions such as being located near railroad tracks

### Priority Metering Locations

District 11 has developed a prioritized list of proposed ramp meter locations. These locations are on-ramps and connectors in heavily congested morning commute segments. Ramp metering is recommended and considered a low cost solution to improve the traffic flow and reduce congestion. If funding is received, further analysis by the district should include metering with auxiliary lanes or ramp widening.

The I-5 North Bound ramps and connectors heading downtown require meters due to overcapacity of the freeway mainline during the morning commute period between 6:00 -9:00 a.m. The connectors shown in the list of priority ramp meter locations are major contributors to the congestion with significant traffic volumes. In 2003, a project (EA 24390k) was initiated to install meters on the high priority on-ramps, but funding was not available. Congestion has been increasing since 2003 and this stretch of freeway was included in the 2012 AM Top 10 Congested Segment Map. If additional funds become available the project needs to be updated and further analysis of the connectors, auxiliary lanes, and ramp widening will be required.

The locations on West Bound 52 should be metered due to congestion of the mainline from 6:30 – 8:30 a.m. Congestion spans one mile east of Mast Blvd. to one mile west of the

SR 125 to SR 52 connector with mainline speeds significantly dropping from 70 miles per hour to 5 miles per hour. Field surveillance has confirmed the extent and severity of this traffic. The heaviest congestion contributor is traffic from Mast Blvd. with 2,235 vehicles per hour during the peak morning hours.

District 11's list of priority ramp meter locations:

Route	Post Mile	Direction	Location	Existing Lanes	Ramp Metering** Cost
5	9.6	NB	5 NB Connector from 54 WB	2	\$ 100,000.00
5	10.2	NB	24th St to 5 NB	2	\$ 80,000.00
5	10.8	NB	Civic Center to 5 NB *	1	\$ 60,000.00
5	10.96	SB	8th St to 5 SB/Civic Center	1	\$ 60,000.00
5	11.3	NB	7th St/8th St to 5 NB	1	\$ 60,000.00
5	11.6	SB	National Blvd/Division to 5 SB	2	\$ 80,000.00
5	12.6	NB	5 NB from 15 SB connector	1	\$ 100,000.00
5	13.2	NB	28th St NB to 5 NB	1	\$ 60,000.00
5	13.4	NB	National Ave WB to 5 NB	1	\$ 60,000.00
5	14.7	NB	Imperial Ave/19th St to 5 NB	1	\$ 60,000.00
5	15.1	NB	5 NB from 94 WB	2	\$ 80,000.00
5	15.15	SB	Pershing St to 5 SB	1	\$ 60,000.00
5	15.5	NB	Pershing Dr to 5 NB	1	\$ 60,000.00
5	15.6	SB	Park Ave to 5 SB	1	\$ 60,000.00
5	16.5	SB	First Ave to 5 SB	2	\$ 80,000.00
5	16.7	SB	Grape St to 5 SB	2	\$ 80,000.00
5	16.75	NB	Hawthorne to 5 NB	1	\$ 60,000.00
5	17.6	SB	Pacific Highway to 5 SB	2	\$ 100,000.00
5	19.97	NB	Rosecrans to 5 NB	1	\$ 60,000.00
5	20.25	SB	5 SB connector from 8 EB	2	\$ 100,000.00
5	20.3	SB	5 SB connector from 8 WB	1	\$ 100,000.00
5	49.4	NB	Tamarack Ave to 5 NB	1	\$ 60,000.00
5	50.2	NB	Carlsbad Village Dr to 5 NB	1	\$ 60,000.00
8	6.6	EB	8 EB Connector from 805 SB *	2	\$ 100,000.00
8	6.6	EB	8 EB connector from 805 NB *	1	\$ 100,000.00
8	7.8	EB	8 EB from 15 NB connector	1	\$ 100,000.00
8	7.8	EB	8 EB from 15 SB connector	2	\$ 100,000.00
52	14.8	WB	125 NB to 52 WB connector	2	\$ 100,000.00
52	14.5	WB	Mission Gorge Rd	1	\$ 60,000.00
52	13.1	WB	Mast Blvd	2	\$ 80,000.00
				TOTAL	\$ 2,320,000.00 **

\* Currently operating as a Vehicle Detection Station

\*\* Estimate for ramp meter infrastructure only. Does not include civil work that may be required. The district should perform further analysis to consider combining auxiliary lanes and ramp widening to maximize the benefit of any new meters.



