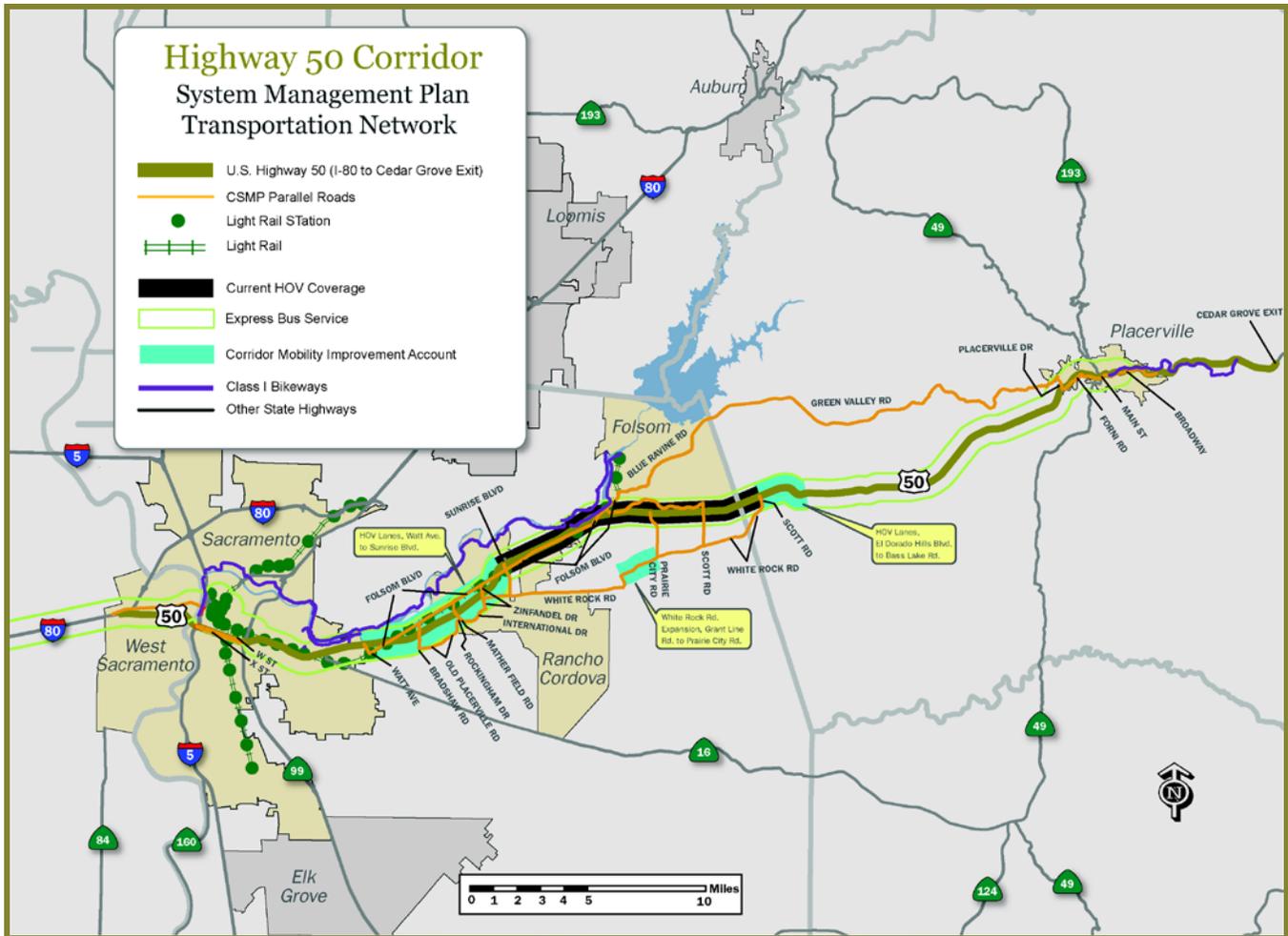


State of the Corridor Report

2012 Report on the Highway 50 Corridor System Management Plan

Management Plan



Overview:

