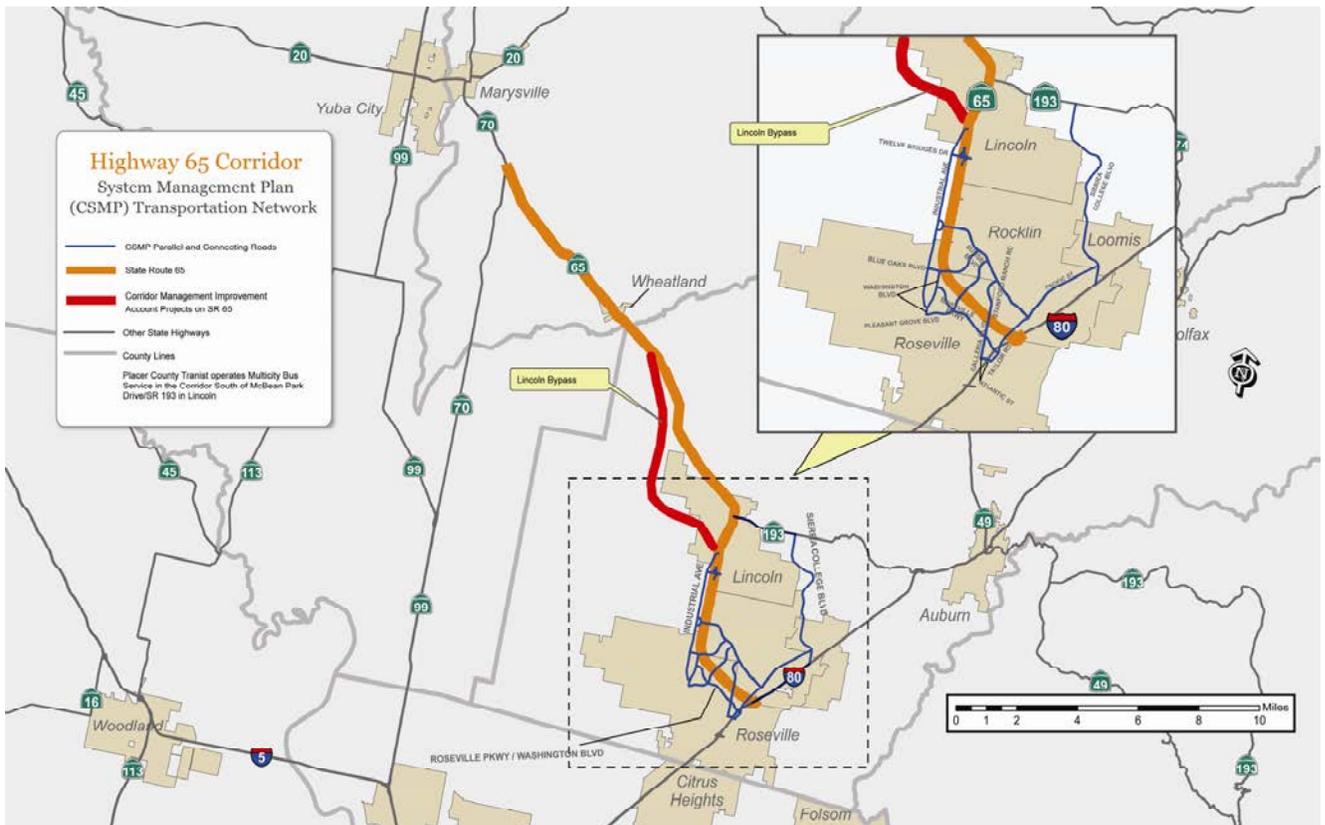




State of the Corridor Report

2010 Report on the State Route 65 Corridor System Management Plan



Overview

Corridor System Management Plans (CSMP) are comprehensive operations and management plans intended to maintain and enhance corridor mobility through the integrated management of all major transportation modes within the corridor. This includes highways and freeways, parallel and connecting local and regional roadways, public transit and bikeways, along with intelligent transportation technologies, which could include ramp metering, coordinated traffic signals, changeable message signs for traveler information, such as incident management, bus/carpool lanes and car/vanpool programs, and transit strategies. Together, these facilities comprise the CSMP managed network. CSMP success is based on the premise of managing a selected set of transportation components within a designated corridor as a system rather than as independent units. Each CSMP identifies current management strategies, existing travel conditions and mobility challenges, corridor performance management, proposed management strategies, and needed capital improvements.