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	11	SD	5	3.96	NB	Coronado Ave to 5 NB	L			Planned
	11	SD	5	4.80	NB	Palm Ave/Rte 75 to 5 NB	C			Planned
	11	SD	5	5.53	NB	Main St to 5 NB	S			Planned
	11	SD	5	6.16	NB	Palomar St to 5 NB	S			Planned
	11	SD	5	6.70	NB	Industrial Blvd/L St to 5 NB	S			Planned
	11	SD	5	7.43	NB	J St. to 5 NB	S			Planned
	11	SD	5	7.93	NB	H St to 5 NB	S			Planned
	11	SD	5	9.15	NB	E St to 5 NB	S			Planned
	11	SD	5	9.60	NB	5 NB Connector from 54 WB	C			Planned
	11	SD	5	9.96	SB	24th St to 5 SB				Planned
	11	SD	5	10.24	NB	24th St to 5 NB	S			Planned
	11	SD	5	10.60	SB	Harbor Dr to 5 SB				Planned
	11	SD	5	10.96	SB	8th St to 5 SB				Planned
	11	SD	5	10.98	NB	Civic Center Dr to 5 NB	S			Planned
	11	SD	5	11.34	NB	7th St/8th St to 5 NB	H			Planned
	11	SD	5	11.61	SB	Division St to 5 SB				Planned
	11	SD	5	11.86	NB	Division/Osborne St to 5 NB	S			Planned
	11	SD	5	12.60	NB	5 NB from 15 SB Connector				Planned
	11	SD	5	13.19	NB	28th St. SB to 5 NB	L			Planned
	11	SD	5	13.19	SB	29th St/Boston Ave to 5 SB				Planned
	11	SD	5	13.43	NB	28th St/National Ave WB to 5 NB	S			Planned
	11	SD	5	13.94	SB	Crosby/Logan Ave to 5 SB				Planned
	11	SD	5	14.50	SB	16th and E Street	S			Planned
	11	SD	5	14.60	SB	17th/J St to 5 SB	S			Planned
	11	SD	5	14.72	NB	Imperial Ave/19th St to 5 NB	S			Planned
	11	SD	5	14.96	SB	17th/E St to 5 SB				Planned
	11	SD	5	15.10	NB	5 NB from 94 WB				Planned
	11	SD	5	15.16	SB	C St to 5 SB				Planned
	11	SD	5	15.17	SB	Pershing St to 5 SB				Planned
	11	SD	5	15.27	NB	21st/F St to 5 NB (94)	S			Planned
	11	SD	5	15.30	NB	B St. to 5 NB	S			Planned
	11	SD	5	15.54	NB	Pershing Dr to 5 NB	H			Planned
	11	SD	5	15.60	SB	Park Ave to 5 SB				Planned
●	11	SD	5	16.11	SB	5th Ave to 5 SB	S	2	M	Operational
	11	SD	5	16.52	SB	First Ave to 5 SB				Planned
	11	SD	5	16.70	SB	Grape St to 5 SB				Planned
	11	SD	5	16.74	NB	Hawthorne/Grape to 5 NB				Planned
	11	SD	5	16.75	NB	First Ave to 5 NB	S			Planned
●	11	SD	5	16.94	NB	Hawthorn St to 5 NB	H	2		Operational
●	11	SD	5	17.34	SB	Kettner Blvd to 5 SB	H	1		Operational
	11	SD	5	17.59	SB	Pacific Highway to 5 SB				Planned
●	11	SD	5	18.13	NB	India St to 5 NB	H	2		Operational
●	11	SD	5	18.16	SB	Hancock St/Washington St to 5 SB	H	2		Operational
●	11	SD	5	18.41	NB	Washington/San Diego Ave to 5 NB	H	2	M	Operational
●	11	SD	5	18.93	SB	Old Town Ave to 5 SB	S	1		Operational
●	11	SD	5	19.26	NB	Old Town Ave/Moore St to 5 NB	S	2		Operational
	11	SD	5	19.97	NB	Rosecrans to 5 NB				Planned
	11	SD	5	20.25	SB	5 SB Connector from 8 EB				Planned
	11	SD	5	20.30	SB	5 SB Connector from 8 WB				Planned
●	11	SD	5	20.72	SB	Seaworld Dr to 5 SB	S	2	M	Operational
●	11	SD	5	20.87	NB	Sea World Dr to 5 NB	S	2		Operational
●	11	SD	5	22.08	SB	Clairemont Dr EB to 5 SB	S	1		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	11	SD	5	22.32	SB	Clairemont Dr WB to 5 SB	L	2	M	Operational
●	11	SD	5	22.32	NB	Clairemont Dr to 5 NB	S	2	M	Operational
●	11	SD	5	22.96	SB	Mission Bay Dr/Grand Ave to 5 SB	S	3	M	Operational
●	11	SD	5	23.58	SB	Balboa Ave to 5 SB	L	2	M	Operational
●	11	SD	5	24.06	NB	Mission Bay Dr to 5 NB	S	2		Operational
●	11	SD	5	25.85	SB	La Jolla Pkwy to 5 SB	S	1		Operational
●	11	SD	5	26.73	SB	Gilman Dr to 5 SB	S	3	M	Operational
	11	SD	5	27.05	NB	Gilman Dr to 5 NB				Planned
●	11	SD	5	27.90	SB	Nobel Dr to 5 SB	S	3	M	Operational
●	11	SD	5	28.26	SB	La Jolla Village Dr EB to 5 SB	H	2	M	Operational
●	11	SD	5	28.39	NB	La Jolla Village Dr EB to 5 NB	L	2	M	Operational
●	11	SD	5	28.46	SB	La Jolla Village Dr WB to 5 SB	L	2		Operational
●	11	SD	5	28.56	NB	La Jolla Village Dr WB to 5 NB	S	1		Operational
	11	SD	5	29.34	SB	Genesee Ave to 5 SB	S			Part Const
	11	SD	5	29.63	NB	Genesee to 5 NB	S			Part Const
	11	SD	5	30.14	SB	Sorrento Valley to 5 SB	S			Part Const
●	11	SD	5	31.66	SB	Carmel Mountain Rd to 5 SB	S	3	M	Operational
●	11	SD	5	31.91	NB	Carmel Mountain Rd to 5 NB	S	3	M	Operational
●	11	SD	5	32.79	SB	Carmel Valley Rd to 5 SB	S	2		Operational
●	11	SD	5	32.90	NB	Carmel Valley Rd to 5 NB	S	2	M	Operational
●	11	SD	5	34.14	NB	Del Mar Heights Rd to 5 NB	S	2		Operational
●	11	SD	5	34.30	SB	Del Mar Heights Rd EB to 5 SB	H	2	M	Operational
●	11	SD	5	34.31	SB	Del Mar Heights Rd WB to 5 SB	L	2		Operational
●	11	SD	5	36.23	NB	Via de la Valle EB to 5 NB	L	2		Operational
●	11	SD	5	36.28	SB	Via de la Valle EB to 5 SB	H	2	M	Operational
●	11	SD	5	36.28	SB	Via de la Valle WB to 5 SB	L	2		Operational
●	11	SD	5	36.50	NB	Via de la Valle WB to 5 NB	H	2	M	Operational
●	11	SD	5	37.37	NB	Lomas Santa Fe Dr EB to 5 NB	S	2	M	Operational
●	11	SD	5	37.40	SB	Lomas Santa Fe Dr WB to 5 SB	L	2	M	Operational
●	11	SD	5	37.40	SB	Lomas Santa Fe Dr EB to 5 SB	S	2	M	Operational
●	11	SD	5	37.64	NB	Lomas Santa Fe Dr WB to 5 NB	S	2	M	Operational
●	11	SD	5	38.54	NB	Manchester Ave to 5 NB	S	1		Operational
●	11	SD	5	38.58	SB	Manchester Ave to 5 SB	L	2		Operational
●	11	SD	5	39.83	SB	Birmingham Dr to 5 SB	S	2		Operational
●	11	SD	5	39.90	NB	Birmingham Dr to 5 NB	S	2	M	Operational
●	11	SD	5	40.63	SB	Santa Fe Dr to 5 SB	S	2	M	Operational
●	11	SD	5	40.69	NB	Santa Fe Dr to 5 NB	S	1		Operational
●	11	SD	5	41.53	SB	Encinitas Blvd to 5 SB	S	2	M	Operational
●	11	SD	5	41.66	NB	Encinitas Blvd to 5 NB	S	2	M	Operational
●	11	SD	5	42.68	NB	Leucadia Blvd to 5 NB	H	2	M	Operational
●	11	SD	5	42.69	SB	Leucadia Blvd to 5 SB	S	3	M	Operational
●	11	SD	5	43.79	SB	La Costa Ave to 5 SB	S	3	M	Operational
●	11	SD	5	44.21	NB	La Costa Ave to 5 NB	S	2	M	Operational
●	11	SD	5	45.44	SB	Poinsettia Ln to 5 SB	S	3	M	Operational
●	11	SD	5	45.58	NB	Poinsettia Ln to 5 NB	S	2	M	Operational
●	11	SD	5	46.87	SB	Palomar Airport Rd EB to 5 SB	S	2	M	Operational
●	11	SD	5	47.10	SB	Palomar Airport Rd WB to 5 SB	L	2	M	Operational
●	11	SD	5	47.17	NB	Palomar Airport Rd to 5 NB	S	3	M	Operational
●	11	SD	5	47.97	SB	Cannon Rd to 5 SB	S	3	M	Operational
●	11	SD	5	48.10	NB	Cannon Rd to 5 NB	S	3	M	Operational
●	11	SD	5	49.25	SB	Tamarack Ave to 5 SB	S	2	M	Operational
	11	SD	5	49.38	NB	Tamarack Ave to 5 NB	S			Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	11	SD	5	50.09	SB	Carlsbad Village Dr to 5 SB	S	1		Operational
	11	SD	5	50.24	NB	Carlsbad Village Dr to 5 NB	S			Planned
●	11	SD	5	50.71	SB	Las Flores Dr to 5 SB	S	1		Operational
	11	SD	5	50.81	NB	Las Flores Dr to 5 NB	S			Planned
●	11	SD	5	51.44	SB	Cassidy St to 5 SB	S	1		Operational
●	11	SD	5	52.41	SB	Oceanside Blvd to 5 SB	L	2	M	Operational
●	11	SD	5	53.30	SB	Mission Ave WB to 5 SB	L	2	M	Operational
●	11	SD	5	53.30	SB	Mission Ave EB to 5 SB	S	1		Operational
	11	SD	5	53.74	SB	Hill St to 5 SB				Planned
●	11	SD	5	54.43	SB	Harbor Dr to 5 SB	L	3	M	Operational
	11	SD	8	0.49	EB	Morena Blvd to 8 EB				Planned
●	11	SD	8	0.70	EB	West Mission Bay Dr to 8 EB	L	2		Operational
●	11	SD	8	0.80	EB	Sports Arena Blvd to 8 EB	S	3	M	Operational
	11	SD	8	0.86	EB	Taylor to 8 EB				Planned
	11	SD	8	0.99	WB	Taylor St to 8 WB				Planned
	11	SD	8	1.91	WB	Hotel Circle to 8 WB				Planned
	11	SD	8	1.96	EB	Hotel Circle S to 8 EB				Planned
●	11	SD	8	2.12	EB	Rosecrans St to 8 EB	S	3	M	Operational
	11	SD	8	3.09	EB	Mission Center Rd to 8 EB				Planned
	11	SD	8	3.12	WB	Mission Center Rd to 8 WB				Planned
	11	SD	8	3.68	WB	Texas St to 8 WB				Planned
●	11	SD	8	5.90	EB	Texas St NB to 8 EB	S	1		Operational
●	11	SD	8	5.91	EB	Texas St SB to 8 EB	L	2	M	Operational
	11	SD	8	6.60	EB	5 SB Connector from 805 SB				Planned
	11	SD	8	6.60	EB	5 SB Connector from 805 NB				Planned
	11	SD	8	6.67	WB	Qualcomm to 8 WB				Planned
	11	SD	8	7.00	EB	Waring rd to 8 EB				Planned
	11	SD	8	7.80	EB	8 EB from 15 NB Connector				Planned
	11	SD	8	7.80	EB	8 EB from 15 SB Connector				Planned
●	11	SD	8	8.10	EB	Fairmount Ave NB to 8 EB	H	1		Operational
●	11	SD	8	8.10	EB	Fairmount Ave SB to 8 EB	H	1		Operational
●	11	SD	8	8.93	WB	Waring Rd to 8 WB	S	2	M	Operational
●	11	SD	8	8.95	EB	Waring Rd to 8 EB	S	2	M	Operational
●	11	SD	8	10.11	WB	College Ave SB to 8 WB	S	2		Operational
●	11	SD	8	10.11	WB	College Ave NB to 8 WB	L	1		Operational
●	11	SD	8	10.20	EB	College Ave SB to 8 EB	L	1		Operational
●	11	SD	8	10.20	EB	College Ave NB to 8 EB	H	1		Operational
●	11	SD	8	11.35	WB	Lake Murray Blvd to 8 WB	S	2	M	Operational
●	11	SD	8	11.35	WB	70th St to 8 WB	L	1		Operational
●	11	SD	8	12.35	WB	Fletcher Pkwy to 8 WB	S	3	M	Operational
	11	SD	8	12.63	EB	La Mesa Blvd to 8 EB				Planned
	11	SD	8	12.78	EB	Severin to 8 EB				Planned
●	11	SD	8	12.80	EB	El Cajon Blvd to 8 EB	S	1		Operational
●	11	SD	8	12.80	EB	Spring St to 8 EB	S	1		Operational
●	11	SD	8	12.83	WB	Spring St/Center St to 8 WB	H	2		Operational
●	11	SD	8	13.41	WB	Jackson Dr to 8 WB	H	2	M	Operational
●	11	SD	8	14.01	WB	La Mesa Blvd to 8 WB	S	2	M	Operational
●	11	SD	8	14.01	WB	125 SB to 8 WB	C	2	M	Operational
●	11	SD	8	14.71	WB	125 NB to 8 WB	C	1		Operational
●	11	SD	8	14.71	WB	Severin/Murray Dr to 8 WB	S	2	M	Operational
●	11	SD	8	15.40	WB	El Cajon Blvd to 8 WB	S	3	M	Operational
	11	SD	8	16.00	EB	Magnolia to 8 EB				Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	11	SD	8	16.01	EB	Fletcher pkwy to 8 EB				Planned
●	11	SD	8	16.40	WB	West Main St to 8 WB	S	2		Operational
	11	SD	8	16.60	EB	Mollison to 8 EB				Planned
●	11	SD	8	17.05	WB	Johnson Ave to 8 WB	S	2	M	Operational
	11	SD	8	17.48	EB	2nd St to 8 EB				Planned
●	11	SD	8	17.51	WB	Magnolia Ave NB to 8 WB	L	1		Operational
●	11	SD	8	17.51	WB	67 SB to 8 WB	C	3		Operational
●	11	SD	8	17.51	WB	Broadway/Fletcher Pkwy to 8 WB	S	3	M	Operational
	11	SD	8	17.99	EB	East main to 8 EB				Planned
●	11	SD	8	18.11	WB	Mollison Ave to 8 WB	S	2	M	Operational
	11	SD	8	18.96	EB	Greenfield to 8 EB				Planned
●	11	SD	8	19.10	WB	2nd St to 8 WB	S	2		Operational
●	11	SD	8	20.41	WB	Greenfield Dr to 8 WB	S	2		Operational
●	11	SD	8	21.75	WB	Los Coches Rd to 8 WB	S	3	M	Operational
●	11	SD	8	23.61	WB	Lake Jennings Rd SB to 8 WB	H	2		Operational
●	11	SD	8	23.71	WB	Lake Jennings Rd NB to 8 WB	L	2	M	Operational
	11	SD	8	25.51	WB	Dumbar Ln to 8 WB				Planned
	11	SD	8	58.21	WB	Tavern Rd to 8 EB				Planned
	11	SD	15	0.67	SB	Oceanview to 15 SB				Planned
	11	SD	15	1.63	SB	Imperial Ave to 15 SB				Planned
	11	SD	15	1.76	SB	Market St to 15 SB				Planned
●	11	SD	15	4.55	SB	University Ave to 15 SB	S	2	M	Operational
●	11	SD	15	4.68	NB	University Ave to 15 NB	S	2	M	Operational
●	11	SD	15	5.00	SB	El Cajon Blvd to 15 SB	S	2	M	Operational
●	11	SD	15	5.07	NB	El Cajon Blvd to 15 NB	S	3	M	Operational
●	11	SD	15	5.49	SB	Adams Ave to SB 15	H	2		Operational
●	11	SD	15	5.61	NB	Adams Ave to 15 NB	H	2	M	Operational
	11	SD	15	6.03	SB	Camino del Rio to 15 SB				Planned
	11	SD	15	6.08	NB	Camino del Rio to 15 NB				Planned
	11	SD	15	6.21	SB	Fairmont Ave to 15 SB				Planned
●	11	SD	15	6.26	NB	15 NB S/ Rte 8	S	2		Operational
●	11	SD	15	6.67	SB	Friars Rd to 15 SB	L	1		Operational
●	11	SD	15	6.78	SB	Friars Rd to 15 SB/8	S	1		Operational
●	11	SD	15	6.96	NB	Friars Rd to 15 NB	S	3	M	Operational
●	11	SD	15	7.67	SB	Murphy Canyon Rd to 15 SB	S	2	M	Operational
●	11	SD	15	8.33	NB	Aero Dr to 15 NB	S	2	M	Operational
●	11	SD	15	8.34	SB	Aero Dr to 15 SB	S	3	M	Operational
●	11	SD	15	9.18	NB	Balboa Ave EB to 15 NB	L	1		Operational
●	11	SD	15	9.19	SB	Balboa Ave EB to 15 SB	S	3	M	Operational
●	11	SD	15	9.20	SB	Balboa Ave WB to 15 SB	L	2	M	Operational
●	11	SD	15	9.37	NB	Balboa Ave WB to 15 NB	H	1		Operational
●	11	SD	15	9.95	SB	Clairemont Mesa Blvd to 15 SB	S	3	M	Operational
●	11	SD	15	9.96	NB	Clairemont Mesa Blvd to 15 NB	S	2		Operational
●	11	SD	15	13.27	NB	Miramar Way to 15 NB	L	1		Operational
●	11	SD	15	13.45	SB	Miramar Way to 15 SB	S	2	M	Operational
●	11	SD	15	14.15	SB	Miramar Rd to 15 SB	S	3	M	Operational
●	11	SD	15	14.28	NB	Miramar Rd to 15 NB	L	2		Operational
●	11	SD	15	14.30	NB	Pomerado Rd to 15 NB	S	1		Operational
●	11	SD	15	14.36	SB	Pomerado Rd to 15 SB	L	2		Operational
●	11	SD	15	14.88	SB	Carroll Canyon Rd to 15 SB	S	2		Operational
●	11	SD	15	15.01	NB	Carroll Canyon Rd to 15 NB	S	2	M	Operational
●	11	SD	15	15.93	NB	Mira Mesa Blvd WB to 15 NB	S	2	M	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	11	SD	15	15.94	NB	Mira Mesa Blvd EB to 15 NB	L	2		Operational
●	11	SD	15	15.96	SB	Mira Mesa Blvd EB to 15 SB	S	3	M	Operational
●	11	SD	15	15.96	SB	Mira Mesa Blvd WB to 15 SB	L	2	M	Operational
●	11	SD	15	17.24	SB	Mercy Rd to 15 SB	S	3	M	Operational
●	11	SD	15	17.27	NB	Mercy Rd to 15 NB	S	3	M	Operational
●	11	SD	15	18.14	NB	Poway Rd to 15 NB	S	1		Operational
●	11	SD	15	18.24	SB	Rancho Penasquitos to 15 SB	S	2		Operational
●	11	SD	15	18.25	SB	Poway Rd to 15 SB	L	2		Operational
●	11	SD	15	18.25	NB	Rancho Penasquitos to 15 NB	L	1		Operational
●	11	SD	15	19.02	SB	Ted Williams Pkwy to 15 SB	S	2	M	Operational
●	11	SD	15	19.45	NB	56 EB to 15 NB	L	2	M	Operational
●	11	SD	15	19.51	NB	Ted Williams Pkwy to 15 NB	S	2		Operational
●	11	SD	15	20.54	SB	Carmel Mountain Rd to 15 SB	S	3	M	Operational
●	11	SD	15	20.58	NB	Carmel Mountain Rd to 15 NB	S	3	M	Operational
●	11	SD	15	21.83	SB	Camino del Norte to 15 SB	S	3	M	Operational
●	11	SD	15	22.04	NB	Camino del Norte to 15 NB	S	3	M	Operational
●	11	SD	15	22.86	SB	Bernardo Center Dr to 15 SB	S	2		Operational
●	11	SD	15	23.02	NB	Bernardo Center Dr to 15 NB	S	2		Operational
●	11	SD	15	23.69	NB	Rancho Bernardo Rd EB to 15 NB	L	2	M	Operational
●	11	SD	15	23.76	SB	Rancho Bernardo Rd EB to 15 SB	H	3	M	Operational
●	11	SD	15	23.81	NB	Rancho Bernardo Rd WB to 15 NB	H	2	M	Operational
●	11	SD	15	23.82	SB	Rancho Bernardo Rd WB to 15 SB	L	2	M	Operational
●	11	SD	15	25.84	SB	West Bernardo Dr to 15 SB	S	1		Operational
●	11	SD	15	25.99	NB	W Bernardo Dr/ Pomerado to 15 NB	H	2	M	Operational
●	11	SD	15	26.88	NB	Via Rancho Pkwy to 15 NB	L	2		Operational
●	11	SD	15	27.01	SB	Via Rancho Pkwy to 15 SB	S	3	M	Operational
●	11	SD	15	27.78	SB	Centre City Pkwy to 15 SB	S	3	M	Operational
●	11	SD	15	28.62	SB	Citracado Pkwy to 15 SB	S	2		Operational
●	11	SD	15	28.82	NB	Citracado Pkwy to 15 NB	S	1		Operational
●	11	SD	15	29.97	SB	Auto Park Way / 9th Ave to 15 SB	S	2	M	Operational
●	11	SD	15	30.21	NB	Auto Park Way / 9th Ave to 15 NB	S	2		Operational
●	11	SD	15	30.70	SB	Valley Pkwy to 15 SB	L	1		Operational
●	11	SD	15	30.72	NB	Valley Pkwy to 15 NB	S	2		Operational
●	11	SD	15	32.73	SB	El Norte Pkwy to 15 SB	S	2	M	Operational
	11	SD	15	33.11	NB	El Norte Pkwy to 15 NB				Planned
	11	SD	15	36.82	SB	Deer Spring Rd to 15 SB				Planned
	11	SD	15	40.62	SB	Gopher Canyon Rd to 15 SB				Planned
	11	SD	15	42.99	SB	395/Escondido Hwy to 15 SB				Planned
	11	SD	15	42.99	SB	76/Pala Rd to 15 SB				Planned
	11	SD	15	53.80	SB	Rainbow Valley Rd to 15 SB				Planned
	11	SD	52	1.21	WB	Regents Rd to 52 WB				Planned
	11	SD	52	1.56	EB	Regents Rd to 52 EB				Planned
	11	SD	52	2.01	WB	Genesee to 52 WB				Planned
	11	SD	52	2.65	EB	Genesee to 52 EB				Planned
	11	SD	52	5.29	WB	Convoy to 52 WB				Planned
	11	SD	52	5.63	EB	Convoy to 52 EB				Planned
	11	SD	52	6.80	WB	Karny Villa Rd to 52 WB				Planned
	11	SD	52	7.08	EB	Ruffin/Kearny Villa Rd to 52 EB				Planned
	11	SD	52	8.48	EB	Santo Rd WB to 52 EB				Planned
	11	SD	52	8.82	EB	Santo Rd EB to 52 EB				Planned
	11	SD	52	13.10	WB	Mast Blvd WB to 52 WB				Planned
	11	SD	52	13.46	WB	Mast Blvd EB to 52 WB				Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
	11	SD	52	14.03	WB	Mision Gorge Rd to 52 WB				Planned
	11	SD	52	14.80	WB	125 NB to 52 WB Connector				Planned
●	11	SD	52	15.98	WB	Cuyamaca St SB 52 WB	S	2	M	Operational
●	11	SD	52	16.26	WB	Cuyamaca St NB 52 WB	L	2	M	Operational
●	11	SD	52	16.91	WB	Magnolia Ave to 52 WB	S	2	M	Operational
●	11	SD	52	16.94	WB	67 SB to 52 WB	S	2		Operational
	11	SD	54	0.35	EB	National City Blvd to 54 EB				Planned
	11	SD	54	0.81	WB	Highland Ave/4th Ave to 54 WB				Planned
	11	SD	54	1.00	EB	Highland Ave/4th St to 54 EB				Planned
●	11	SD	54	2.95	EB	Reo Dr to 54 EB	S	2	M	Operational
●	11	SD	54	2.97	WB	Reo Dr to 54 WB	S	2	M	Operational
●	11	SD	54	4.04	WB	Woodman St to 54 WB	S	2	M	Operational
●	11	SD	54	4.29	EB	Woodman St to 54 EB	S	2	M	Operational
●	11	SD	54	4.77	WB	Briarwood Rd to 54 WB	S	2	M	Operational
●	11	SD	54	5.07	EB	Briarwood Rd to 54 EB	S	2	M	Operational
	11	SD	56	0.42	EB	El Camino Real to 56 EB	S	2	M	Planned
●	11	SD	56	0.42	EB	El Camino Real to 56 EB	S	2		Operational
●	11	SD	56	0.85	WB	Carmel Creek Rd to 56 WB	L	2	M	Operational
●	11	SD	56	0.97	EB	Carmel Creek Rd to 56 EB	S	2	M	Operational
●	11	SD	56	1.83	WB	Carmel Country Rd to 56 WB	L	2		Operational
●	11	SD	56	1.89	EB	Carmel Country Rd to 56 EB	S	2		Operational
●	11	SD	56	2.91	WB	Carmel Valley Rd to 56 WB	S	3	M	Operational
●	11	SD	56	3.19	EB	Carmel Valley Rd to 56 EB	S	3	M	Operational
●	11	SD	56	5.95	WB	Camino Del Sur to 56 WB	S	3	M	Operational
●	11	SD	56	6.17	EB	Camino Del Sur to 56 EB	S	3	M	Operational
●	11	SD	56	6.87	WB	Black Mountain Rd to 56 WB	S	3	M	Operational
●	11	SD	56	7.16	EB	Black Mountain Rd to 56 EB	S	3	M	Operational
●	11	SD	56	8.06	EB	Rancho Penasquitos Blvd to 56 EB	H	1		Operational
●	11	SD	56	8.06	WB	Rancho Penasquitos Blvd to 56 WB	S	1		Operational
●	11	SD	78	0.65	WB	Jefferson St to 78 WB	S	3	M	Operational
●	11	SD	78	0.86	EB	Jefferson St to 78 EB	S	3	M	Operational
●	11	SD	78	1.39	WB	El Camino Real to 78 WB	S	2		Operational
●	11	SD	78	1.59	EB	El Camino Real to 78 EB	S	2		Operational
●	11	SD	78	3.25	WB	College Blvd SB to 78 WB	S	3	M	Operational
●	11	SD	78	3.33	WB	College Blvd NB to 78 WB	H	2		Operational
●	11	SD	78	3.59	EB	Plaza Dr to 78 EB	H	2		Operational
●	11	SD	78	4.29	WB	Emerald Dr to 78 WB	S	2		Operational
●	11	SD	78	4.47	EB	Emerald Dr to 78 EB	S	2		Operational
●	11	SD	78	5.80	WB	Melrose/West Vista Way to 78 WB	H	2		Operational
●	11	SD	78	6.14	WB	Vista Village Dr to 78 WB	H	2	M	Operational
●	11	SD	78	6.32	EB	Vista Village Dr to 78 EB	S	3	M	Operational
●	11	SD	78	6.86	WB	Escondido Ave to 78 WB	S	2	M	Operational
●	11	SD	78	6.89	EB	Escondido Ave to 78 EB	L	2		Operational
●	11	SD	78	7.76	WB	Mar Vista Dr to 78 WB	L	2		Operational
●	11	SD	78	7.80	EB	Mar Vista Dr to 78 EB	S	2	M	Operational
●	11	SD	78	8.97	WB	Sycamore Ave to 78 WB	S	3	M	Operational
●	11	SD	78	9.22	EB	Sycamore Ave to 78 EB	S	3	M	Operational
●	11	SD	78	10.44	WB	Rancho Santa Fe Rd to 78 WB	S	2	M	Operational
●	11	SD	78	10.68	EB	Rancho Santa Fe Rd to 78 EB	S	2	M	Operational
●	11	SD	78	11.10	WB	Las Posas Rd to 78 WB	S	2	M	Operational
●	11	SD	78	11.36	EB	Las Posas/Grand Ave to 78 EB	H	2	M	Operational
●	11	SD	78	12.04	WB	San Marcos Blvd SB to 78 WB	S	2	M	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	11	SD	78	12.27	WB	San Marcos Blvd NB to 78 WB	L	1		Operational
●	11	SD	78	12.27	EB	San Marcos Blvd to 78 EB	S	3	M	Operational
●	11	SD	78	12.81	WB	Twin Oaks SB to 78 WB	H	2	M	Operational
●	11	SD	78	12.88	WB	Twin Oaks NB to 78 WB	L	2	M	Operational
●	11	SD	78	13.02	EB	Twin Oaks Valley Rd to 78 EB	S	3	M	Operational
●	11	SD	78	14.14	WB	Barham/Woodland to 78 WB	H	2	M	Operational
●	11	SD	78	14.86	EB	Barham/Woodland to 78 EB	H	2	M	Operational
●	11	SD	78	15.37	WB	Nordahl Rd to 78 WB	S	2		Operational
●	11	SD	78	15.60	EB	Nordahl Rd to 78 EB	S	2		Operational
●	11	SD	78	17.28	WB	Centre City Pkwy SB to 78 WB	S	2	M	Operational
●	11	SD	78	17.34	WB	Centre City Pkwy NB to 78 WB	L	2	M	Operational
●	11	SD	78	17.62	WB	Broadway/Lincoln Ave to 78 WB	main	3	M	Operational
●	11	SD	94	1.44	EB	19th St to 94 EB	H	1		Operational
●	11	SD	94	1.44	EB	G St to 94 EB	S	3		Operational
●	11	SD	94	1.87	EB	25th St to 94 EB	S	2		Operational
●	11	SD	94	2.23	WB	28th St to 94 WB	H	1		Operational
●	11	SD	94	2.24	EB	28th St to 94 EB	S	1		Operational
●	11	SD	94	2.61	WB	32nd St to 94 WB	H	1		Operational
●	11	SD	94	2.63	EB	32nd St to 94 EB	H	1		Operational
●	11	SD	94	3.14	WB	15 SB to 94 WB	C	2	M	Operational
●	11	SD	94	3.26	WB	15 NB to 94 WB	C	1		Operational
●	11	SD	94	3.55	EB	Home Ave to 94 WB	H	1		Operational
●	11	SD	94	3.98	WB	805 NB to 94 WB	C	2	M	Operational
	11	SD	94	4.70	EB	47th st to 94 EB				Planned
●	11	SD	94	4.83	WB	49th St to 94 WB	H	1	M	Operational
●	11	SD	94	5.16	WB	Euclid Ave SB to 94 WB	S	1		Operational
●	11	SD	94	5.16	WB	Euclid Ave NB to 94 WB	S	1		Operational
●	11	SD	94	5.16	EB	Euclid Ave to 94 EB	S	1		Operational
●	11	SD	94	5.61	WB	Kelton Rd to 94 WB	S	2	M	Operational
●	11	SD	94	5.80	EB	Kelton Rd to 94 EB	S	1		Operational
●	11	SD	94	6.21	WB	Federal Blvd to 94 WB	S	1		Operational
●	11	SD	94	7.24	WB	College Grove Way to 94 WB	H	2	M	Operational
●	11	SD	94	7.75	WB	College Ave to 94 WB	S	1		Operational
●	11	SD	94	7.76	WB	Broadway to 94 WB	H	1		Operational
●	11	SD	94	8.14	WB	Massachusetts Ave to 94 WB	S	2	M	Operational
●	11	SD	94	8.36	EB	Massachusetts Ave to 94 EB	S	1		Operational
●	11	SD	94	8.55	WB	Waite Dr to 94 WB	H	1		Operational
●	11	SD	94	8.87	WB	Lemon Grove Ave to 94 WB	S	1		Operational
●	11	SD	94	9.01	EB	Lemon Grove Ave to 94 EB	S	1		Operational
●	11	SD	94	9.62	WB	125 NB to 94 WB	C	2		Operational
●	11	SD	94	10.11	WB	94 WB to 94 WB Connector	main	3	M	Operational
●	11	SD	94	10.13	WB	Spring St to 94 WB	S	2	M	Operational
●	11	SD	125	11.92	SB	Paradise Valley Rd to 125 SB	H	3	M	Operational
●	11	SD	125	12.03	NB	Elkelton Pl to 125 NB	H	2	M	Operational
●	11	SD	125	12.75	SB	Jamacha Rd to 125 SB	S	3	M	Operational
●	11	SD	125	12.91	NB	Jamacha Rd to 125 NB	S	3	M	Operational
●	11	SD	125	15.22	SB	Spring St to 125 SB	S	1		Operational
●	11	SD	125	15.78	NB	Campo Rd to 125 NB	H	2	M	Operational
	11	SD	125	16.08	SB	Fletcher Pkwy/Amaya to 125 SB				Planned
●	11	SD	125	16.87	SB	Lemon Ave to 125 SB	S	2		Operational
●	11	SD	125	17.24	SB	Grossmont Blvd to 125 SB	S	2	M	Operational
●	11	SD	125	17.36	NB	Grossmont Blvd to 125 NB	S	2		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	11	SD	125	17.78	SB	125 SB connector to 125 SB	main	3	M	Operational
	11	SD	163	0.05	NB	A St/11th St to 163 NB				Planned
	11	SD	163	1.19	NB	Park Blvd to 163 NB				Planned
	11	SD	163	2.60	SB	Robinson Ave to 163 SB	S			Planned
●	11	SD	163	2.67	SB	Washington St to 163 SB	H	2	M	Operational
	11	SD	163	2.75	NB	University Ave to 163 NB	H			Planned
	11	SD	163	2.76	NB	Washington St to 163 NB	H			Planned
	11	SD	163	3.13	NB	6th St to 163 NB	S			Planned
	11	SD	163	4.22	SB	Friars Rd EB to 163 SB				Planned
	11	SD	163	4.27	SB	Friars Rd WB to 163 SB	L			Planned
	11	SD	163	4.67	NB	Friars Rd EB to 163 NB	H			Planned
	11	SD	163	5.60	NB	Genesee to 163 NB	S			Planned
	11	SD	163	5.60	SB	Genesee EB to 163 SB	H			Planned
	11	SD	163	5.83	SB	Genesee WB to 163 SB	L			Planned
●	11	SD	163	7.83	SB	Mercury/Armour to 163 SB	H	2		Operational
●	11	SD	163	8.01	NB	Balboa Ave to 163 NB	L	2		Operational
●	11	SD	163	8.05	SB	Balboa Ave/Mercury to 163 SB	H	3	M	Operational
●	11	SD	163	8.16	NB	Century Park Ct to 163 NB	H	2	M	Operational
●	11	SD	163	8.67	SB	Clairemont Mesa Blvd EB to 163 SB	H	2		Operational
●	11	SD	163	8.75	NB	Clairemont Mesa Blvd EB to 163 NB	L	2	M	Operational
●	11	SD	163	8.91	SB	Clairemont Mesa Blvd WB to 163 SB	L	2		Operational
●	11	SD	163	8.93	NB	Clairemont Mesa Blvd WB to 163 NB	H	2	M	Operational
●	11	SD	163	10.81	NB	Kearny Villa Rd to 163 NB	H	1		Operational
●	11	SD	163	10.93	SB	Kearny Villa Rd to 163 SB	S	3	M	Operational
	11	SD	805	0.51	SB	San Ysidro to 805 SB				Planned
	11	SD	805	0.87	NB	San Ysidro to 805 NB				Planned
	11	SD	805	2.73	SB	Palm Ave to 805 SB				Planned
	11	SD	805	3.13	NB	Palm Ave to 805 NB	S			Planned
	11	SD	805	3.52	SB	Otay Valley Rd to 805 SB				Planned
●	11	SD	805	3.85	NB	Main St to 805 NB	S	3	M	Operational
	11	SD	805	4.23	SB	Orange St to 805 SB				Planned
●	11	SD	805	4.59	NB	Olympic Pkwy/Orange Ave to 805 NB	S	3	M	Operational
	11	SD	805	5.84	SB	Telegraph Canyon Rd to 805 SB				Planned
●	11	SD	805	6.21	NB	Telegraph Canyon Rd to 805 NB	S	2	M	Operational
	11	SD	805	7.00	SB	H St to 805 SB				Planned
●	11	SD	805	7.03	NB	H St EB to 805 NB	L	2	M	Operational
●	11	SD	805	7.08	NB	H St WB to 805 NB	H	2		Operational
●	11	SD	805	7.74	SB	Bonita Rd to 805 SB	S	2		Operational
●	11	SD	805	7.93	NB	Bonita Rd to 805 NB	S	2		Operational
●	11	SD	805	8.52	SB	54 WB to 805 SB	C	2		Operational
●	11	SD	805	8.93	SB	Sweetwater Rd/30th St 805 SB	S	2	M	Operational
	11	SD	805	9.23	NB	Sweetwater Rd to 805 NB	S			Planned
	11	SD	805	10.11	SB	Plaza Blvd to 805 SB				Part Const
●	11	SD	805	10.36	NB	Plaza Blvd to 805 NB	S	2	M	Operational
	11	SD	805	10.96	SB	43rd St to 805 SB				Planned
●	11	SD	805	10.96	SB	43rd St to 805 NB		0		Operational
	11	SD	805	11.18	SB	47th St to 805 SB				Planned
●	11	SD	805	11.44	NB	43rd St to 805 NB	C	2	M	Operational
●	11	SD	805	11.44	NB	47th St to 805 NB	S	2		Operational
	11	SD	805	12.22	SB	Imperial Ave to 805 SB				Planned