Corridor System Management Plans (CSMPs) are comprehensive operations and management plans intended to maintain and enhance corridor mobility through the integrated management of all travel modes within the corridor. This includes highways and freeways, parallel and connecting local and regional roadways, public transit (bus, bus rapid transit, light rail) and bikeways. Together these facilities comprise the CSMP managed network and are displayed in the map above. CSMPs have been developed to provide one unified concept for managing, operating, and preserving a corridor for all travel modes and across all jurisdictions resulting in the integration capital improvements, traffic management, and transit management strategies. Each CSMP includes current management strategies, existing travel conditions and mobility challenges, corridor performance management, proposed management strategies, and needed capital improvements. The Highway 50 (US 50) corridor includes US 50 from the US 50/Interstate 80 interchange in the Yolo County City of West Sacramento to the US-50/Cedar Grove exit in the El Dorado County community of Camino.

Purpose of the State of the Corridor Report:

The annual State of the Corridor (SOTC) Reports maintains the momentum started by the completion of the 2009 CSMPs, and the 2010 and 2011 SOTC Reports by monitoring and reporting annual corridor performance and ongoing implementation of CSMP strategies. The first two SOTC Report editions covered fiscal year activity from July 1st through June 30th. **This 2012 SOTC Report covers July 1, 2011 through December 31, 2011.** Future editions of this report will identify corridor performance and implementation of strategies on a calendar year rather than a fiscal year basis. The reason for this change is to utilize the performance data in the *District 3 Mobility Performance Report (MPR)*, which is reported by calendar year rather than fiscal year. The MPR, which is produced by the Division of Maintenance and Traffic Operations, evaluates the operational performance of freeways in the District. The major benefit of this reporting period change will be a SOTC report that contains more accurate and up-to-date reporting of corridor performance and eliminates redundancy.

The 2012 US-50 SOTC Report includes the following components:

- Status of the Corridor Mobility Improvement Account Projects
- Major Corridor Accomplishments
- Performance Measures: State Highway System, Transit, and Bicycle
- Moving Forward: CSMP Strategies, Traffic Operations Improvement Strategies, and Micro-simulation Modeling

Corridor Mobility Improvement Account Bond Project Status:

CSMPs were developed for corridors associated with the Corridor Mobility Improvement Account (CMIA) and Highway 99 Bond Program projects, supported by the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, Proposition 1B. Three projects on Highway 50 in District 3 were awarded CMIA funds. The status of these projects is as follows:

High Occupancy Vehicle (HOV) lanes on Highway 50, from Watt Avenue to Sunrise Boulevard: Construction of this \$104.6 Million project began in January 2010. The eastbound (EB) lanes were completed and opened to the public on December 13, 2011 and the westbound (WB) lanes is scheduled to be completed and open to the public by March 19, 2012, ahead of the scheduled January 2013 completion date.

White Rock Road Expansion, from Grant Line Road to Prairie City Road: The project is part of a larger project including operational and safety improvements at Scott Road and Placerville Road intersections. It will ultimately be part of the Capital Southeast Connector project linking the City of Elk Grove and El Dorado County. The CTC allocated partial funding for project construction funding in December 2011. It is anticipated that the CTC will allocate additional funding at its February 2012 meeting. Construction for this \$27.9 Million project is expected to begin in April 2012 and anticipated to be completed by December 2013.

HOV Lanes on Highway 50, from the El Dorado County Line to Cameron Park Drive: Construction for Phase 1 of the project from the El Dorado County Line to Bass Lake Road began in November 2008 and was completed and opened to the public around June 20, 2011, ahead of the scheduled December 2011 completion date. In May 2010, El Dorado County Transportation Commission (EDCTC) successfully obtained \$3.5 million in CMIA cost savings, through the CTC, to extend the eastbound HOV lane an additional 1.5 miles east of Bass Lake Road. On December 15, 2011, the CTC allocated \$9.5 million in CMIA cost savings to help fund Phase 2A of the project, which consists of constructing HOV lanes in both directions from east of Bass Lake Road to Cameron Park Drive. Construction is scheduled to begin in April 2012 and be completed by October 2012.