Purpose of the State of the Corridor Report

The annual State of the Corridor (SOTC) Report maintains the momentum started by the completion of the first CSMP by reporting on the ongoing implementation of CSMP strategies and movement towards true integrated multimodal corridor system management, as well as anticipated corridor mobility challenges, and impediments to CSMP implementation. It is important to note that the analysis of performance in the first report since the completion of the CSMP is limited to the State Highway System (SHS) only due to the lack of performance data for the non-SHS transportation modes. Future editions of this report will include a more comprehensive report on the performance of the various transportation modes within the corridor, regardless of ownership, as we move toward integrated performance measurement, management and operations.

Proposition 1B Bond Project Status

CSMPs were developed for corridors associated with the Corridor Mobility Improvement Account (CMIA) and Highway 99 Bond Programs, supported by the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, Proposition 1B. One project on State Route (SR) 65 was awarded CMIA funds. The status of the project is as follows:

SR 65 Lincoln Bypass: Phase I of the Lincoln Bypass will construct a new four-lane expressway/freeway on a new alignment from Industrial Avenue to north Nelson Lane, and continue north with 2 lanes from Nelson Lane to south of the Bear River Bridge. Phase II will extend the four-lanes constructed with Phase I, from Nelson Lane to north of Riosa Road. The California Transportation Commission allocated construction funding for Phase I in February 2008. The current schedule indicates construction is half way complete with project completion scheduled for January 2012.

Major Corridor Accomplishments

Interstate 80 (I-80) / SR 65 Interchange Project Study Report (PSR): The I-80/SR65 PSR was completed in 2009. The project proposes constructing bi-directional High Occupancy Lanes (HOV) direct connector lanes between I-80 and SR 65, replacing the eastbound to northbound (NB) SR 65 loop-connector with a flyover connector, structure widening of the east Roseville viaduct and possible Taylor Road over crossing replacement, and widening the southbound (SB) SR 65 and westbound I-80 to northbound SR 65 connectors. The project is now in the Project Approval and Environmental Document stage of development.

SR 65 / Sunset Boulevard Interchange: The Sunset Boulevard interchange project was completed in March 2010. The new interchange replaced an existing at-grade intersection with a six-lane overpass to take Sunset traffic over the highway. The project removed the final signalized intersection between the Roseville/Rocklin communities and the City of Lincoln, which will help reduce traffic congestion.

Performance Measures

Continuous corridor monitoring and performance measures are an integral part of corridor management and investment decision making to help identify immediate, efficient, and effective system operational strategies and capital improvements. Performance measures provide the important, dynamic daily information needed to rapidly address operational problems caused by recurrent and non-recurrent traffic congestion.

The 2009 CSMP identified performance measures for the SHS, local roadways, and transit to be used as part of the corridor system management process. As noted previously, there is limited or a lack of current performance data for city and county streets, and there is need to develop additional transit and new bicycle performance measures. As such, this Report only includes SHS performance measures. As we continue to strive to establish a multi-modal CSMP, future iterations will include local roadways, transit, and bicycle performance measures.

Table 1 includes the performance measures that were initially identified in the 2009 CSMP and have been updated using 2009 PeMS and Tach Run data. The 2009 CSMP used 2007 data from a number of different sources because of inconsistent and unreliable PeMS coverage. Since the completion of the 2009 CSMP additional detection has been completed offering better PeMS coverage and more reliable data. As a result, we will use this Report and the 2009 performance measures as our baseline to track system performance and future annual "State of the Corridor" reports will include run-charts indicating changes in the performance measures in logical time increments.