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	11	SD	805	12.35	NB	Imperial Ave to 805 NB	S	2		Operational
	11	SD	805	12.85	SB	Market St to 805 SB				Planned
●	11	SD	805	13.21	NB	Market St to 805 NB	S	1		Operational
	11	SD	805	13.81	SB	Home Ave to 805 SB				Planned
●	11	SD	805	13.87	NB	Home Ave to 805 NB	L	2	M	Operational
	11	SD	805	15.73	SB	University/Boundary St to 805 SB				Planned
●	11	SD	805	15.94	NB	University Ave to 805 NB	L	2		Operational
	11	SD	805	16.29	SB	El Cajon Blvd to 805 SB				Planned
●	11	SD	805	16.50	NB	El Cajon Blvd to 805 NB	S	2		Operational
	11	SD	805	16.93	NB	Adams Ave to 805 NB				Planned
●	11	SD	805	18.49	SB	Murray Ridge Rd to 805 SB	S	2	M	Operational
●	11	SD	805	19.00	NB	Murray Ridge Rd to 805 NB	S	1		Operational
●	11	SD	805	20.16	SB	Mesa College Dr to 805 SB	S	2	M	Operational
●	11	SD	805	21.15	NB	Balboa Ave EB to 805 NB	L	2	M	Operational
●	11	SD	805	21.33	NB	Balboa Ave WB to 805 NB	H	2	M	Operational
●	11	SD	805	21.47	SB	Balboa Ave EB to 805 SB	H	2	M	Operational
●	11	SD	805	21.72	SB	Balboa Ave WB to 805 SB	L	1		Operational
●	11	SD	805	22.46	NB	Clairemont Mesa Blvd EB to 805 NB	L	2	M	Operational
●	11	SD	805	22.66	SB	Clairemont Mesa Blvd WB to 805 SB	L	2		Operational
●	11	SD	805	22.68	SB	Clairemont Mesa Blvd EB to 805 SB	H	2	M	Operational
●	11	SD	805	22.68	NB	Clairemont Mesa Blvd WB to 805 NB	H	2	M	Operational
●	11	SD	805	24.43	SB	Governor Dr to 805 SB	S	1		Operational
●	11	SD	805	24.53	NB	Governor Dr to 805 NB	S	2	M	Operational
●	11	SD	805	25.25	SB	Nobel Dr to 805 SB	S	3	M	Operational
●	11	SD	805	25.94	SB	Miramar Rd WB to 805 SB	L	2		Operational
●	11	SD	805	25.94	SB	La Jolla Village Dr EB to 805 SB	H	2	M	Operational
●	11	SD	805	26.02	NB	La Jolla Village Dr WB to 805 NB	L	2	M	Operational
●	11	SD	805	26.03	NB	Miramar Rd to 805 NB	L	2	M	Operational
●	11	SD	805	26.95	SB	Sorrento Valley Rd to 805 SB	H	2	M	Operational
●	11	SD	805	27.14	SB	Mira Mesa Blvd to 805 SB	H	3		Operational
●	11	SD	805	27.16	NB	Vista Sorrento Pkwy to 805 NB	H	3	M	Operational
●	11	SD	905	6.55	WB	Caliente Ave to 905 WB	S	2	M	Operational
●	11	SD	905	6.91	EB	Caliente Ave to 905 EB	S	2	M	Operational
●	11	SD	905	8.63	WB	Britannia Blvd to 905 WB	S	3	M	Operational
●	11	SD	905	8.89	EB	Britannia Blvd to 905 EB	S	2		Operational
●	11	SD	905	9.64	WB	La Media Rd SB 905 WB	S	2	M	Operational
●	11	SD	905	9.72	EB	La Media Rd to 905 EB	S	2	M	Operational
●	11	SD	905	9.81	WB	La Media Rd NB 905 WB	H	2	M	Operational
●	11	SD	905	11.34	WB	Siempre Viva Rd to 905 WB	S	3		Operational
	11	SD	905	R6.55	WB	Caliente Ave to 905 WB	S	2	M	Planned
	11	SD	905	R6.90	EB	Caliente Ave to 905 EB	S	2	M	Planned
	11	SD	905	R8.63	WB	Britannia Blvd to 905 WB	S	3	M	Planned