Major Corridor Accomplishments:

Hazel Avenue Widening, Phase 1: Phase 1 of this project was completed in September 2011, and is part of a major roadway project to improve Hazel Avenue from US 50 to Madison Avenue to reduce congestion, and improvement safety and mobility. This \$33.3 million project phase widened Hazel Avenue from US 50 to Curragh Downs Drive, including the American River Bridge, from four- to six-lanes and included bicycle lanes, pedestrian facilities, and landscaping.

HOV Lanes on Highway 50, Phase 2A from Bass Lake Rd. to Cameron Park Drive: On December 15, 2011, the CTC approved the programming of \$9.5 million in CMIA Program savings to help fund Phase 2A of this project, which consists of constructing HOV lanes in both directions from east of Bass Lake Road to Cameron Park Drive. Construction is scheduled to be in April 2012 and is anticipated to be completed by October 2012.

Highway 50 – Missouri Flat Road Interchange Project, Phase 1B: Construction of this phase of the project began and is anticipated to be completed in November 2012. This \$36 million project reconfigured the interchange to a 4-lane tight diamond, constructed auxiliary lanes and bicycle/pedestrian facilities between the Missouri Flat Road and Forni Road/Western Placerville Drive interchanges, and widened the Highway 50 Weber Creek bridges between Missouri Flat Road and the Western Placerville/Forni Road interchanges.

White Rock Road Widening – El Dorado Hills Boulevard/Latrobe Road to Monte Verde Drive: Construction was completed on this \$1.1 Million project in November 2011. The project, which is part of the Capital South-East Connector, widened White Rock Road from two- to four-lanes, and included adding sidewalks, Class II bike lanes, and a traffic signal.

Silva Valley Parkway IC, Phase 1: The CTC programmed \$1.0 million in SLPP funding at its October 26-27, 2011 meeting, which will allow this \$63 Million project to move forward from PS&E and ROW to construction by January 2013. Due to right-of-way and environmental permitting issues, El Dorado County has requested a 12-month construction allocation extension from the CTC. The extension is scheduled to be heard at the August 22-23, 2012 CTC meeting.

Performance Measures:

A diverse mixture of transportation modes and roadways such as state highways, major arterial roadways, transit services and bicycle facilities, make up the managed network and combine to provide mobility in the Highway 50 corridor. Continuous monitoring of the network through the use of performance measures is an integral part of corridor management and investment decision making by aiding in the identification of immediate, efficient, and effective system operational strategies and capital improvements.

State Highway System Performance Measures:

The District MPR is now being used to track and report on highway performance in each CSMP corridor. This will ensure data and reporting consistency in the most efficient manner possible. Additional performance measures may be added to the Highway 50 CSMP next fiscal year when it is updated.

Traffic Congestion:

- Vehicle Hours of Delay (VHD):** Total VHD at 60 miles per hour in both directions decreased in 2011 over 2010 in all Counties with the greatest decrease observed in El Dorado County. This decrease may be attributed to completion of the Harbor Boulevard Interchange project in late 2010, the Watt Avenue to Sunrise Boulevard and the El Dorado Hills Boulevard to Bass Lake Road bus/car pool lane projects, and the downturn of the economy. The results are as follows:

Route	County	2010	2011	% Change
US 50	YOL	84,490	82,693	-2%
	SAC	1,198,593	1,121,970	-6%
	ELD	966,972	247,159	-74%

- Top 10 Congested Freeways:** Based on the VHD in both directions of all State Highway urban corridors in the greater Sacramento area of District 3, the congestion comparison of US-50 for 2010 and 2011 were ranked with the other corridors. As identified below, the US 50 corridor is becoming less congested, but the Sacramento and El Dorado County segments of the corridor are still within the top 10 congested freeways. This decrease may be attributed to completion of the Harbor Boulevard Interchange project in late 2010, the Watt Avenue to Sunrise Boulevard and the El Dorado Hills Boulevard to Bass Lake Road bus/car pool lane projects, and the downturn of the economy.

