Financing Our Transportation



#### Introduction

In the past year, transportation has been a central issue in the discussions on the condition of the state's infrastructure. About 60 percent of Californians view traffic congestion as a major problem. This dissatisfaction is probably because the state's transportation capacity has not kept pace with growth in population and travel demand. Even with the funding provided by the Traffic Congestion Relief Act (2000) and Proposition 42 (2002), many feel that the state's transportation system suffers from underinvestment. In November 2006, voters approved two measures to increase the state's investment in transportation: Proposition 1A to enhance the reliability of certain funds and Proposition 1B to provide a one-time infusion of \$20 billion in bond revenues for transportation.

These measures will help to improve the state's transportation infrastructure. Nonetheless, issues remain regarding how the state can meet transportation demands on an ongoing basis. For instance, the state's highways and roads require increasing maintenance and rehabilitation. Additionally, there are emerging issues, such as goods movement and transportation security, which the state is just beginning to address.

What is being done to address these problems? How should the state ensure Proposition 1B funds effectively address congestion problems and provide mobility to facilitate the state's growing economy? What other fund sources are available for transportation? How are these funds distributed? This publication seeks to answer these and other related questions in an effort to help those interested in finding solutions to our transportation challenges.

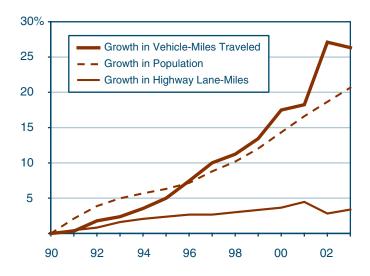
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## Traveling in California: Trends and Mobility

#### **Travel Increasing Steadily...**



- > Demand for Highway Travel Outpaced Population Growth. From 1990 to 2003, California's population increased by almost 21 percent. Meanwhile, travel on the state highway system as measured by vehicle-miles traveled (VMT) increased by 26 percent.
- ➤ Population Growth Concentrated in Inland Areas. Population growth has been uneven throughout the state. Between 1990 and 2003, population grew most in the following regions: Sacramento (50 percent), Bakersfield (47 percent), and Riverside-San Bernardino (37 percent).
- > Inland California Also Sees Largest Gains in Total Driving. Beyond the state highway system, demand for travel on local roads also increased between 1990 and 2003 with the largest gains in noncoastal regions. The regions with the largest increases between 1990 and 2003 included: Fresno (61 percent), Bakersfield (51 percent), and Riverside-San Bernardino (45 percent).

## ... But Only Marginal Growth in State Highway Capacity

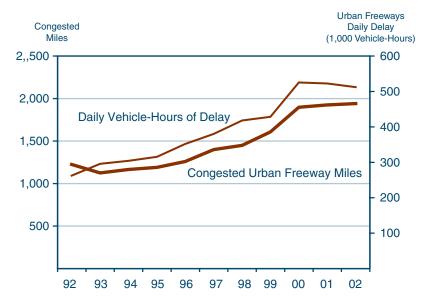
- ➤ Highway Lane-Miles Increased Minimally. Between 1990 and 2003, highway lane-miles only increased by about 3 percent. Today, California has about 50,500 lane-miles of highways, maintained and operated by the California Department of Transportation (Caltrans). An additional 327,000 miles of local roads are maintained and operated by local cities and counties.
- > Growth in Highway Capacity Uneven Across State. The most significant expansion in highway capacity over this period occurred in Orange, Los Angeles and Ventura Counties, and the Bay Area. Capacity increases were much less noticeable (or even nonexistent) in other parts of the state.
- ➤ Carpool Lane-Miles Increased Considerably. In 2000, the state highway system included 925 miles of high occupancy vehicle (HOV) lanes. As of 2005, California's highway system included 1,268 miles of HOV lanes, a 37 percent increase. In most cases, use of HOV lanes is restricted to vehicles with two or more occupants in order to encourage carpooling. In some cases, three or more occupants are required for vehicles using HOV lanes.
- ➤ Toll Roads Remain a Small Fraction of Highway System Capacity. There are about 120 miles of tolled transportation facilities in California. This includes eight toll bridges in the Bay Area (seven are state owned) and about 85 miles of toll roads in San Diego and Orange Counties. Some of these facilities offer variable tolls which set toll prices by level of congestion and time of day.

