

**Background Report**  
**Senate Transportation and Housing Committee**  
**Informational Hearing**  
**Review of the California Transportation Commission's**  
**2011 Statewide Transportation Needs Study**  
**January 24, 2012**

Today's hearing focuses on the recently published *2011 Statewide Transportation System Needs Assessment*. The *Needs Assessment* is a ten-year estimate of the investment required in all modes of transportation in the state. The California Transportation Commission (CTC) commissioned the study, which was prepared by the state's metropolitan planning organizations (MPO), regional transportation planning agencies, CTC staff, Department of Transportation (Caltrans), and representatives of other transportation organizations. The *Needs Assessment* identifies the needs for all modes of transportation, including state highways, local streets and roads, public mass transportation, bicycle and pedestrian facilities, seaports, airports, land ports, and intermodal facilities. The last needs study was done ten years ago. This current study is more structured and incorporates performance measures to provide a strong framework for understanding the benefits of the investing in the program of projects identified in its *Needs Assessment*.

This background report provides a summary of the methodology used to determine needs, describes the goal of the assessment, summarizes the estimated ten-year transportation investments, reviews the estimated revenue shortfall, summarizes the performance measures to be used in the projects, and concludes with a summary of the *Needs Assessment's* recommendations.

**Methodology**

The methodology for the needs study relied upon a survey of the MPOs and regional transportation planning agencies throughout the state. CTC asked each agency to identify system expansion projects, system management projects, and system preservation projects that it could complete over the next ten years. For the most part, projects were from each agency's fiscally constrained project list. "Fiscally constrained" refers to the requirement the regional transportation investment programs be based on the likely amount of transportation funds that will be available to a region over the period of a regional transportation plan. This constraint is intended to avoid the creation of a baseless wish list plan. In addition to the regional plans, the drafters of the statewide assessment consulted needs findings of studies prepared by the California State Association of Counties and the League of Cities, and the California Transit Association.

## **Goal of the *Needs Assessment***

The *Needs Assessment* stipulates its goal as follows:

The overall goal of the updated *Needs Assessment* is to develop a coordinated list of transportation projects and programs, and to identify related funding requirements that will allow local, state, and regional transportation agencies in California to present a consistent message when communicating statewide needs for preserving, expanding, maintaining, and operating the state's transportation system.

## **Estimated Ten-Year Transportation Needs**

The ten-year estimate of transportation needs is \$538 billion. Of this amount, \$341 billion is for preservation and maintenance of the transportation system, \$13 billion is for system management, and \$183 is for new facilities. Of the total needs, 64 percent is for preservation and maintenance and only 34 percent is for new facilities or capacity. Eight-seven percent of the needs are for the "big three": state highways, local streets and roads, and public transit.

The needs of the "big three" are as follows:

- The needs of the state highway system are nearly equally distributed between system maintenance and preservation with 48 percent of the need and new facilities with 47 percent. System management claims 5 percent of the needs.
- The needs of the state's public transit operators are distributed between maintenance and preservation, which are estimated to be 82 percent of the transit need, and new facilities claiming 18 percent of the need.
- The needs of local governments are distributed between 80 percent for maintenance and preservation, 18 percent for system expansion, with 2 percent remaining for system management needs.

Exhibit 1 displays a summary of needs.

**Exhibit 1**

**Ten Year Summary of Transportation System Needs  
(\$s in billions)**

	<b>Maintenance/ Preservation</b>	<b>System Mgt.</b>	<b>System Expansion</b>	<b>Total by Category</b>	<b>Percent</b>
State Highways	\$79.7	\$7.5	\$78.7	\$165.90	30.8
Local Roads	102.9	2.3	24.2	26.40	24.1
Public Transit	142.4	1.2	30.9	174.50	32.4
Intercity Rail	0.2	0.1	6.1	6.36	1.2
Bike & Pedestrian		0.6	3.9	4.48	0.8
Freight Rail	0.1	0.4	21.9	22.35	4.2
Seaports	4.6	0.4	7.1	12.10	2.3
Airports	10.4	1.0	4.5	15.85	2.9
Land Ports	0.9	0.0		0.97	0.2
Intermodal			5.9	5.90	1.1
<b>Total Needs</b>	<b>\$341.2</b>	<b>\$13.4</b>	<b>\$183.2</b>	<b>\$537.82</b>	<b>100.0%</b>