Route	County	2010 Rank	2011 Rank
US 50	YOL	14	12
	SAC	2	3
	ELD	4	8

- Top Bottleneck Locations:** The bottleneck comparisons of US 50 for 2011 by locations and rankings listed below can change from year to year, and may be indicative of temporary bottlenecks (i.e. short-term construction activities or special events) rather than major geometric constraints that require major operational strategies or capital expansion. Rankings are restricted to the urbanized area, are in comparison to all state highways in the greater Sacramento area of District 3 during both the AM peak and PM peak time periods. The locations listed below identify the time period of either during the AM peak or PM peak, directions, average daily VHD, and duration of the delay. Some locations listed were not in top bottleneck locations and were not ranked, but are listed for comparison purposes only. For the ranked locations, Stockton Boulevard was the top congestion location along US 50 during the PM peak where there was 163 hours of average daily VHD during 2011 and ranked as the 7th top PM bottleneck location in the greater Sacramento area. NB Howe Avenue was the top congestion location along US-50 during the AM peak where there was 55 hours of average daily VHD during 2011 and ranked as the 5th top AM bottleneck location.

County	Approx. Location	AM/PM, Direction	2011 Av. Daily VHD	2011 Av. Duration (min)	2011 Rank
YOL	Jefferson Bl.	PM, EB	18	6	---
SAC	15 th St.	PM, WB	118	32	13
	16 th St.	PM, EB	75	64	21
	25 th St.	PM, WB	106	29	14
	25 th St.	AM, WB	15	15	---
	25 th St.	PM, EB	17	8	---
	Stockton Bl.	PM, WB	163	48	7
	Stockton Bl.	PM, EB	43	12	---
	48 th St.	PM, EB	133	32	10
	59 th St.	PM, WB	56	17	25
	59 th St.	AM, WB	10	4	---
	65 th St.	PM, WB	10	6	---
	NB Howe Av.	AM, WB	55	18	5
	NB Howe/Power Inn	PM, WB	63	42	24
	Occidental Dr.	PM, EB	11	3	---
Occidental Dr.	AM, WB	8	3	---	
ELD	NB Bradshaw Rd.	PM, EB	40	19	29
	W. of Hazel Av.	AM, WB	29	35	---
	Aerojet Dr.	PM, EB	18	9	---
	Folsom Bl.	PM, EB	11	7	---
	El Dorado Hills	AM, WB	41	24	---

Transit and Bicycle Performance Measures:

Beginning with the 2011 SOTC Report, it was determined that the implementation of the infrastructure needs for transit and bicycles would be used as the performance measures for each. Although this is an “output” and not an “outcome” measure, it is considered the best indicator of increasing the contribution of each mode to corridor mobility at this preliminary stage of system management and reporting. The 2011 Report established the baseline by listing transit and bicycle system infrastructure needs and each SOTC Report reports on implementation progress. Projects selected as infrastructure needs connect to or are on the managed system network identified in the original 2009 CSMP and are included in Tables 1 and 2.

The sources used for the identification of improvement needs were the 2010-30 El Dorado County Regional Transportation Plan, 2035 SACOG Metropolitan Transportation Plan, the Sacramento Regional Transit District 10-Year Capital Improvement Plan and 5-Year Capital Improvement Plan Master List of all Projects 2010-15, the Sacramento Regional Transit Action Plan, the Yolo County Transit District Long-Range Plan 2009-10 and 2018-19, the Western El Dorado County 2008 Short Range Transit Plan, the 2007 El Dorado County Park and Ride Facilities Master Plan, the Yolo County Transit District Long-Range Plan 2009-10 and 2018-19, the SACOG 2011 Regional Bicycle, Pedestrian, and Trails Master Plan, 2011 Sacramento County Bicycle Master Plan, and the 2010 El Dorado County Bicycle Transportation Plan.