Table 1: US 65 CSMP Highway Performance Measures Summary

County	Location	Post Miles	Distance (Miles)	Average Daily Traffic ¹	Performance Measures (2009 Data)							
					LOS ¹	Total Vehicle Hours of Delay ²	Total Vehicle Hours of Delay ²	Minutes of Delay per Vehicle ²	Minutes of Delay per Person ²	Vehicle Travel Time (Minutes) ²	Distressed Pavement (lane miles) ⁴	2006-2009 Reported Collision Rate Comparison (%) ⁵
						Daily	Peak Hour ³	Peak Hour ³	Peak Hour ³	Peak Hour ³		
PLA	I-80 to Washington Blvd	4.86 / 8.26	3.4	106,000	F	273	47	0.58	0.64	3.98	3.3	44%
	Washington Blvd to Industrial Ave	8.26 / 11.97	3.65	66,000	D	296	92	0.86	0.94	4.45	0.5	63%
	Industrial Ave to Ferrari Ranch Rd	11.91 / 12.96	1.05	47,500	C	119	12	0.07	0.08	1.10	0	25%
	Ferrari Ranch Rd to Gladding Rd	12.96 / 14.43	1.47	21,700	D	410	41	0.99	1.08	3.51	0	99%
	Gladding Rd to Riosa Rd	14.43 / 21.75	7.32	17,800	E	225	21	0.80	0.88	8.10	2.7	50%
	Riosa Rd to Yuba County Line	21.75 / 24.24	2.49	18,500	E	170	17	0.58	0.64	3.07	0	62%
YUB	Yuba County Line to S. Beale Rd	0.00 / 4.10	4.10	18,500	E	260	26	0.92	1.01	5.02	2	61%
	S. Beale Rd to SR 70	4.10 / 5.28	5.28	17,700	A	0	0	0.00	0.00	4.87	2.2	19%
Total		--	28.76	--	--	1,753	256	4.80	5.27	34.10	10.7	--

¹ Source: **State Highways**-Average Daily Traffic (ADT) and Level of Service (LOS) calculated based on 2009 Caltrans' PeMS's traffic data, which will now be the baseline for future CSMP performance analysis. Reported LOS is for the typical most congested daily peak travel period.

² Source: Delay is the average additional travel time by vehicles/persons traveling under 60 mph. Data derived from *SACMET Travel Demand Model*, PeMS's traffic data, and Caltrans' District 3 *2007 HICOMP* report and Traffic Operations Probe vehicle Tach. runs.

³ Peak Hour is during PM

⁴ Source: 2008 Caltrans' Division of Maintenance *Pavement Summary Report*. Distressed pavement is categorized as (1) "Major Structural Distress" which indicates the pavement has severe cracking and is likely to have a poor ride, (2) "Minor Structural Distress", which indicates the pavement has moderate cracking and may have a poor ride, and (3) "Poor Ride Quality (Only)", which indicates the pavement exhibits few cracks but has a poor ride condition. 2009 data is not available as of June 3, 2010.

⁵ Source: 2006 through 2009 Caltrans' *Traffic Accident Surveillance and Analysis System (TASAS)* summary data of the percentage above, or below, the statewide average for fatal, injury and property damage-only collisions on comparable facilities.

Moving Forward

The following key opportunities and challenges should be addressed as we move forward to implement system management within this corridor.

Lincoln Bypass, Phase 2: The project proposes to extend the new four-lane expressway/freeway from Nelson Lane to north of Riosa Road. This project will reduce the travel time, improve safety and address congestion within and around the City of Lincoln. Caltrans is currently working with South Placer Regional Transportation Authority (SPRTA) on a cooperative agreement to secure funding for the design phase. Although the construction phase is not yet funded, construction could begin in 2012 with completion in 2013.

Transit and Bicycle Performance Measures: The analysis of transit performance was limited to one performance measure – Available Daily/Peak Hour Capacity (%). This measure compares ridership with capacity on a daily and peak hour basis. The intent was to indicate how well transit was performing relative to ridership increases over time. However, the usefulness of this measure has proven questionable, given the likelihood of route changes and limited data availability. In addition, the 2009 CSMP did not include bicycle performance measures, though, committed to working with stakeholders to establish them. In an effort to establish additional performance measures for transit and bikes, we will continue to work with our local and regional partners to develop useful performance measures for alternative transportation modes.