● Existing Meter

High Priority

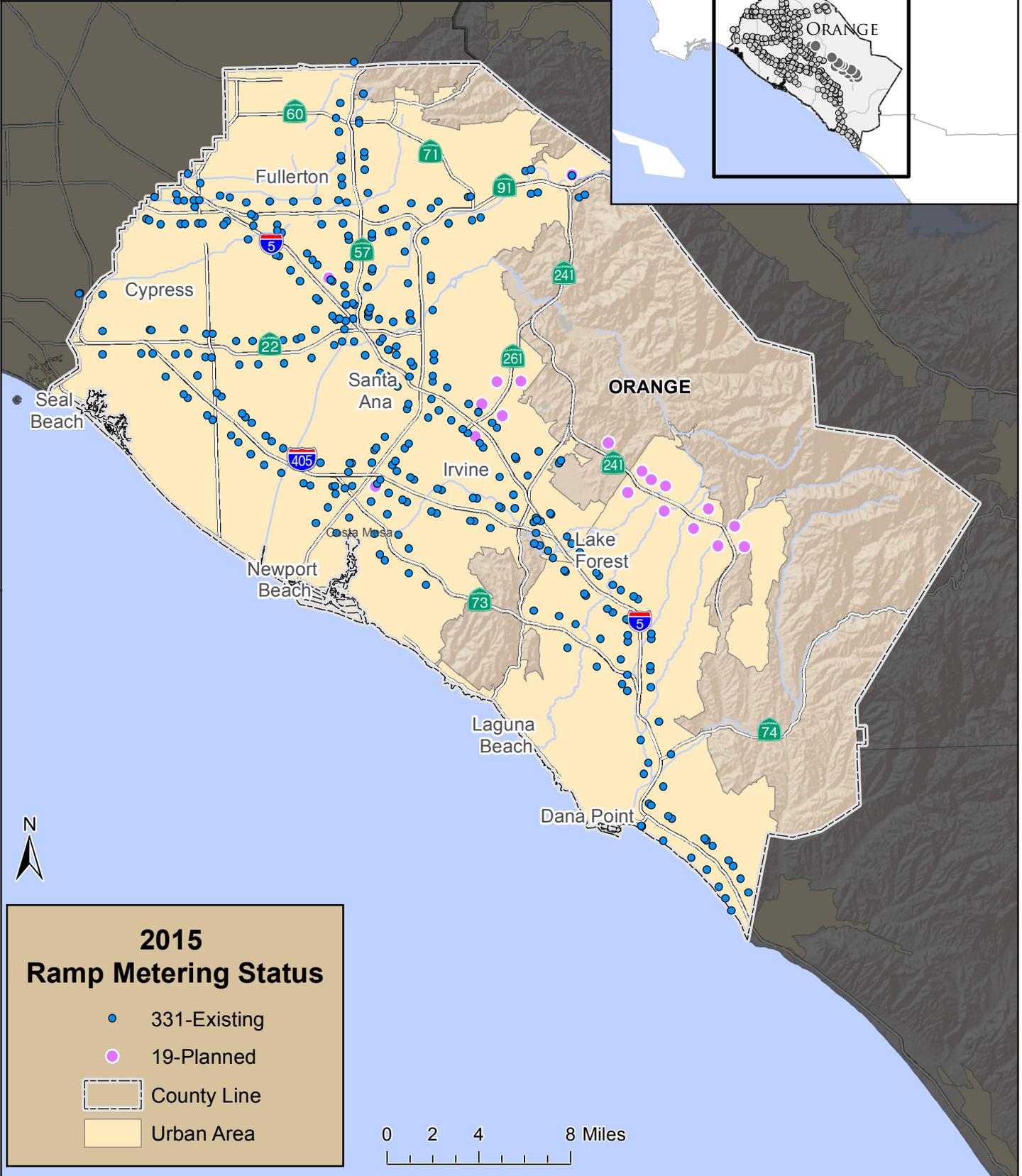
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# DISTRICT 12

# District 12

Ramp Metering Development Plan

Division of Traffic Operations  
Data by: Office of Traffic Management  
Map by: Office of Performance



Disclaimer: This information is for discussion and planning purposes, and does not represent a commitment by Caltrans or others to install or operate ramp meters at these locations.