Table 1: Highway 50 CSMP Transit System Needs Update

Transit Operator	Project Description	Total Cost Estimate (1,000s)	Implementation Status
SacRT	Watt Ave. and US 50 IC. Modify interchange to include a dedicated transit way for bus rapid transit, bicycle, and pedestrians	\$50,375	Anticipate funding for construction in 2012
EDCTA	County Line Multi Modal Transit center: 250-space Park-and-Ride facility within the vicinity of the SAC/ELD County Line, south of US 50 near the Empire Ranch IC	\$5,425	2007 El Dorado County Park and Ride Facilities Plan
EDCTA, Regional Transit, Folsom Stage Line	Regional Fueling Station near the Sacramento/El Dorado County Line	\$20,310	Planned: MTP Pg. 19, Complete by 2035, part of multi modal transit center

Table 2: Highway 50 CSMP Bicycle System Needs Update

County	Project Description	Total Cost Estimate (1,000s)	Implementation Status
YOL	Lower Northwest Interceptor (LNWI) alignment: Class I bike path along LNWI alignment from Yolo St /Sacramento Ave to Stone Blvd. Includes grade-separated crossing of UPRR and undercrossing of US 50	\$12,000	2011 SACOG Regional Bicycle & Pedestrian Master Plan (RBPMP). Under the present fiscal circumstances of the City and considering the magnitude of these project costs, there is very little likelihood of any progress absent a major state or federal share in funding.
YOL	Class I path, Pioneer Trail from US 50 Bridge to Jefferson Bl.	\$750	2011 SACOG RBPMP. Under the present fiscal circumstances of the City and considering the magnitude of these project costs, there is very little likelihood of any progress absent a major state or federal share in funding.
SAC	Class I path along the south bank of the American River from Watt Avenue to Gristmill Park	\$2,233	2011 SACOG RBPMP, Conceptual Project
SAC	Overcrossing of US 50 at railroad right of way between Routier Rd. and Mather Field Rd.	\$1,055	Conceptual Project. The County Airport owns rights to a spur that is within project's limits and has expressed a need to keep the spur for use in future projects. Therefore, the City (Rancho Cordova) is ongoing discussions regarding options that will allow the City to retain the spur.
SAC	Class II bike lanes on Sunrise Bl. from Rancho Cordova City limit to Grant Line Rd	\$1,105	2011 SACOG RBPMP. The City of Rancho Cordova has the project partially funded to date, but is still working to get it completely funded. This project will include bike lanes.
SAC	Class II bike lanes on White Rock Road from Sunrise Boulevard to El Dorado County Line	\$4,471	Grant Line Road to Prairie City Road (Under Construction). Remaining phases looking for funding. This project is in construction with CMAQ funding. The city portion of the project from Grantline Rd. to Prairie City will include bike friendly shoulders.
SAC	Crossing of US 50 east of Zinfandel Road	TBD	MTIP-Promenade . The City of Rancho Cordova is still in the process of finding available funding for this project.
SAC	Crossing of US 50 near Folsom Bl. in Folsom	TBD	2011 SACOG RBPMP, Plan to pursue both State/Federal Grants. Expect to submit a grant application in 2014. Estimate Construction Date 2020.
SAC	Grant Line Path: Class I bike path from Mosher to White Rock Rds..	\$7,567	2011 SACOG RBPMP
SAC	Class I & II facilities along Iron Point Road, from Folsom Bl. to Sacramento County line	TBD	2011 SACOG RBPMP, Class II facilities are fully constructed along Iron Point Road.
SAC	Crossing of Folsom Bl. and Humbug-Willow Creek Parkway for bicycle and pedestrians with trail connections	\$2,500	2035 SACOG MTP complete by 2020, No Funding. Plan to pursue State/Federal Grants. Expect to submit a grant application in 2013. Estimate Construction Date 2017/18.
SAC	US 50 Parallel Route: Class I bike path from Empire Ranch Rd. to Alder Creek	\$850	Plan to pursue State/Federal Grants. Expect to submit a grant application in 2014/15, Estimate Construction Date 2018/19.
ELD	Class II bike lanes on Silva Valley Prkwy. from the new connection with White Rock Rd. to Green Valley Rd.	\$700	2010 El Dorado County Bicycle Transportation Plan (ECBTP), MTP pg. 19, complete by 2035.