## California's Roads More Crowded Than Other States

Rank (2003)	Urban Area	Miles Driven Per Highway Lane-Mile
1	Los Angeles-Long Beach-Santa Ana, CA	23,248
2	Riverside-San Bernardino, CA	21,429
3	San Francisco-Oakland, CA	20,242
4	Chicago, IL-IN	19,516
5	San Diego, CA	19,460
6	Sacramento, CA	19,303
7	Atlanta, GA	19,077
8	Miami, FL	19,057
9	Houston, TX	18,970
10	Oxnard-Ventura, CA	18,873

- > Urban Roads Are Heavily Used. California regions lead the nation with the most crowded roads, measured in terms of the number of miles driven on each lane-mile of highway. Los Angeles tops the list, with Riverside-San Bernardino and San Francisco-Oakland placing second and third.
- > Trends of Road Usage in Urban Areas. While Los Angeles has the nation's most crowded roads, other California regions are catching up. Between 1990 and 2003, miles driven per highway lane-mile increased considerably in Sacramento (35 percent), Riverside-San Bernardino (28 percent), and Oxnard-Ventura (27 percent).
- > Supply Has Not Kept Pace With Demand. One reason why California's roads are more crowded than those in the rest of the country is that the state's transportation infrastructure has not expanded enough to keep pace with growth in travel demand (measured in VMT).

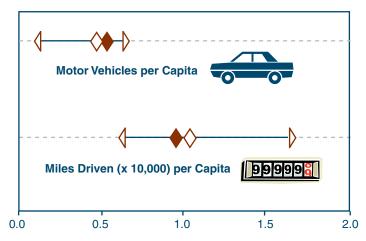
## Congestion Paid for in Delay, Fuel, and Excess Emissions



- ➤ Hours of Delay Have Risen. Because of the imbalance between road supply and travel demand, delay on urban freeways has nearly doubled from about 262,000 vehicle-hours per day in 1992 to 512,000 vehicle-hours per day in 2002.
- ➤ Increased Congestion. In 2002, 43 percent of the state's urban freeways were congested. Congestion is defined as occurring when vehicles are traveling at 35 miles per hour or less during peak commute periods on a typical work day. This is up from 32 percent in 1992.
- > Costs of Congestion. Congestion on urban freeways costs Californians at least \$16 million per day (or \$5.9 billion per year) in wasted time and excess fuel.
- > Environmental Impacts. This delay also has negative environmental consequences, resulting in an estimated 512 additional tons of emissions per day.

#### **Are Californians Really in Love With Their Cars?**

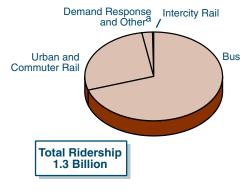




- ➤ While the conventional wisdom is that Californians are infatuated with their automobiles, some data suggest that this is not the case.
- ➤ For instance, when compared to the average American, Californians tend to drive fewer miles.
- Californians do have slightly more vehicles than the average American.

#### Bus Riders Make Up the Bulk of Transit Ridership

2003-04



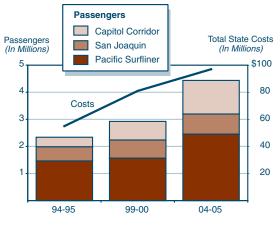
<sup>a</sup>Includes trips made on paratransit ferries and other forms of transit.

- ➤ Transit Ridership.
  In 2003-04, almost
  1.3 billion passenger trips were made on various modes of transit, including bus, rail, and ferry.
- Most Transit Patrons Ride the Bus.
  About 70 percent of these trips were on buses. Most of the remaining trips (27 percent) were made on commuter

and urban (light) rail systems. Intercity rail, paratransit, and ferry systems carried less than 3 percent of all trips.