## **DISTRICT 12**

Orange County was originally under the jurisdiction of Caltrans District 7. In 1988, Caltrans' District 12 was formed under Assembly Bill 696. Caltrans District 12 is unique as it serves a single county covering 798 square miles, 34 cities and 3.1 million people for a density of 3,885 people per square mile. This District maintains and operates 278 centerline miles and 2,066 total lane miles of highway. This District and its transportation partners have gone to great lengths to relieve freeway congestion by doubling freeway lane miles and building the most complete High Occupancy Vehicle lanes network in California consisting of 268 miles.

### Existing or Planned Ramp Metering Routes

The following routes have or are planned to have ramp metering:

I-5, I-405, I-605, SR 22, SR 55, SR 57, SR 73, SR 90, SR 91, SR 133, SR 241, and SR 261.

District 12 has 331 existing ramp meters and 19 planned ramp meters for a projected total of 350 ramp meters for the ten-year period covered by the RMDP. Currently, there are no proposed high priority locations in District 12. Ramp meter locations are illustrated on the District 12 RMDP map.

### Congestion Challenges

Orange County has developed into a major employment center where people from Los Angeles, San Diego, Riverside, and San Bernardino Counties commute to work. This has created congestion on I-5 at the Orange/Los Angeles County line, on SR 91, and at the interchange of SR 22, SR 57, and I-5.

Proposed solutions to the congestion are: congestion pricing, auxiliary lanes, and freeway expansion. The freeway expansion approach should be considered after a careful analysis and after all other viable options are exhausted.

In 2011 a study was done by Cambridge Systematics, Inc. with the Automobile Club of Southern California showing that the cost per person of delay in Orange and Los Angeles Counties was \$892 annually.

### District Ramp Metering Strategies

District 12 continues to use ramp metering as a traffic management strategy during morning and afternoon peak periods to maintain the traffic flow on the freeway system, as well as to increase safety. Some ramp metering locations have an HOVPL for carpoolers, buses, and motorcycles to bypass the ramp meter queue.

## Supporting Documents

- District 12 TCRs, CSMPs, and DSMP, and other planning documents  
<http://www.dot.ca.gov/dist12/planning/>
- Southern California Association of Governments (SCAG):  
<http://www.scag.ca.gov>



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	12	Ora	5	0.90	SB	Calafia	H	1		Non Op
●	12	Ora	5	1.26	NB	Avenida Magdalena	H	1		Operational
●	12	Ora	5	1.49	SB	El Camino Real	S	2		Non Op
●	12	Ora	5	1.83	NB	El Camino Real	S	2		Operational
●	12	Ora	5	2.14	SB	Avenida Presidio	S	1		Non Op
●	12	Ora	5	2.47	NB	Avenida Presidio	S	2		Operational
●	12	Ora	5	2.80	NB	Palizada	S	2		Operational
●	12	Ora	5	3.23	SB	Avenida Pico 1	S	2		Non Op
●	12	Ora	5	3.56	NB	Avenida Pico 2	S	2		Operational
●	12	Ora	5	4.02	NB	Hermosa 1	L	2		Operational
●	12	Ora	5	4.10	NB	Hermosa 2	H	2		Operational
●	12	Ora	5	4.10	SB	Hermosa 2	L	1		Non Op
●	12	Ora	5	5.59	SB	Estrella	S	2		Non Op
●	12	Ora	5	5.73	NB	Camino De Estrella 1 (EB)	L	1		Operational
●	12	Ora	5	5.89	NB	Camino De Estrella 2 (WB)	S	2		Operational
●	12	Ora	5	6.67	SB	Rte 1	H	1		Non Op
●	12	Ora	5	6.82	SB	Las Ramblas	L	1		Non Op
●	12	Ora	5	6.91	NB	Las Ramblas	L	2		Operational
●	12	Ora	5	7.54	NB	Capistra	S	2		Operational
●	12	Ora	5	8.60	SB	San Juan Creek	H	2		Non Op
●	12	Ora	5	8.64	NB	San Juan Creek	H	2		Operational
●	12	Ora	5	9.42	SB	Ortega Hwy 1	S	2		Non Op
●	12	Ora	5	9.69	NB	Ortega Hwy 2	S	2		Operational
●	12	Ora	5	10.73	SB	Junipero Serra	S	2	NM	Operational
●	12	Ora	5	11.11	NB	Junipero Serra	S	2	NM	Operational
●	12	Ora	5	12.80	SB	Avery Pkwy 1	S	2	NM	Operational
●	12	Ora	5	13.05	NB	Avery Pkwy 2	S	2		Operational
●	12	Ora	5	13.60	SB	Crown Valley Pkwy 1	S	2		Operational
●	12	Ora	5	13.72	NB	Crown Valley2 (WB)	L	2		Operational
●	12	Ora	5	13.99	NB	Crown Valley1 (EB)	H	2		Operational
●	12	Ora	5	15.03	SB	Oso Pkwy 1 (EB)	H	2		Operational
●	12	Ora	5	15.13	NB	Oso Pkwy 1 (EB)	L	2		Operational
●	12	Ora	5	15.30	SB	Oso Pkwy 2 (WB)	L	2	NM	Operational
●	12	Ora	5	15.35	NB	Oso Pkwy 2 (WB)	H	2		Operational
●	12	Ora	5	16.37	SB	La Paz 1 (EB)	S	2	NM	Operational
●	12	Ora	5	16.50	SB	La Paz 2 (WB)	L	2	NM	Operational
●	12	Ora	5	16.55	NB	La Paz 1 (EB)	L	2	NM	Operational
●	12	Ora	5	16.69	NB	La Paz 2 (WB)	S	2		Operational
●	12	Ora	5	17.26	SB	Alicia Pkwy 1 (EB)	H	2	NM	Operational
●	12	Ora	5	17.43	NB	Alicia 1 (EB)	L	2		Operational
●	12	Ora	5	17.49	SB	Alicia Pkwy 2 (WB)	L	2		Operational
●	12	Ora	5	17.76	NB	Alicia 2 (WB)	H	2		Operational
●	12	Ora	5	18.54	SB	El Toro 1 (EB)	S	2	NM	Operational
●	12	Ora	5	18.62	NB	El Toro 1 (EB)	L	2		Operational
●	12	Ora	5	18.63	SB	El Toro 2 (WB)	H	2		Operational
●	12	Ora	5	18.82	NB	El Toro 2 (WB)	H	2		Operational
●	12	Ora	5	19.80	SB	Lake Forest 1 (EB)	S	2		Operational
●	12	Ora	5	19.90	SB	Lake Forest 2 (WB)	L	2	NM	Operational
●	12	Ora	5	20.00	NB	Lake Forest 2 (WB)	L	2		Operational
●	12	Ora	5	20.59	NB	Bake Parkway 1	L	2		Operational
●	12	Ora	5	20.60	SB	Bake Parkway 1	H	2		Operational
●	12	Ora	5	20.94	NB	Bake Parkway 2	H	2		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	12	Ora	5	20.97	SB	Bake Parkway 2	L	2	NM	Operational
●	12	Ora	5	21.92	SB	Alton Pkwy 1	H	2		Operational
●	12	Ora	5	22.14	NB	Alton Pkwy 2	L	2		Operational
●	12	Ora	5	22.20	NB	Alton Pkwy 3	S	2		Operational
●	12	Ora	5	27.43	SB	Jamboree 1 (EB)	H	2		Operational
●	12	Ora	5	27.55	NB	Jamboree 1 (EB)	L	2	NM	Operational
●	12	Ora	5	27.56	NB	Jamboree 2 (WB)	H	2	NM	Operational
●	12	Ora	5	27.70	SB	Jamboree 2 (WB)	L	2	NM	Operational
●	12	Ora	5	28.10	NB	Tustin Ranch	H	2		Operational
●	12	Ora	5	28.35	SB	Tustin Ranch	L	2		Operational
●	12	Ora	5	29.80	NB	NEWPORT COAST	S	2		Operational
●	12	Ora	5	30.90	SB	1St	S	2		Operational
●	12	Ora	5	31.27	NB	4Th/Mabury	S	2		Operational
●	12	Ora	5	31.93	NB	Grand 2	L	2		Operational
●	12	Ora	5	32.00	SB	Grand 3	L	2		Operational
●	12	Ora	5	32.25	SB	17Th 1	H	2		Operational
●	12	Ora	5	32.50	NB	17th 2	L	2		Operational
●	12	Ora	5	32.60	NB	17th 3	S	2		Operational
●	12	Ora	5	33.00	SB	Main/Buffalo	H	2		Operational
●	12	Ora	5	33.20	NB	Main 2	H	2		Operational
●	12	Ora	5	34.60	SB	Chapman 1	S	2		Operational
●	12	Ora	5	35.00	NB	Chapman 2	S	1		Operational
●	12	Ora	5	35.10	NB	State College	L	2		Operational
●	12	Ora	5	35.20	SB	State College	L	2		Operational
●	12	Ora	5	35.40	SB	Orangewood 1	S	2		Operational
●	12	Ora	5	36.31	SB	Katella	H	2		Operational
●	12	Ora	5	36.40	NB	Orangewood 2	S	2		Operational
●	12	Ora	5	36.48	NB	Katella	S	1		Operational
●	12	Ora	5	36.48	SB	Anaheim 1	S	2		Operational
	12	Ora	5	36.60	NB	Anaheim 2	S			Planned
●	12	Ora	5	37.39	NB	Harbor (NB)	L	1		Operational
●	12	Ora	5	37.48	SB	Harbor (SB)	L	2		Operational
●	12	Ora	5	37.73	NB	Ball	S	2		Operational
●	12	Ora	5	38.09	SB	South 1	H	1		Operational
●	12	Ora	5	38.10	NB	South 2	H	2		Operational
●	12	Ora	5	39.00	SB	Lincoln	H	2		Operational
●	12	Ora	5	39.24	NB	Lincoln	L	2		Operational
●	12	Ora	5	39.30	SB	Euclid 1	H	2		Operational
●	12	Ora	5	39.60	NB	Euclid 2	S	2		Operational
●	12	Ora	5	40.53	SB	Brookhurst 1	S	2		Operational
●	12	Ora	5	40.74	NB	Brookhurst 2	L	2		Operational
●	12	Ora	5	40.98	NB	La Palma	S	2		Operational
●	12	Ora	5	41.78	SB	Magnolia	S	2		Operational
●	12	Ora	5	42.52	NB	Orangethorpe (WB)	S	1		Operational
●	12	Ora	5	43.35	SB	Beach 1	S	2		Operational
●	12	Ora	5	43.60	NB	Beach 2	S	2		Operational
●	12	Ora	5	44.20	SB	Artesia	S	2		Operational
●	12	Ora	5	44.35	NB	Artesia	L	2		Operational
●	12	Ora	5	R23.69	SB	Sand Canyon 1	S	2		Operational
●	12	Ora	5	R24.05	NB	Sand Canyon 2	S	2		Operational
●	12	Ora	5	R24.83	SB	Jeffrey 1	L	2	NM	Operational
●	12	Ora	5	R25.08	NB	Jeffrey 1	H	2		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	12	Ora	5	R25.15	NB	Jeffrey 2	L	2	NM	Operational
●	12	Ora	5	R26.35	SB	Culver 1 (EB)	H	1		Operational
●	12	Ora	5	R26.56	NB	Culver 1 (EB)	L	2		Operational
●	12	Ora	5	R26.66	SB	Culver 2 (WB)	L	1		Operational
●	12	Ora	5	R26.81	NB	Culver 2 (WB)	H			Operational
●	12	Ora	5	R29.02	SB	Red Hill	S	2		Operational
●	12	Ora	5	R29.24	NB	Red Hill	S	2		Operational
●	12	Ora	22	L9.70	EB	The City Drive	L	2		Operational
●	12	Ora	22	R0.89	WB	Valley View 1 (NB)	L	1		Operational
●	12	Ora	22	R1.00	WB	Valley View 2 (SB)	S	1		Operational
●	12	Ora	22	R1.08	EB	Valley View 2	H	2		Operational
●	12	Ora	22	R10.12	WB	Bristol	L	2		Operational
●	12	Ora	22	R10.14	EB	Bristol	S	2		Operational
●	12	Ora	22	R11.23	WB	Main	H	2		Operational
●	12	Ora	22	R11.25	EB	Main	H	2		Operational
●	12	Ora	22	R11.68	WB	Glassell 1 /Grand	S	2		Operational
●	12	Ora	22	R12.01	EB	Glassell 2 /Grand	S	2		Operational
●	12	Ora	22	R12.79	WB	Tustin	S	2		Operational
●	12	Ora	22	R2.49	WB	Knott 1	S	2		Operational
●	12	Ora	22	R2.88	EB	Knott 2	S	2		Operational
●	12	Ora	22	R3.44	EB	Beach 1 /Rte 39 (SB)	L	2		Operational
●	12	Ora	22	R3.45	WB	Beach 1 /Rte 39 (SB)	H	2		Operational
●	12	Ora	22	R3.73	EB	Beach 2 /Rte 39 (NB)	H	2		Operational
●	12	Ora	22	R3.73	WB	Beach 2 /Rte 39 (NB)	L	2		Operational
●	12	Ora	22	R4.58	WB	Magnolia 1	S	2		Operational
●	12	Ora	22	R4.99	EB	Magnolia 2	S	2		Operational
●	12	Ora	22	R5.57	WB	Brookhurst 1	L	2		Operational
●	12	Ora	22	R5.80	EB	Brookhurst 2	H	2		Operational
●	12	Ora	22	R6.94	EB	Euclid	S	2		Operational
●	12	Ora	22	R6.94	WB	Euclid	L	2		Operational
●	12	Ora	22	R7.72	WB	Harbor 1 (SB)	S	2		Operational
●	12	Ora	22	R7.93	WB	Harbor 2 (NB)	L	2		Operational
●	12	Ora	22	R8.02	EB	Harbor 2	S	2		Operational
●	12	Ora	22	R8.68	WB	Gardengrove 1	S	2		Operational
●	12	Ora	22	R9.08	EB	Gardengrove 2	S	2		Operational
●	12	Ora	22	R9.6	WB	The City Drive	S	2		Operational
●	12	Ora	55	R2.77	SB	Victoria 1	S	1		Operational
●	12	Ora	55	R3.07	NB	Victoria 2	S	2		Operational
●	12	Ora	55	R3.66	SB	Fair Dr 1	S	1		Operational
●	12	Ora	55	R3.97	NB	Fair Dr 2	S	2		Operational
●	12	Ora	55	R4.70	SB	Baker	S	1		Operational
●	12	Ora	55	R5.87	NB	Paulari No 2	S	1		Operational
●	12	Ora	55	6.10	NB	Airport	S	1		Operational
●	12	Ora	55	R6.89	SB	Macarthur 1 (EB)	S	1		Operational
●	12	Ora	55	R6.94	NB	Macarthur 1 (EB)	L	1		Operational
●	12	Ora	55	R7.03	SB	Macarthur 2 (WB)	S	2		Operational
●	12	Ora	55	R7.16	NB	Macarthur 2 (WB)	L	1		Operational
●	12	Ora	55	R7.62	SB	Dyer 1	S	2		Operational
●	12	Ora	55	R7.85	NB	Dyer 1	L	1		Operational
●	12	Ora	55	R8.12	NB	Dyer 2	S	2		Operational
●	12	Ora	55	R9.19	SB	Edinger 1	S	2		Operational
●	12	Ora	55	R9.41	NB	Edinger 2	H	2		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	12	Ora	55	R9.78	SB	Mcfadden	S	2		Operational
●	12	Ora	55	R10.00	NB	Mcfadden	H	2		Operational
●	12	Ora	55	10.84	SB	Fourth St 1	S	1		Operational
●	12	Ora	55	11.10	NB	Fourth St 2	S	2		Operational
●	12	Ora	55	11.62	SB	17th 1	S	2		Operational
●	12	Ora	55	11.74	NB	17th 1 (EB)	L	2		Operational
●	12	Ora	55	12.00	NB	17th 2 (WB)	S	2		Operational
●	12	Ora	55	13.51	SB	Chapman 1(EB)	S	2		Operational
●	12	Ora	55	13.75	SB	Chapman 2 (WB)	L	2		Operational
●	12	Ora	55	13.90	NB	Chapman 2	H	3		Operational
●	12	Ora	55	15.11	SB	Katella	S	3		Operational
●	12	Ora	55	15.22	NB	Katella 1	L	2		Operational
●	12	Ora	55	15.40	NB	Katella 2	S	1		Operational
●	12	Ora	55	16.72	SB	Lincoln 1	S	2		Operational
●	12	Ora	55	17.12	NB	Lincoln 2	L	3		Operational
●	12	Ora	57	11.08	SB	Chapman 1 (WB)	S	1		Operational
●	12	Ora	57	11.22	NB	Chapman 1	L	1		Operational
●	12	Ora	57	11.39	NB	Chapman 2	S	1		Operational
●	12	Ora	57	11.55	SB	Orangewood	H	1		Operational
●	12	Ora	57	11.69	NB	Orangewood 1	L	1		Operational
●	12	Ora	57	11.78	NB	Orangewood 2	S	1		Operational
●	12	Ora	57	12.41	SB	Katella 1 (EB)	L	1		Operational
●	12	Ora	57	12.50	NB	Katella 1	L	1		Operational
●	12	Ora	57	12.58	SB	Katella 2 (WB)	S	2		Operational
●	12	Ora	57	12.74	NB	Katella 2	S	1		Operational
●	12	Ora	57	13.27	SB	Ball 1 (EB)	L	1		Operational
●	12	Ora	57	13.38	NB	Ball 1	L	1		Operational
●	12	Ora	57	13.45	NB	Ball 2	S	1		Operational
●	12	Ora	57	13.56	SB	Ball 2 (WB)	S	2		Operational
●	12	Ora	57	14.65	SB	Lincoln 1 (EB)	L	1		Operational
●	12	Ora	57	14.73	NB	Lincoln 1	L	1		Operational
●	12	Ora	57	14.83	SB	Lincoln 2 (WB)	L	1		Operational
●	12	Ora	57	14.90	NB	Lincoln 2	S	2		Operational
●	12	Ora	57	16.46	SB	Orangethorpe	S	2		Operational
●	12	Ora	57	16.57	NB	Orangethorpe	S	1		Operational
●	12	Ora	57	17.18	SB	Chapman 3	S	1		Operational
●	12	Ora	57	17.41	SB	Nutwood	L	2		Operational
●	12	Ora	57	17.75	NB	Nutwood	S	2		Operational
●	12	Ora	57	18.19	SB	Yorba Linda 1 (EB)	L	2		Operational
●	12	Ora	57	18.30	NB	Yorba Linda 1	L	1		Operational
●	12	Ora	57	18.38	SB	Yorba Linda 2 (WB)	S	2		Operational
●	12	Ora	57	18.49	NB	Yorba Linda 2	S	1		Operational
●	12	Ora	57	19.73	SB	Imperial 1 (EB)	L	1		Operational
●	12	Ora	57	19.81	NB	Imperial 1	L	1		Operational
●	12	Ora	57	19.95	SB	Imperial 2 (WB)	L	1		Operational
●	12	Ora	57	20.00	NB	Imperial 2	S	2		Operational
●	12	Ora	57	20.74	SB	Lambert	S	2		Operational
●	12	Ora	57	21.16	NB	Lambert	L	2		Operational
●	12	Ora	57	22.20	SB	Tonner Canyon	S	1		Operational
●	12	Ora	73	11.64	SB	Greenfield	S	2		Non Op
●	12	Ora	73	12.10	NB	Greenfield 2	S	2		Non Op
●	12	Ora	73	12.83	SB	Moulton Pkwy	S	2		Non Op