Table 2: Highway 50 CSMP Bicycle System Needs Update (continued)

County	Project Description	Total Cost Estimate (1,000s)	Implementation Status
ELD	Class II bike lanes on White Rock Road from the western El Dorado County line to Carson Crossing Road	\$300	2010 ECBTP, closest connection to US 50 between Folsom and ELD County, south of US 50
ELD	El Dorado Trail: Extend existing Class I bike path at Los Trampas Dr. to Halcon Road in Camino. Provides a connection into Camino and reduces the need for a grade separated crossing of US 50 at the existing trail terminus	\$500	2010 ECBTP, MTP, pg. 8, complete by 2035
ELD	Class I bike path from Halcon Road to Snows Road, near Camino, parallels US 50	\$1,000	2010 ECBTP, not in MTP
ELD	Class II bike lanes included in extension of Saratoga Way from Finders Way to western county line (alternatively construct a Class I bike path prior to construction of extension of Saratoga Way to Iron Point Road)	\$75	2010 ECBTP, MTP pg. 12, complete by 2035
ELD	Class I bike path in the Sacramento-Placerville Transportation Corridor (El Dorado Trail) from Missouri Flat Rd. to Mother Lode Dr. in El Dorado. Completes Class I bike path connection.	\$525	2010 ECBTP, MTP pg. 12, complete by 2035
ELD	Class I bike path in the Sacramento-Placerville Transportation Corridor (El Dorado Trail) from Mother Lode Dr. in El Dorado to Mother Lode Dr. in Shingle Springs. Completes the connection between Placerville, Diamond Springs, El Dorado, and Shingle Springs.	\$1,900	2010 ECBTP
ELD	Bike Lanes on Mother Lode Dr. from Missouri Flat Road to Lindberg Avenue (Ph.1)	\$175	2010 ECBTP, MTP, pg. 11, complete by 2035
ELD	Class II bike lanes on Country Club Drive, from Bass Lake Road to Cambridge Road (Phase 1)	\$350	2010 ECBTP, MTP, pg. 6, complete by 2035
ELD	Class II bike lanes- Country Club Drive from Cameron Park Drive to Cambridge Road.	\$1,200	Tier I, High Priority Project 2010 ECBTP
ELD	US 50/Missouri Flat Road Interchange (Phase 1B) includes Bike/Ped facility from Missouri Flat Road to Placerville Dr/Forni Rd along EB US 50	\$5,000	2010 ECBTP, MTP Pg. 16, MTIP ELD19193, Complete by 2013, Total project cost is \$41,943,833; Class I Bike Path component is currently estimated at \$5 million
ELD	Bicycle-pedestrian overcrossing of US 50 at El Dorado Hills Blvd.	\$6,783	2010 ECBTP shows estimate at \$4.8 M., MTP, pg. 16, MTIP ELD19173, complete by 2028
ELD	Overcrossing of Missouri Flat Rd.. Provides a safe and direct crossing over US 50	\$1,000	2010 Placerville Non-Motorized Transportation Plan (PNMTP)
ELD	Class I bike path – Main Street/ Placerville Drive to Ray Lawyer Dr.	\$300	2010 PNMTP, in environmental phase
ELD	El Dorado Trail Bike Path (Class I) in the City of Placerville, from Clay Street to Bedford Avenue. Bike/Ped Overcrossing.	\$165	2010 PNMTP, MTP pg. 2, MTIP ELD19269, complete by 2015, in environmental phase

Moving Forward:

Implementation of 2009 Highway 50 CSMP Strategies:

During the development of the 2009 CSMP a number of strategies were identified to assist in the effort to enhance corridor mobility. The following strategies listed in Table 3 are a subset of the original strategies that were implemented from July 1, 2011 through December 31, 2011. The implementation actions do not represent the final enactments of individual strategies, but are part of the ongoing long-term implementation progress.