- ➤ *Increasing Number of Trips by Train.* Since the late 1990s, the number of transit trips made by rail has significantly increased. In 2003-04, about 347 million trips were made by train compared to only 287 million in 1997-98.
- > Bus Ridership Down. In contrast to rail, the total number of annual bus trips in California has actually declined slightly. In 2003-04, 881 million trips were made on buses, down from 889 million in 1997-98.
- While Auto Travel Grows, Transit Ridership Stagnates. While auto travel on state highways has increased by 26 percent since 1990, transit (bus and rail) ridership overall has experienced almost no growth. Again, this is due to the slight drop in bus trips (the mode representing the bulk of transit ridership), offset by growth in other transit modes, such as intercity, commuter, and urban rail which have experienced considerable ridership growth.

#### Intercity Rail Ridership Grows, but So Do State's Costs

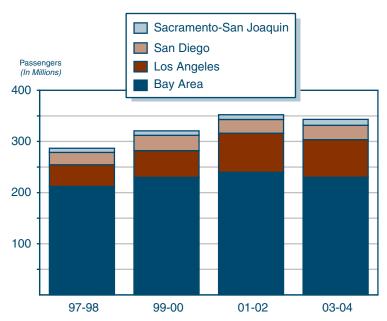


- The state's passenger rail system includes intercity rail that serves trips between regions in California and to other parts of the country.
- ➤ Currently, Amtrak operates all intercity rail

service in the state. The state funds service in three corridors:

- *Capitol Corridor* serving San Jose, Oakland, Davis, Sacramento, and Auburn.
- *Pacific Surfliner* serving San Diego, Los Angeles, Santa Barbara, and San Luis Obispo.
- San Joaquin serving Oakland, Sacramento, Fresno, and Bakersfield.
- ➤ Between 1994-95 and 2004-05, ridership on the three corridors has nearly doubled from 2.3 million to 4.4 million annual passengers, an average annual rate of 6.6 percent. The Capitol Corridor has experienced the largest increase in ridership, which resulted mainly from the expansion of service in the number of daily round-trip trains available to riders.
- > State costs (funded mainly by the Public Transportation Account) to operate and maintain intercity service nearly doubled over that period from \$55 million to almost \$100 million annually, an average annual growth rate of 5.8 percent.

## Urban and Commuter Rail Ridership Concentrated in Bay Area

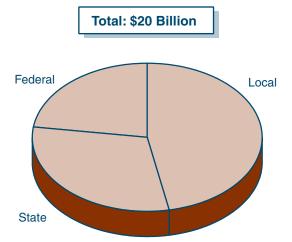


- ➤ Urban and commuter rail are the components of the state's passenger rail system that primarily serve local and regional transportation needs.
- These services are generally planned and administered by local or regional transportation agencies, with funding provided by a combination of local, state, and federal sources.
- The bulk of urban and commuter rail ridership has historically been in the Bay Area. However, most of the recent growth in rail ridership has been outside of the Bay Area.
- ➤ Ridership gains since the late 1990s on rail systems in the Los Angeles (73 percent) and Sacramento-San Joaquin (42 percent) regions are at least partially attributable to major system expansions over that period.

## Transportation Revenues and Expenditures

#### Local Funds Account for Almost One-Half of Ongoing Funds for Transportation

2005-06



Transportation in California is funded by a variety of state, local, and federal fund sources. Together, these revenues provide roughly \$20 billion a year for transportation purposes.

#### State Funds

- Ongoing state funds consist primarily of the state excise tax on gasoline and diesel fuels, weight fees, as well as most of the state sales tax on motor fuels.
- ➤ Additional state funding sources can include bond revenues and appropriations from the General Fund.
- ➤ In 2005-06, state revenues provided about 30 percent (\$6.1 billion) of total funds for transportation.

#### Local Funds

- ➤ Local funds for transportation are derived from a variety of revenue sources. These sources include (but are not limited to) a statewide 0.25 percent tax on the sale of all goods and services, additional (optional) local sales taxes, property taxes, and transit fares.
- ➤ In 2005-06, we estimate that local funds constituted 47 percent (\$9.4 billion) of all revenues for transportation.

#### Federal Funds

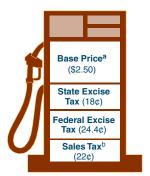
- These funds are generally apportioned to California based on the state's contribution of federal excise taxes on motor fuels to the federal Highway Trust Fund.
- ➤ In 2005-06, California received about \$4.6 billion in federal transportation funds. This accounted for 23 percent of total funding to the state's transportation system.