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	12	Ora	73	13.36	NB	La Paz 1/Moulton	L	2		Non Op
●	12	Ora	73	14.40	SB	Aliso Creek 3	L	2		Non Op
●	12	Ora	73	14.70	NB	Aliso Creek 1	L	2		Non Op
●	12	Ora	73	15.26	NB	Glenwood	L	2		Non Op
●	12	Ora	73	16.40	NB	El Toro/Rte 133	L	1		Non Op
●	12	Ora	73	21.50	SB	Newport Coast	L	2		Non Op
●	12	Ora	73	22.50	SB	Bonita Cyn	H	2		Non Op
●	12	Ora	73	22.80	NB	Bonita Cyn	L	2		Non Op
●	12	Ora	73	23.50	SB	Bison 1	S	2		Non Op
●	12	Ora	73	23.70	SB	Macarthur 1	H	2		Non Op
●	12	Ora	73	24.10	NB	Macarthur 2	L	2		Non Op
●	12	Ora	73	24.72	SB	Jamboree1	S	2		Operational
●	12	Ora	73	24.78	NB	Jamboree 2	L	2		Operational
●	12	Ora	73	25.77	NB	Bristol/Campus	S	2		Operational
●	12	Ora	73	27.19	SB	Bear	S	2		Operational
●	12	Ora	73	27.44	NB	Bear	S	2		Operational
●	12	Ora	73	27.72	SB	Fairview	L	1		Operational
●	12	Ora	91	R0.43	WB	Orangethorpe (WB)	S	2		Operational
●	12	Ora	91	R0.45L	EB	Magno Lia	S	2		Operational
●	12	Ora	91	R0.60	EB	Orangethorpe (EB)	S	2	NM	Operational
●	12	Ora	91	R1.01	EB	Valley View	S	2		Operational
●	12	Ora	91	1.11	WB	Brookhurst	S	2		Operational
●	12	Ora	91	1.37	EB	Brookhurst	S	2		Operational
●	12	Ora	91	R1.69	WB	Knott 1 (SB)	S	1		Operational
●	12	Ora	91	R1.81	EB	Knott 1 (SB)	L	2		Operational
●	12	Ora	91	R1.99	EB	Knott 2 (NB)	L	1		Operational
●	12	Ora	91	R1.99	WB	Knott 2 (NB)	L	1		Operational
●	12	Ora	91	2.11	WB	Euclid	S	2		Operational
●	12	Ora	91	R2.40	WB	Beach 1 (SB)	S	2		Operational
●	12	Ora	91	2.43	EB	Euclid	S	2		Operational
●	12	Ora	91	R2.58	EB	Beach 1 (SB)	L	2	NM	Operational
●	12	Ora	91	R2.65	WB	Beach 2 (NB)	L	2		Operational
●	12	Ora	91	R2.76	EB	Beach 2 (NB)	S	2		Operational
●	12	Ora	91	3.13	WB	Harbor 1	S	2		Operational
●	12	Ora	91	R3.87L	WB	Mag No Lia	S	2		Operational
●	12	Ora	91	R3.91R	EB	Lemon	S	2		Operational
●	12	Ora	91	4.18	WB	East	S	2		Operational
●	12	Ora	91	4.35	EB	East	S	2		Operational
●	12	Ora	91	5.14	WB	State College	S	2		Operational
●	12	Ora	91	5.35	EB	State College	S	2		Operational
●	12	Ora	91	7.30	EB	Glassell 1	L	2	NM	Operational
●	12	Ora	91	7.31	WB	Kraemer 1 (SB)	S	2		Operational
●	12	Ora	91	7.40	WB	Kraemer 2 (NB)	L	2	NM	Operational
●	12	Ora	91	7.48	EB	Glassell 2	S	2	NM	Operational
●	12	Ora	91	8.36	WB	Tustin	S	2		Operational
●	12	Ora	91	8.38	EB	Tustin	L	2		Operational
●	12	Ora	91	R9.95	WB	Lakeview 1 (NB)	S	1		Operational
●	12	Ora	91	R10.08	EB	Lakeview 1 (SB)	L	2	NM	Operational
●	12	Ora	91	R10.10	EB	Lakeview 2 (NB)	S	2		Operational
●	12	Ora	91	R10.27	WB	Lakeview 2 (SB)	S	2		Operational
●	12	Ora	91	R11.38	WB	Imperial 1 (NB)	S	2		Operational
●	12	Ora	91	R11.49	EB	Imperial 1 (SB)	L	2	NM	Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	12	Ora	91	R11.59	WB	Imperial 2 (SB)	S	2	NM	Operational
●	12	Ora	91	R11.70	EB	Imperial 2 (NB)	S	2		Operational
●	12	Ora	91	R14.26R	WB	Weir Canyon 1 (NB)	S	2		Operational
●	12	Ora	91	R14.3R	EB	Weir Canyon 1 (SB)	L	2		Operational
●	12	Ora	91	R14.5R	WB	Weir Canyon 2 (SB)	L	2		Operational
●	12	Ora	91	R14.6R	EB	Weir Canyon 2 (NB)	S	2		Operational
●	12	Ora	91	R16.40	EB	Gypsum Canyon 1 (NB)	L	2		Operational
●	12	Ora	91	R16.40	WB	Gypsum Canyon 1 (SB)	L	2		Operational
●	12	Ora	91	R16.60	EB	Gypsum Canyon 2 (SB)	S	2		Operational
	12	Ora	91	16.45	WB	Gypsum Canyon 2 (NB)	S	2		Planned
●	12	Ora	133	8.90	NB	Barranca 1	S	2	NM	Non Op
●	12	Ora	133	9.00	SB	Barranca 2	L	2	NM	Non Op
●	12	Ora	133	9.10	NB	Barranca 2	H	1		Non Op
●	12	Ora	133	11.70	SB	Irvine Blvd 1	S	2		Non Op
●	12	Ora	133	11.85	NB	Irvine Blvd 1	L	2		Non Op
●	12	Ora	133	12.05	NB	Irvine Blvd 3	H	2		Non Op
	12	Ora	241	17.80	NB	Antonio 2	H			Planned
	12	Ora	241	18.30	SB	Santa Margarita	H			Planned
	12	Ora	241	18.70	NB	Santa Margarita	H			Planned
	12	Ora	241	19.76	NB	Los Alisos 2	S			Planned
	12	Ora	241	20.13	SB	Los Alisos 1	S			Planned
	12	Ora	241	21.61	SB	Portola S1	H			Planned
	12	Ora	241	21.93	NB	Portola S2	H			Planned
	12	Ora	241	22.61	NB	Lake Forest	H			Planned
	12	Ora	241	23.20	SB	Alton 1	H			Planned
	12	Ora	241	23.54	NB	Alton 2	H			Planned
	12	Ora	241	25.15	NB	Portola N2	S			Planned
	12	Ora	261	0.31	NB	Walnut 2	S			Planned
	12	Ora	261	1.35	SB	Irvine Blvd 1	S			Planned
	12	Ora	261	1.75	NB	Irvine Blvd 2	S			Planned
	12	Ora	261	2.71	SB	Portola Pkwy1	S			Planned
	12	Ora	261	3.17	NB	Portola Pkwy2	S			Planned
●	12	Ora	405	0.77	SB	Irvine Center 1 (NB)	H	1		Operational
●	12	Ora	405	0.93	NB	Irvine Center 1 (NB)	H	2		Operational
●	12	Ora	405	0.96	SB	Irvine Center 2 (SB)	L	1		Operational
●	12	Ora	405	1.11	NB	Irvine Center 2 (SB)	H	2		Operational
●	12	Ora	405	2.88	SB	Sand Canyon	L	2		Operational
●	12	Ora	405	2.89	NB	Sand Canyon 1	L	2		Operational
●	12	Ora	405	2.99	NB	Sand Canyon 2	H	2		Operational
●	12	Ora	405	3.84	SB	Jeffrey 1 (NB)	H	2		Operational
●	12	Ora	405	3.86	NB	Jeffrey 1 (NB)	L	1		Operational
●	12	Ora	405	4.03	NB	Jeffrey 2 (SB)	H	2		Operational
●	12	Ora	405	4.03	SB	Jeffrey 2 (SB)	L	1		Operational
●	12	Ora	405	5.46	SB	Culver 1 (NB)	S	2		Operational
●	12	Ora	405	5.55	NB	Culver 1 (NB)	H	2		Operational
●	12	Ora	405	5.69	SB	Culver 2 (SB)	L	1		Operational
●	12	Ora	405	5.74	NB	Culver 2 (SB)	H	2		Operational
●	12	Ora	405	6.79	SB	Jamboree	H	3		Operational
●	12	Ora	405	6.87	NB	Jamboree 1 (NB)	L	2		Operational
●	12	Ora	405	7.01	SB	Jamboree 2 (SB)	L	2		Operational
●	12	Ora	405	7.07	NB	Jamboree 2 (SB)	L	3		Operational
●	12	Ora	405	7.69	SB	Macarthur 1	H	3		Operational