Table 3: Highway 50 CSMP Strategies

Strategy	Description	Implementation Status	Implementation Challenges
Construct planned and programmed key capital projects along the State Highway System and parallel roadways that serve to reduce congestions along US 50	Implementation of the capital improvements identified in the 2009 CSMP Key Programmed and Planned Project lists and approved in the regional transportation plans for all transportation modes within the scope, schedule, and cost specified.	In Sacramento County, the EB portion of the US 50 Bus/Carpool lanes project from Sunrise Boulevard to Watt Avenue was completed and opened to the public in December 2011, and the WB portion is in construction and is anticipated to be completed in March 2012. In the FY 2012/2013, Caltrans will work to secure funding for completion of PA&ED to extend the US 50 Bus/Carpool lanes from Watt Avenue to the SR-99/Oak Park Interchange. In El Dorado County, Phase 1 of the US 50 Bus/Carpool lanes project from El Dorado Hills to Bass Lake Road was completed in June 2011 and Phase 2A of this project is anticipated to be in construction by April 2012 and completed by October 2012.	Funding availability, funding competition within the region
Comprehensive daily monitoring of the status of all modes providing service on the CSMP transportation network.	Full deployment of multimodal transportation service status detection systems for all CSMP network components.	Close coordination between Planning & Traffic Operations to identify detection need locations. Incorporated into 3-Year PID Program, TSDP, and seeking funding opportunities.	Funding availability, funding competition within region.
Continually monitor and analyze the CSMP transportation network to improve system performance.	Monitor transportation performance measures and make system modifications, as appropriate, on a frequent and timely basis.	Annual State of the Corridor Reports	Staff resources and data availability.
Complete Bus/Carpool lane network.	Complete the regional bus/carpool lane network, including freeway-to-freeway HOV lane connectors.	In Sacramento County, the EB portion of the US 50 Bus/Carpool lanes project from Sunrise Boulevard to Watt Avenue was completed and opened to the public in December 2011, and the WB portion is in construction and is anticipated to be completed in March 2012. In the FY 2012/2013, Caltrans will work to secure funding for completion of PA&ED to extend the US 50 Bus/Carpool lanes from Watt Avenue to the SR-99/Oak Park Interchange. In El Dorado County, Phase 1 of the US 50 Bus/Carpool lanes project from El Dorado Hills to Bass Lake Road was completed in June 2011 and Phase 2A of this project is anticipated to be in construction by April 2012 and completed by October 2012.	Funding availability, funding competition within the region. Public agency and public acceptance of network.
Expand P&R lots at key locations	Add additional capacity to existing Park and Ride (P&R) lots at or approaching capacity near transit stations and other locations.	Updated the gap analysis for transit and bicycle projects for inclusion into the 2012 SOTC reports. Transit gap analysis includes P&R lots.	Funding availability, funding competition within the region, and available land.
Improve bike-pedestrian access in the CSMP transportation network.	Plan and program for construction of additional bicycle paths / lanes, and related improvements for access and connectivity to transit, park and ride lots, and destination points.	Updated the gap analysis for transit and bicycle projects for inclusion into the 2012 SOTC Report.	Funding availability, funding competition within the region.

Traffic Operational System (TOS) Improvements and Intelligent Transportation Systems (ITS) Plans and Studies:

The primary and highest priority method for Highway 50 corridor system management is the development, implementation, and use of system and operational management strategies to facilitate efficient and effective transportation network use. These strategies include TOS projects such as ramp metering, auxiliary lanes, transition lanes, bus/carpool (a.k.a. HOV) lanes, and short mixed flow lane extensions, and ITS projects such as Closed Circuit Television Systems, Changeable Message Signs, Blue Tooth Readers, Highway Advisory Radio, and Traffic Monitoring Stations. Plans and studies are utilized to identify needed TOS and ITS improvements. Several plans and studies underway are as follows:

District 3 ITS/Operational Improvement Plan: An improvement plan will be prepared that will identify and prioritize new TOS and ITS projects for urban highway corridors within District 3. TOS and ITS improvements utilize very low cost strategies that allow the system to operate at optimal performance without adding significant through-capacity. Currently, there are numerous individual TOS and ITS plans that were prepared by different District 3 Divisions, Caltrans Headquarters, and various local and regional agencies. The purpose of the Plan will be to provide a unified document that can be used by all District Divisions, and local and regional agencies for programming and deployment of projects identified in the Plan.