#### Price of Motor Fuel Includes Taxes for Transportation

**Gallon of Gasoline** 



**Gallon of Diesel Fuel** 



Pump Price: \$3.09 Per Gallon Pump Price: \$3.14 Per Gallon

- ➤ A large portion of transportation revenues in California are collected at the pump, with Californians paying the following taxes:
  - 18 cents in *state* tax for each gallon of gasoline and diesel fuel (generally referred to as the "gas" tax).
  - 18.4 cents in *federal* tax for each gallon of gasoline.
  - 24.4 cents in *federal* tax for each gallon of diesel fuel.
  - 7.25 percent uniform *state* and *local* sales tax, plus optional local sales taxes for transportation or other purposes varying by county. (The statewide average sales tax level is approximately 7.9 percent once local optional taxes are considered.)
- The state also collects weight fees on commercial vehicles (trucks) based on either the truck's unladen weight (for trucks lighter than 10,000 pounds) or its gross weight (for trucks in excess of 10,000 pounds).

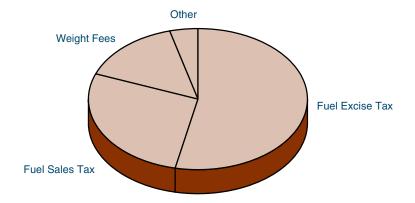
<sup>&</sup>lt;sup>a</sup>Assumes base price of \$2.50 for illustration purposes.

<sup>&</sup>lt;sup>b</sup>Assumes average sales tax of 7.9%.

## **State Transportation Funding Comes Primarily From Fuel Taxes...**

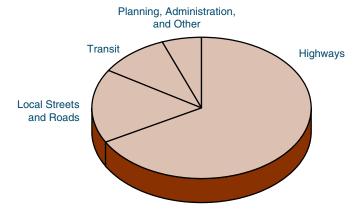
2005-06

Revenues: \$6.1 Billion



#### ... And Goes Primarily for Highways

**Expenditures: \$6.6 Billion**<sup>a</sup>



<sup>&</sup>lt;sup>a</sup>Includes expenditures of carryover balances from the prior year.

#### **Key State Transportation Funding Accounts**

#### State Highway Account (SHA)

- ➤ Revenues—state gas tax and weight fees.
- Expenditures—generally used for highway maintenance and operation, highway rehabilitation and reconstruction, and Caltrans administration. Can also be used for capital improvements (highways and certain transit facilities).

#### Transportation Investment Fund (TIF)

- > Revenues—state sales tax on gasoline.
- Expenditures—provides funds directly for local road improvements, as well as for capital projects (highway and transit) selected by regionals and Caltrans in the State Transportation Improvement Program. Also funds traffic congestion relief projects and transit indirectly through transfers to the TCRF and PTA (see below).

#### Traffic Congestion Relief Fund (TCRF)

- ➤ Revenues—state sales tax on gasoline (from TIF).
- Expenditures—provides funds for 141 statutorily specified transportation projects.

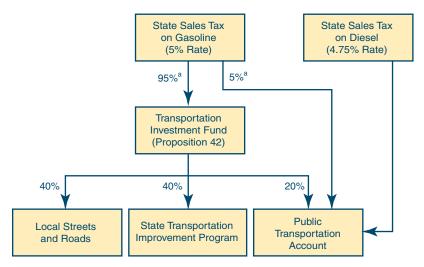
#### Public Transportation Account (PTA)

- ➤ Revenues—state sales tax on diesel, and a portion of state sales tax on gasoline including:
  - Sales tax on 9 cents per gallon of gasoline (referred to as Proposition 111 revenue).
  - Net revenue from 4.75 percent sales tax on gasoline in excess of 0.25 percent sales tax on all other goods, over and above the Proposition 111 revenues (referred to as spillover).
  - A portion of state gasoline sales tax revenue from TIF.
- Expenditures—provides funds for transit capital improvement, as well as operating assistance for local transit systems. Also funds capital improvement and ongoing support of the state's intercity rail program. Funds are restricted to expenditures for transit and planning only.