● Existing Meter

High Priority



# 2015 Ramp Metering Development Plan

Status	District	County	Route	Postmile	Direction	Location	Ramp Type	# of Lanes	HOVPL	Comment
●	12	Ora	405	7.73	NB	Macarthur 1	L	2		Operational
	12	Ora	405	8.40	SB	Paularino	S	1		Planned
●	12	Ora	405	8.70	NB	Anton	H	2		Operational
●	12	Ora	405	9.54	NB	Bristol 1 (NB)	L	1		Operational
●	12	Ora	405	9.54	SB	Bristol 2	L	2		Operational
●	12	Ora	405	9.65	NB	Bristol 2 (SB)	H	2		Operational
●	12	Ora	405	10.29	SB	Fairview	S	1		Operational
●	12	Ora	405	10.93	NB	Fairview	S	2		Operational
●	12	Ora	405	11.29	SB	Harbor 1 (NB)	H	2		Operational
●	12	Ora	405	11.44	NB	Harbor 1 (NB)	L	2		Operational
●	12	Ora	405	11.50	SB	Harbor 2 (SB)	L	2		Operational
●	12	Ora	405	11.60	NB	Hyland	S	2		Operational
●	12	Ora	405	12.55	SB	Euclid	H	2		Operational
●	12	Ora	405	12.87	NB	Euclid	S	2	NM	Operational
●	12	Ora	405	13.36	SB	Talbert	S	2		Operational
●	12	Ora	405	13.63	NB	Brookhurst 1 (SB)	L	1		Operational
●	12	Ora	405	13.98	NB	Brookhurst 2 (NB )	H	2	NM	Operational
●	12	Ora	405	13.98	SB	Brookhurst 2 (SB )	L	1		Operational
●	12	Ora	405	14.72	SB	Warner (EB)	S	2		Operational
●	12	Ora	405	14.82	NB	Warner	H	2	NM	Operational
●	12	Ora	405	15.16	SB	Magnolia 1 (SB)	L	1		Operational
●	12	Ora	405	15.17	NB	Magnolia 1 (SB)	L	1		Operational
●	12	Ora	405	15.39	NB	Magnolia 22 (NB)	L	2	NM	Operational
●	12	Ora	405	16.26	SB	Edinger (EB)	S	2		Operational
●	12	Ora	405	16.52	NB	Beach 1/ Rte 39 (NB)	L	1		Operational
●	12	Ora	405	16.60	SB	Beach 1/ Rte 39 (SB)	H	2		Operational
●	12	Ora	405	16.76	NB	Beach 2/ Rte 39 (SB)	S	2	NM	Operational
●	12	Ora	405	17.66	SB	Bolsa	L	1		Operational
●	12	Ora	405	17.92	SB	Golden West	L	1		Operational
●	12	Ora	405	17.98	NB	Golden West (NB)	L	1		Operational
●	12	Ora	405	19.01	SB	Westminster	H	2	NM	Operational
●	12	Ora	405	19.29	NB	Westminster	H	2		Operational
●	12	Ora	405	20.69	SB	Bolsa Chica	L	1		Operational
●	12	Ora	405	22.54	SB	Seal Beach 1	S	2		Operational
●	12	Ora	405	22.55	NB	Seal Beach 1	L	2		Operational
●	12	Ora	605	R1.26	SB	Katella 1 (WB)	S	1		Operational
●	12	Ora	605	R1.49	SB	Katella 2 (EB)	L	1		Operational
●	12	Ora	605	R1.55	NB	Katella 2 /WILLOW	S	2	NM	Operational

● Existing Meter

High Priority

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# APPENDICES

## GLOSSARY

ALA/CC	Alameda/Contra Costa
ALINEA	Linear ramp metering control (Asservissement linéaire d'entrée autoroutière)
ATMS	Advanced Transportation Management System
C	Freeway-to-freeway Connector
Caltrans	California Department of Transportation
CCT	Closed-Circuit Television
CEQA	California Environmental Quality Act
CHP	California Highway Patrol
CMA	Congestion Management Agencies
CMS	Changeable Message Signs
CP	Corridor Plan
CRM	Coordinated Ramp Metering
CSMP	Corridor System Management Plans
D	Collector/Distributor
DP	Director Policy
DD	Deputy Directive
DRISI	Division of Research, Innovation and System Information
DSMP	District System Management Plans
EB	Eastbound
FPI	Freeway Performance Initiative
GIS	Geographic Information Systems
H	Hook
HAR	Highway Advisory Radio
HDM	Highway Design Manual
HERO	Heuristic Ramp Metering Coordination
HOVPL	High Occupancy Vehicle Preferential Lane
I	Interstate
ITS	Intelligent Transportation System
L	Loop
LD-IGR	Local Development-Intergovernmental Review
M	Metered HOVPL
MOU	Memorandum of Understanding
MPH	Miles Per Hour
MPO	Metropolitan Planning Organization
MPR	Mobility Performance Report
MTC	Metropolitan Transportation Commission
NB	Northbound

NM	Non-metered HOVPL
Non Op	Non Operational
OCRMS	Orange County Ramp Metering System
Part Const	Partially Constructed
PATH	California Partners for Advanced Transportation Technology
REV8	San Diego Ramp Metering System Revision 8
RMDM	Ramp Metering Design Manual
RMDP	Ramp Meter Development Plan
RMIS	Ramp Metering Information System
RTPA	Regional Transportation Planning Agency
S	Slip or diagonal
SATMS	Semi-Automatic Traffic Management System
SB	Southbound
SDRMS	San Diego Ramp Metering System
SHOPP	State Highway Operation and Protection Program
SHS	State Highway System
SR	State Route
SWARM	System Wide Adaptive Ramp Metering
TCR	Transportation Concept Reports
TCCR	Transportation Corridor Concept Reports
TMC	Transportation Management Center
TMS	Transportation Management Systems
TOS	Traffic Operations System
TSDP	Transportation System Development Plans
URMS	Universal Ramp Metering Software
UC	University of California
US	United States
VDS	Vehicle Detection Stations
WB	Westbound

## ACKNOWLEDGEMENTS

The 2015 Ramp Metering Development Plan was prepared by a joint effort of the Division of Traffic Operations and the Division of Transportation Planning, led by Terry L. Thompson and Juvenal Alvarez. Assistance from the 2015 RMDP Statewide Taskforce is recognized and acknowledged.

## COUNTY ABBREVIATIONS

COUNTY	COUNTY ABBREVIATION
Alameda	Ala
Alpine	Alp
Amador	Ama
But	But
Calaveras	Cal
Colusa	Col
Contra Costa	CC
Del Norte	DN
El Dorado	ED
Fresno	Fre
Glenn	Gle
Humboldt	Hum
Imperial	Imp
Inyo	Iny
Kern	Ker
Kings	Kin
Lake	Lak
Lassen	Las
Los Angeles	LA
Madera	Mad
Marin	Mrn
Mariposa	Mpa
Mendocino	Men
Merced	Mer
Modoc	Mod
Mono	Mno
Monterey	Mon
Napa	Nap
Nevada	Nev

COUNTY	COUNTY ABBREVIATION
Orange	Ora
Placer	Pla
Plumas	Plu
Riverside	Riv
Sacramento	Sac
San Benito	SBt
San Bernardino	SBd
San Diego	SD
San Francisco	SF
San Joaquin	SJ
San Luis Obispo	SLO
San Mateo	SM
Santa Barbara	SB
Santa Clara	SCl
Santa Cruz	SCr
Shasta	Sha
Sierra	Sie
Siskiyou	Sis
Solano	Sol
Sonoma	Son
Stanislaus	Sta
Sutter	Sut
Tehama	Teh
Trinity	Tri
Tulare	Tul
Tuolumne	Tuo
Ventura	Ven
Yolo	Yol
Yuba	Yub

Use the above list for the correct abbreviation of each county. Use upper and lower case lettering as shown.

# Deputy Directive

*Number:* DD-35-R1  
*Refer to  
Director's Policy:* 08-Freeway System  
Management  
*Effective Date:* January 6, 2011  
*Supersedes:* DD-35 (1-3-95)

*TITLE* Ramp Metering

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*POLICY*

The California Department of Transportation (Department) is committed to using ramp metering as an effective traffic management strategy to maintain an efficient freeway system, and protect the investment made in constructing freeways by keeping them operating at or near capacity.

Each district that currently operates, or expects to operate, ramp meters within the next ten years, shall prepare a Ramp Metering Development Plan (RMDP). RMDP shall contain a list of each ramp meter location that is currently in operation or planned for operation within the next ten years. Each district shall update its RMDP biennially and ensure that future ramp meter locations are included in the local Congestion Management Plans.

Provisions for ramp metering shall be included in any project that proposes additional capacity, modification of an existing interchange, or construction of a new interchange, within the freeway corridors identified in the RMDP, regardless of funding source. These provisions, at each onramp, may include procurement of additional right of way, changes to ramp geometry to accommodate queue storage, installation of High Occupancy Vehicle (HOV) preferential lanes, deployment of electrical and communication systems, and construction of California Highway Patrol (CHP) enforcement areas and maintenance vehicle pullouts.

The guidelines, policies and procedures, and standards contained in the Ramp Metering Design Manual (RMDM), together with the design criteria in the Highway Design Manual (HDM), shall be applied when planning and designing ramp meters.

HOV preferential lanes shall be provided wherever ramp meters are installed, and each HOV preferential lane should be metered. Each district shall provide justification for deviation from the HOV preferential lane installation policy and obtain concurrence from the Headquarters Traffic Operations District Liaison.

### *DEFINITION/BACKGROUND*

Ramp metering is a traffic management strategy that utilizes a system of traffic signals at freeway entrance, and connector ramps to regulate the volume of traffic entering a freeway corridor in order to maximize the efficiency of the freeway, and thereby minimize the total delay in the transportation corridor.

Ramp metering has been an effective tool in reducing congestion and overall travel time on California freeways and local streets since the late 1960s. The added benefits include the reduction of both congestion-related collisions and air pollution.