I-80/US 50 Davis to Downtown Sacramento Feasibility Study: A feasibility study began in December 2011 to identify and analyze congestion relief mobility enhancement projects on I-80 from the Solano/Yolo County line to US 50 and on US 50 from I-80 to the Yolo/Sacramento County line. Some of the projects that will be analyzed include bus/carpool lanes, auxiliary lanes, mix flow lanes and ramp meters. Once the analysis is completed, a phasing plan will be developed and the identified projects will be programmed based on the priority status and funding availability. The study is scheduled for completion by June 2013.

Project Initiation Documents (PID) Work Program for Corridor Projects: The District’s System Planning process identifies a spectrum of projects to address deficiencies on the transportation system. The bridge between the identification of needed system improvements and the actual programming (funding) of these projects is the PID. The PID provides refined information regarding the specific scope, schedule, and cost of the proposed improvement, thereby providing critical information for decision makers and assuring the efficient delivery of capital improvement projects. The selection of PIDs for development and inclusion in the annual 3-Year PID Work Program is based on the prioritization of the project through the System Planning process, a comprehensive dialogue with our local and regional partner agencies, and the likelihood of the project being programmed for at least project development work. Before a project can be programmed to receive funding for project development and construction, a PID must first be prepared. High priority projects included in the 2009 Highway 50 CSMP as well as new projects that may be identified in aforementioned plans and studies included in the 3-Year PID Work Program. TOS and ITS projects being considered for inclusion into the Work Program are listed in Table 4.

Table 4: Proposed PID Work Program

Non-SHOPP (Lead Agency)	Project Description	Total Cost Estimate (1,000s)	Estimated PID Completion Year
El Dorado County	US 50/Ponderosa Road: Reconstruct interchange	\$30,000	2013
Sacramento County	US 50/Hazel Avenue: Reconstruct interchange	\$65,000	2012
SHOPP	Project Description	Total Cost Estimate (1,000s)	Estimated PID Completion Year
Caltrans	Detection Repair and Upgrade Communications at 178 locations on Routes 5, 65, 80, 50, 51, 89, 99	\$2,700	2013
Caltrans	CCTV Camera System Upgrade at 80 locations on Routes 5, 65, 80, 50, 51, 89, 99	\$1,900	2013
Caltrans	HAR Upgrade at 25 locations on Routes 5, 65, 80, 50, 51, 89, 99	\$1,500	2013
Caltrans	RWIS Upgrade at 18 locations on Routes 5, 65, 80, 50, 51, 89, 99	\$1,500	2013
Caltrans	Upgrade CMS panels to LED at 40 locations on Routes 5, 65, 80, 50, 51, 89, 99	\$2,600	2014
Caltrans	Upgrade Video Wall at Regional Transportation Management Center off US-50	\$1,000	2014
Caltrans	Upgrade existing communication lines on US 50 to fiber optics in Sacramento County from PM 0.00 to PM 5.10	\$1,400	2014

Micro-simulation Modeling:

Since the beginning of the development of the CSMPs, Caltrans has been developing micro-simulation traffic models for several CSMP corridors, including the US 50 corridor. These CSMP models include a calibrated 2006 base model, a future 2020 No Build model, and several 2020 scenario models that evaluate the traffic impacts of programmed, planned, and key CSMP projects. Caltrans is now in the process of using these models for feasibility studies that will analyze the traffic impacts of specific projects. The models will also allow Caltrans to evaluate project sequencing and prioritization strategies.