Source: CTC

**Estimated Revenue Shortfall—\$295 Billion**

The *Needs Assessment* estimates that \$242 billion in revenue will be available over the next ten years in state, local, and federal funds for the California’s transportation system. This funds only 45 percent of the \$538 billion in needs, leaving a ten-year shortfall of \$295 billion. As can be seen in Exhibit 2, 65 percent of all revenue is forecasted to be from local sources. The local sources include the ¼ percent statewide local sales tax provided by the Transportation Development Act, the gas tax subventions to

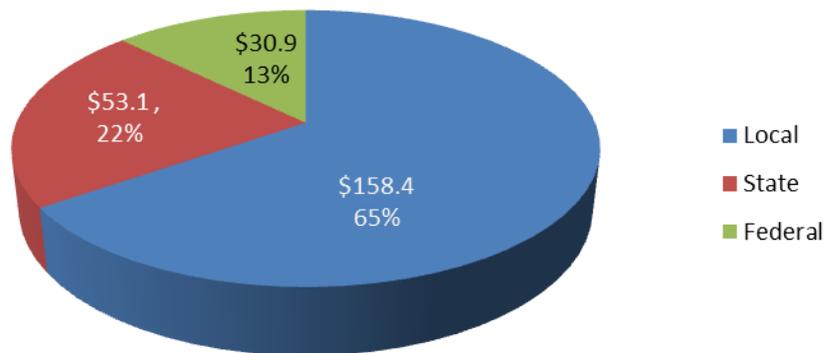
cities and counties, and the voter-approved, local transportation sales tax which are levied in eighteen counties. Appendix 1 has a detailed ten-year cost and revenue summary.

State funds constitute about 22 percent of the revenue and are derived from the the excise tax on gasoline and diesel fuel plus weight fees. In addition, state revenue from time- to- time may include voter-approved bond funds.

Federal transportation funds are in limbo. The current federal transportation funding law expired in 2009, but through a series of continuing resolutions Congress has extended that expiration. The current extension is set to expire on March 31, 2012. The Senate version of reauthorization is a two- year, \$109 billion bill. The current version has a \$12 billion shortfall. The House is seeking to draft a six-year bill and fund it from royalties generated from an expansion of offshore oil and gas exploration.

### Exhibit 2

**Ten Year Estimate of Transportation Funds by Sources  
(\$s in billions)**



### Performance Analysis

Drawing upon research developed by Caltrans, the *Needs Assessment* undertook a performance analysis. The Caltrans methodology endeavored to link transportation to Smart Mobility. This is the first linkage of a systematic performance analysis to a statewide *Needs Assessment*. Exhibit 3 identifies the principle Smart Mobility performance measures. The measures are intended to show the relationship between transportation investment decisions and the economic, social, and environmental consequences of the investments. Measures of this sort will support the sustainable communities strategy in the regional transportation plans, which SB 375 (Steinberg), Chapter 728, Statutes of 2008, require.

Exhibit 3 summarizes the performance measures.

**Exhibit 3**

**Statewide Transportation Needs Assessment  
Selected Performance Measures**

<b>Smart Mobility 2010 Goals</b>	<b>Categories</b>	<b>Performance Measures</b>
Robust Economy	Employment	Increase in jobs
Robust Economy	Economic Output	Value added to Gross State Product
Reliable Mobility	Multimodal Travel Mobility	Change in average per-trip travel time
Reliable Mobility	Asset Condition	Conformance with accepted standards for maintaining system in state of good repair
Environmental Stewardship	Climate and Energy Conservation	Systemwide vehicle miles traveled (VMT)
Environmental Stewardship	Air Quality/Public Health	Criteria Pollutant emissions per capita
Social Equity	Equitable Distribution of Access and Mobility	Comparison of outcomes for low income and minority (LIM) and non-LIM communities
Health and Safety	Multimodal Safety	Number of injuries and fatalities per capita from all collisions (including bicycle and pedestrian)
Health and Safety	Pedestrian and Bicycle Mode Share	Percent of total trips per capita taken by biking or walking
Location Efficiency	Support for Sustainable Growth	Percent of total dwelling units in transit priority areas
Location Efficiency	Transit Mode share	Percent of total trips per capita taken by transit