The Department has installed over 2,200 ramp meters throughout the State. Installation of ramp meters on all urban freeway entrance ramps, including freeway-to-freeway connectors will be considered as a Departmental best practice, where ramp metering will maintain or improve effective operations along freeway corridors.

RMDM is a comprehensive document containing ramp meter design standards, design procedural requirements, and operational policies adopted statewide. RMDM is used to guide the Department's designers, as well as consulting engineers, and city/county engineers performing design work on freeways.

### *RESPONSIBILITIES*

#### Chief, Division of Traffic Operations:

- Develops, implements, and maintains statewide policies, manuals, and guidelines for ramp metering.
- Provides direction and assistance to district staff on ramp metering activities, as well as resources for training district staff.
- Ensures and supports the inclusion of ramp meters in projects within freeway segments containing any of the locations listed in RMDP.
- Ensures consistency among different districts on the development and implementation of ramp metering projects.
- Provides direction, training and assistance to district Traffic Operations staff on the development of the RMDP in partnership with the Division of Transportation Planning.
- Leads the development of statewide RMDP.
- Maintains a statewide inventory of planned, programmed, and constructed ramp meters.

#### Chief, Division of Transportation Planning:

- Works collaboratively with Chief, Division of Traffic Operations in the development of statewide RMDP.

- Ensures consistency among different districts on the development of their respective RMDP.
- Provides direction, training, and assistance to district Planning staff on the development of the RMDP in partnership with the Division of Traffic Operations.
- Work collaboratively with the Division of Traffic Operations in the development, implementation, and maintenance of statewide policies, manuals, and guidelines for ramp metering.

Chiefs, Divisions of Design and Construction:

- Ensure that Division policies and manuals support the current ramp metering policies. These policies include making provisions for ramp meters in project development, accommodating HOV at onramps, and construction of CHP enforcement areas and maintenance vehicle pullouts at ramp meters.
- Ensure that staff and practices support ramp metering policies.

Chief, Divisions of Maintenance:

- Leads the development of acceptance procedures to hand-off ramp meter systems to the Division of Maintenance.

District Directors:

- Ensure the provision of resources for the entire life cycle of ramp metering activities. These activities include ramp metering planning, design, construction, operations, and maintenance.
- Establish local agency support for ramp metering.
- Assign lead responsibility for development, maintenance, and implementation of RMDP in the District.

Deputy District Directors, Planning:

- In coordination with District Traffic Operations, develop and maintain the district RMDP, program funding and implement ramp metering projects with the affected local and regional transportation stakeholders.
- Submits all future ramp metering locations contained in the RMDP for inclusion in local Congestion Management Plans, Regional Transportation Plans, Department System Planning documents and other applicable planning documents developed by other agencies or the Department.
- Ensures consistency of ramp metering plans with neighboring Districts' ramp metering plans.
- Provides traffic forecasting for development of RMDP in coordination with Traffic Operations.

Deputy District Directors, Construction, Design, and Project Management:

- Ensure that provisions for ramp metering are included in all projects involving interchange modification and freeway improvements at locations identified in RMDP.

- Ensure that each existing ramp meter affected by construction projects remains operational throughout the construction period.

Deputy District Directors, Operations:

- In coordination with District Planning, develop and maintain the district RMDP.
- Develop an inventory of planned, programmed and constructed ramp meters.
- Assist Deputy District Directors, Planning to coordinate with local and regional transportation stakeholders, on the implementation of ramp metering projects and document the efforts made toward coordination and record any concurrence obtained.
- Provide district personnel with technical assistance and support on the design and operation of ramp metering systems.
- Coordinate with CHP regarding enforcement issues at ramp meters.
- Implement ramp metering policies and procedures.
- Provide justification for deviation from established ramp metering policies. Ensure consistency of ramp metering practices with neighboring Districts.

Deputy District Directors, Maintenance:

- Ensure that each ramp meter is operational.
- Ensure regular inspection of each ramp meter.
- Ensure the minimization of traffic delay when repairing existing ramp meters.

District Project Managers:

- Ensure that ramp meters are included in the earliest stage of project development and are not eliminated during the project delivery process.
- Identify necessary project resources for the installation of ramp meters.
- Work closely with district Traffic Operations to ensure that ramp metering requirements are satisfied.
- Ensure the approval of Fact Sheet for exception to ramp metering policies.

District Ramp Metering Staff:

- Support the development and maintenance of the district RMDP.
- Review ramp metering plans and specifications, and coordinate with Design, Construction and Maintenance to design, construct, operate, and maintain ramp meters.
- Work with District Construction to ensure that each existing ramp meter affected by construction projects remains operational throughout the construction period.
- Prepare, review, and implement ramp metering rates that will maintain effective operations along freeway corridors.

District Design Engineers and Office Engineers:

- In coordination with district Traffic Operations, identify and incorporate the need for ramp meters and HOV preferential lanes in the Project Study Report, Project Report, and Environmental Documents.
- Provide Standard Special Provisions and Contract Plans for ramp metering elements, including system integration needs such as communications, and compatibility of software.
- Provide Fact Sheet for exception to ramp metering policies.

District Construction Engineers (Electrical and Civil), Resident Engineers, and Encroachment Permit Inspectors:

- Ensure that ramp metering elements are installed according to the Standard Special Provisions, Standard Specifications, and Contract Plans.
- Ensure that each ramp meter affected by construction projects remains operational throughout the construction period unless otherwise specified in the contract documents.
- Immediately notify district Traffic Operations personnel of any change in status of each ramp meter affected by construction projects.
- Ensure that each ramp meter affected is fully reviewed, tested, and operational prior to accepting a contract and closing the project ID number.

*APPLICABILITY*

All Department employees involved with ramp metering activities.

  
MALCOLM DOUGHERTY  
Chief Deputy Director, Interim

  
Date Signed

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# Deputy Directive

<i>Number:</i>	DD-64-R2
<i>Refer to Director's Policy:</i>	DP-22 Context Sensitive Solutions DP-05 Multimodal Alternatives DP-06 Caltrans Partnerships DP-23-R1 Energy Efficiency, Conservation and Climate Change
<i>Effective Date:</i>	10/17/14
<i>Supersedes:</i>	DD-64-R1 (10/2/2008)
<i>Responsible Program:</i>	Planning and Modal Programs

**TITLE** Complete Streets - Integrating the Transportation System

## **POLICY**

The California Department of Transportation (Caltrans) provides for the needs of travelers of all ages and abilities in all planning, programming, design, construction, operations, and maintenance activities and products on the State highway system. Caltrans views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system.

Caltrans develops integrated multimodal projects in balance with community goals, plans, and values. Addressing the safety and mobility needs of bicyclists, pedestrians, and transit users in all projects, regardless of funding, is implicit in these objectives. Bicycle, pedestrian, and transit travel is facilitated by creating “complete streets” beginning early in system planning and continuing through project delivery and maintenance and operations. Developing a network of “complete streets” requires collaboration among all Department functional units and stakeholders to establish effective partnerships.

## **DEFINITION/BACKGROUND**

**Complete Street** - A transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit riders, and motorists appropriate to the function and context of the facility.

The intent of this directive is to ensure that travelers of all ages and abilities can move safely and efficiently along and across a network of “complete streets.”

State and federal laws require Caltrans and local agencies to promote and facilitate increased bicycling and walking. California Vehicle Code (CVC) sections 21200-21212, and Streets and Highways Code (sections 890-894.2) identify the rights of bicyclists and pedestrians, and establish legislative intent that people of all ages using all types of mobility devices are able to travel on roads. Bicyclists, pedestrians, and non-motorized traffic are permitted on all state facilities, unless prohibited (CVC, section 21960). Therefore, the Department and local agencies have the duty to provide for the safety and mobility needs of all who have legal access to the transportation system.

Department manuals and guidance outline statutory requirements, planning policy, and project delivery procedures to facilitate multimodal travel, which includes connectivity to public transit for bicyclists and pedestrians. In many instances, roads designed to Caltrans’ standards provide basic access for bicycling and walking. This directive does not supersede existing laws. To ensure successful implementation of “complete streets,” manuals, guidance, and training will be updated and developed.

## *RESPONSIBILITIES*

### Chief Deputy Director:

- Establishes policy consistent with Caltrans’ objectives to develop a safe and efficient multimodal transportation system for all users.
- Ensures management staff is trained to provide for the needs of bicyclists, pedestrians, and transit users.

### Deputy Directors, Planning and Modal Programs and Project Delivery:

- Include bicycle, pedestrian, and transit modes in statewide strategies for safety and mobility, and in system performance measures.
- Provide tools and establish processes to identify and address the needs of bicyclists, pedestrians, and transit users early and continuously throughout planning and project development activities.
- Ensure districts document decisions regarding bicycle, pedestrian, and transit modes in project initiation and scoping activities.
- Ensure departmental manuals, guidance, standards, and procedures reflect this directive, and identify and explain Caltrans’ objectives for multimodal travel.
- Ensure an Implementation Plan for this directive is developed.

Deputy Director, Maintenance and Operations:

- Provides tools and establishes processes that ensure regular maintenance and operations activities meet the safety and mobility needs of bicyclists, pedestrians, and transit users in construction and maintenance work zones, encroachment permit work, and system operations.
- Ensures departmental manuals, guidance, standards, and procedures reflect this directive and identifies and explains Caltrans' objectives for multimodal travel.

District Directors:

- Promote partnerships with local, regional, and state agencies to plan and fund facilities for integrated multimodal travel and to meet the needs of all travelers.
- Identify bicycle and pedestrian coordinator(s) to serve as advisor(s) and external liaison(s) on issues that involve the district, local agencies, and stakeholders.
- Ensure bicycle, pedestrian, and transit needs are identified in district system planning products; addressed during project initiation; and that projects are designed, constructed, operated, and maintained using current standards.
- Ensure bicycle, pedestrian, and transit interests are appropriately represented on interdisciplinary planning and project delivery development teams.
- Provide documentation to support decisions regarding bicycle, pedestrian, and transit modes in project initiation and scoping activities.

Deputy District Directors, Planning, Design, Construction, Maintenance, and Operations:

- Ensure bicycle, pedestrian, and transit user needs are addressed and deficiencies identified during system and corridor planning, project initiation, scoping, and programming.
- Collaborate with local and regional partners to plan, develop, and maintain effective bicycle, pedestrian, and transit networks.
- Consult locally adopted bicycle, pedestrian, and transit plans to ensure that state highway system plans are compatible.
- Ensure projects are planned, designed, constructed, operated, and maintained consistent with project type and funding program to provide for the safety and mobility needs of all users with legal access to a transportation facility.
- Implement current design standards that meet the needs of bicyclists, pedestrians, and transit users in design, construction and maintenance work zones, encroachment permit work, and in system operations.
- Provide information to staff, local agencies, and stakeholders on available funding programs addressing bicycle, pedestrian, and transit travel needs.

Chiefs, Divisions of Aeronautics, Local Assistance, Rail and Mass Transportation, Transportation Planning, Research, Innovation and System Information, and Transportation Programming:

- Ensure incorporation of bicycle, pedestrian, and transit travel elements in all Caltrans transportation plans and studies.
- Support interdisciplinary participation within and between districts in the project development process to provide for the needs of all users.
- Encourage local agencies to include bicycle, pedestrian, and transit elements in regional and local planning documents, including general plans, transportation plans, and circulation elements.
- Promote land uses that encourage bicycle, pedestrian, and transit travel.
- Advocate, partner, and collaborate with stakeholders to address the needs of bicycle, pedestrian, and transit travelers in all program areas.
- Support the development of new technology to improve safety, mobility, and access for bicyclists, pedestrians, and transit users of all ages and abilities.
- Research, develop, and implement multimodal performance measures.
- Provide information to staff, local agencies, and stakeholders on available funding programs to address the needs of bicycle, pedestrian, and transit travelers.

Chiefs, Divisions of Traffic Operations, Maintenance, Environmental Analysis, Design, Construction, and Project Management:

- Provide guidance on project design, operation, and maintenance of work zones to safely accommodate bicyclists, pedestrians, and transit users.
- Ensure the transportation system and facilities are planned, constructed, operated, and maintained consistent with project type and funding program to maximize safety and mobility for all users with legal access.
- Promote and incorporate, on an ongoing basis, guidance, procedures, and product reviews that maximize bicycle, pedestrian, and transit safety and mobility.
- Support multidisciplinary district participation in the project development process to provide for the needs of all users.

Employees:

- Follow and recommend improvements to manuals, guidance, and procedures that maximize safety and mobility for all users in all transportation products and activities.
- Promote awareness of bicycle, pedestrian, and transit needs to develop an integrated, multimodal transportation system.
- Maximize bicycle, pedestrian, and transit safety and mobility through each project's life cycle.

*APPLICABILITY*

All Caltrans employees.

*Original signed by:*

*10/16/14*

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KOME AJISE  
Chief Deputy Director

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Date Signed