Operational Improvement Projects: The SR 65 CSMP recognizes that with the construction of California's SHS is virtually complete in the Sacramento region, major emphasis has largely shifted to focused capacity expansions, system maintenance, and operational improvements such as ramp meters, ramp widening, auxiliary lanes, and ramp merge extensions. The following operational needs have been identified as key to optimizing system performance and will be included in our 3 Year PSR Program in anticipation of the pursuit of regional discretionary funding programs:

- Ramp meters for one or both directions at Stanford Ranch Road, Pleasant Grove Blvd, Sunset Avenue, Whitney Blvd, and Twelve Bridges Drive.
- Northbound and southbound median HOV lanes from Nicolaus Road to the I-80 Junction
- Northbound and southbound auxiliary lanes between all interchanges from the I-80 Junction to Blue Oaks Drive

Intelligent Transportation Systems: Intelligent Transportation Systems (ITS) are a key system management component. ITS provides an opportunity to improve mobility through the corridor by using lower cost strategies to improve overall efficiency without adding capacity. An array of technologies are used to detect and manage transportation activities in the corridor such as Closed Circuit Television System (CCTV), Changeable Message Signs (CMS), Extinguishable Message Signs (EMS), Electronic Tag Reader (ETR), Highway Advisory Radio (HAR), Ramp Meters (RMS), Roadside Weather Information System (RWIS), and Traffic Monitoring Stations (TMS). These elements are typically spaced every ½ mile in the urbanized areas of District 3.

The use of the ITS tools in conjunction with the Regional Transportation Management Center improve efficiency by collecting and disseminating traffic information to the travelling public. This helps reduce delay and improve safety within the corridor. The May 2009 CSMP identified a variety of system management strategies and elements currently being used on the managed network and their locations. The following table shows the ITS needs within the SR 65 corridor:

Element	County/PM	Location
CCTV	Pla/5.90	Stanford/Galleria/Harding
CCTV	Pla/8.20	WB Blue Oaks Blvd
CCTV	Pla/9.60	Sunset Avenue
CCTV	Pla/10.60	Whitney Blvd
CCTV	Pla/12.00	Twelve Bridges
RMS	Pla/5.70	SB Stanford/Galleria/Harding
RMS	Pla/5.90	NB Stanford/Galleria/Harding
RMS	Pla/6.15	NB Stanford Ranch Road
RMS	Pla/10.50	SB Whitney Blvd
RMS	Pla/10.60	NB Whitney Blvd

The following ITS projects were proposed for inclusion in the 10 Year State Highway Operations and Protection Program (SHOPP). However, it is unlikely that the majority of these projects will be programmed through the SHOPP given limited resources and other higher priority basic maintenance needs. As such, Caltrans will seek funding for these projects through all available means, including regional discretionary funding programs. These are listed in priority order.

Priority	County/PM	Description	Cost (\$1,000)
1	Various	RMS and TMS Upgrade	1,700
2	Various	CCTV Camera System Upgrade	1,400
3	Various	RWIS Upgrade	1,000
4	Various	HAR System Upgrade	1,000
5	Various	Ramp Meter – Priority 1	4,000
6	Various	Ramp Meter – Priority 2	4,000
7	Various	Travel Time Infrastructure	1,800
8	Various	CMS Phase II	6,750
9	Various	CCTV Cameras – Outlying Area	1,200

Micro-simulation Modeling: Since the beginning of the development of the CSMP's, Caltrans has been working in parallel with a consultant team to develop micro-simulation traffic models of select CMSP corridors so that we can better understand at a detailed level how specific operational strategies and capital projects will impact traffic flow. The models include the freeway system, ramps, interchanges and key local roads. For the SR 65 corridor, the models cover SR 65 from I-80 to just north of Sheridan where the Lincoln Bypass will connect with the existing SR 65. The models will enable Caltrans and its regional partners to test an array of operational and capital project scenarios, to identify groups of strategies and projects for simultaneous or phased implementation, and to prioritize the order of implementation. The models will also enable us to forecast what will happen after projects are implemented, whether new problems will be created, and if so, how to avoid or mitigate those new problems before they occur. The models are nearing completion and are expected to be available for use in Fall 2010. Comprehensive reports for each model are being drafted and will also be available in Fall 2010