#### **Use of Gas Tax and Weight Fees Is Restricted**

- The State Constitution (Article XIX) restricts how state gas tax and weight fee revenues are spent. These monies may only be used to plan, construct, maintain, and operate public streets and highways, as well as to plan, construct, and maintain transit/rail tracks and related facilities (such as stations). These revenues *cannot* be used to operate transit systems or to purchase rolling stock (trains, buses, or ferries).
- ➤ In 2005-06, these sources provided about \$4.3 billion, including \$3.4 billion from the gas tax. A portion of gas tax revenues—roughly \$1.1 billion in 2005-06—is allocated to cities and counties to plan, construct, and maintain local streets and roads.
- ➤ The remaining \$3.2 billion state gas tax and weight fee revenues, along with federal transportation funds, finance various state highway purposes. Together, these revenues totaled about \$6 billion in 2005-06. Current law sets priorities for expending these funds as follows:
  - Highway maintenance and operations, and local assistance.
  - Highway rehabilitation and safety projects in the State Highway Operations and Protection Program.
  - Capital improvements (including capacity expansion projects such as additional highway lanes and new transit facilities) in the State Transportation Improvement Program (STIP).

## Sales Tax on Motor Fuel Used for Broad Range of Transportation Purposes



<sup>&</sup>lt;sup>a</sup>Percentage represents average share of gasoline sales tax revenues in recent years. Actual distribution of gasoline sales tax revenues (between the TIF and PTA) varies from year to year. Amount includes Proposition 111 revenues, but not spillover.

Statewide, there is a uniform sales tax rate of 7.25 percent on most purchases. Five percent of that rate goes to the state, with the remainder dedicated to local uses. (Due to additional local optional taxes, the average sales tax rate in California is closer to 7.9 percent.)

#### Sales Tax on Gasoline

➤ Before 2002, most revenues generated from the sales tax on gasoline were deposited into the General Fund and used for various nontransportation purposes. Only a small share of state gasoline sales tax revenues (spillover and Proposition 111 revenues) was used for transit purposes.

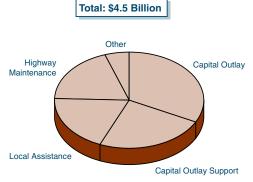
- ➤ Since 2002, Proposition 42 constitutionally requires that the portion of gasoline sales tax revenues that previously went to the General Fund be transferred to transportation purposes. The funds can be used for a broad range of projects—highways, streets and roads, and transit (including rolling stock). After 2007-08, 40 percent of these funds will be used for STIP projects, 40 percent will be used for local street and road improvements, and 20 percent will go for transit purposes. (Through 2007-08, a portion of the annual Proposition 42 transfer first will be used to fund projects in the Traffic Congestion Relief Program.)
  - Proposition 42 allowed the transfer to be suspended under certain conditions. This occurred in 2003-04 and 2004-05. Proposition 1A, passed in November 2006, limits the conditions under which suspensions may occur.
- ➤ In 2005-06, Proposition 42 provided almost \$1.4 billion for transportation. Another \$67 million in gasoline sales tax revenues went to the PTA for transit purposes. In total, gasoline sales tax revenues accounted for 23 percent of state funds for transportation in 2005-06.

#### Sales Tax on Diesel

Most of the revenues from the state's portion of the sales tax on diesel fuel (4.75 percent rate) go to the PTA for transit purposes. This revenue, about \$271 million in 2005-06, accounts for about 4 percent of state funds for transportation. Revenues from the remaining 0.25 percent rate are retained in the General Fund.

#### Most Highway Expenditures Are for Capital Projects

2005-06



Most state highway program expenditures are for capital improvement on the state and local road system, as well as to fund planning and engineering activities supporting these improvements.

> Capital improvements—one-third of

Caltrans' highway expenditures, funds highway and bridge rehabilitation, expansion, right-of-way acquisition, and safety improvements.

- Capital project support—24 percent of highway expenditures, includes project design, engineering, and environmental review activities.
- ➤ Local assistance—19 percent of highway expenditures, primarily federal funds, the state passes through to local agencies, which finance highway and roadway improvements, bridge replacement and seismic retrofit, as well as transit and nonmotorized (bicycle and pedestrian) facility enhancements.