Source: CTC

## **Needs Assessment Policy Recommendations**

According to the CTC, the *Needs Assessment* provides a set of policy recommendations that are “designed to help California make the transportation system improvements that it needs to meet its ‘smart mobility’ goals.” The recommendations include the following:

- Ensure the long-term stability and sustainability of highways and transit funding
- Strengthen the national commitment to transportation state of good repair
- Establish goods movement as a national economic priority
- Create a program focused on metropolitan mobility
- Improve mobility between California’s regions and between California and neighboring states and countries
- Strengthen the federal commitment to safety and security particularly with respect to rural roads and access
- Strengthen comprehensive environmental stewardship
- Ensure that social equity goals are being met
- Accelerate project delivery

## **Conclusion**

The *Needs Assessment* is a substantial improvement over past efforts and stands as a compendium of regional investment requirements. The investments have been vetted through public hearings and have been subjected to regional performance analysis. What the *Needs Assessment* lacks is a set of priority investments based on different levels of funding. If the \$295 billion shortfall is only partially met, for example at the 50 percent level, the *Needs Assessment* does not provide guidance as to the mix of projects that would be contained in an investment program in which the shortfall is partially funded. The committee may wish to discuss with the CTC commissioners and other witnesses how the programs and projects in the *Needs Assessment* could be priorities at different investment levels.

**Appendix 1**

	A. Preservation - Maintenance	B. Preservation - Maintenance	C. Preservation Subtotal	D. System Management	E. System Expansion	F. Subtotal (D + E)	Total
Costs:							
Highways	\$70,380,000	\$9,280,000	\$79,660,000	\$7,544,777	\$78,740,144	\$86,284,921	\$165,944,921
Local Roads	NA	NA	\$102,900,000	\$2,294,798	\$24,155,968	\$26,450,766	\$129,350,766
Public Transit	\$32,675,000	\$109,682,000	\$142,357,000	\$1,270,308	\$30,903,798	\$32,174,106	\$174,531,106
Inter-city Rail	NA	NA	\$170,000	\$94,045	\$6,143,864	\$6,237,909	\$6,407,909
Freight Rail	\$64,420	\$0	\$64,420	\$387,332	\$21,924,017	\$22,311,349	\$22,375,769
Seaports	\$4,600,000	\$0	\$4,600,000	\$402,550	\$7,097,466	\$7,500,016	\$12,100,016
Airports	\$10,420,000	\$0	\$10,420,000	\$953,892	\$4,553,791	\$5,507,683	\$15,927,683
Land Ports	NA	NA	\$935,000	\$0	\$33,798	\$33,798	\$968,798
Intermodal Facilities	NA	NA	\$0	\$0	\$5,946,876	\$5,946,876	\$5,946,876
Bike/Ped	NA	NA	\$0	\$577,816	\$3,935,565	\$4,513,381	\$4,513,381
Total Costs*			\$341,106,420	\$13,525,518	\$183,435,287	\$196,960,805	\$538,067,225
Revenues:							
Federal	NA	NA	NA	NA	NA	NA	\$30,900,000
State	NA	NA	NA	NA	NA	NA	\$53,100,000
Regional/Local	NA	NA	NA	NA	NA	NA	\$158,400,000
Total Revenues			\$147,707,000			\$94,693,000	\$295,667,225
Net Revenues			(\$193,399,420)			(\$102,267,805)	(\$295,667,225)
% Funded			43.30%			48.08%	45.05%

Source: CTC

NOTE: Amounts reported in \$ thousands (\$000's)

\*Includes \$3.81 billion in SHOPP Mobility Program costs under (D) System Management