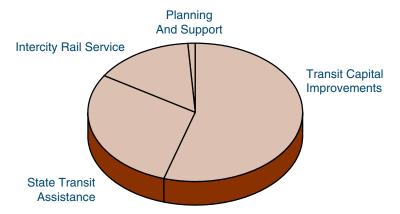
Remaining funds (one-quarter) are for noncapital uses:

- ➤ *Highway maintenance*—about 19 percent of spending, funds roadway repairs, landscaping, and snow and litter removal.
- > Other support activities make up the remaining 5 percent of highway expenditures. These include spending for traffic management centers, new technology research, legal costs, costs related to scheduling and tracking projects, as well as various Caltrans administrative expenses.

## State Transit Expenditures Primarily for Local Assistance

2005-06

Total: \$686 Million



Most state transit expenditures provide assistance to local and regional agencies to make capital improvements to rail and bus equipment and facilities, and to support transit operations.

- > Transit capital improvements account for over one-half of these expenditures (55 percent). These expenditures are in the form of project grants to local jurisdictions.
- > State Transit Assistance constitutes about 29 percent of total state expenditures for transit. These funds are distributed by formula statewide to transit operators to support the operations and maintenance of transit systems, and for capital acquisition purposes.
- > Support for intercity passenger rail service accounts for about 15 percent of total state transit expenditures.
- > Transit planning and administrative support make up 1 percent of state expenditures for transit purposes.

100

\$19,925

## **State Bond Funds Will Provide Substantial One-Time Infusion to Transportation**

Proposition 1B Uses of Bond Funds	
(In Millions)	
	Amount
Congestion Reductions, Highway and Local Road Improvements	\$11,250
Reduce congestion on state highways and major access routes	\$4,500
Increase highways, roads, and transit capacity	2,000
Improve local roads capacity, safety, and operations	2,000
Enhance State Route 99 capacity, safety, and operations	1,000
Provide grants for locally funded transportation projects	1,000
Rehabilitate and improve operation of highways and roads	750
Transit	\$4,000
Improve local rail and transit capital	\$3,600
Improve intercity rail capital	400
Goods Movement and Air Quality	\$3,200
Improve movement of goods on highways, rail, and in ports	\$2,000
Reduce emissions from goods movement activities	1,000
Retrofit and replace school buses	200
Safety and Security	\$1,475
Improve transit system security and disaster response	\$1,000
Improve railroad crossing safety	250
Seismically retrofit local bridges and overpasses	125

Improve security and disaster planning in ports, harbors, and

ferry facilities

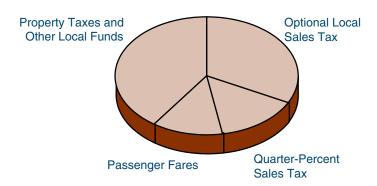
Total

- ➤ In November 2006, voters approved Proposition 1B, the *Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006.* This act allows the state to sell \$20 billion in general obligation bonds to fund transportation projects to relieve congestion, improve air quality, and enhance the safety and security of the state's transportation system.
- These bond funds are one-time in nature. However, they constitute a major infusion of state funds into the state's transportation system that will be spent over multiple years.

## About One-Half of Local Transportation Revenues Comes From Sales Tax

2005-06

Total: \$9.4 Billion



Collectively, local revenues generated an estimated \$9.4 billion from various sources in 2005-06 for transportation.

- > Optional local sales taxes represent an important source of local transportation funding, generating approximately \$3.1 billion annually. These revenues fund improvements to highways, local streets and roads, and transit systems.
- ➤ Quarter-percent tax on all sales provided almost \$1.4 billion in 2005-06. The funds are generated under the Transportation Development Act of 1971 and are deposited into the Local Transportation Fund. They provide a major source of support for transit operating assistance and capital projects.
- > *Transit fares* provided about \$1.2 billion to local transit systems in 2005-06.
- > Property tax and other local funds collectively provided an estimated \$3.8 billion in 2005-06. These funds include property taxes, developer fees, bond proceeds, as well as fines and forfeitures. These funds are spent mainly on maintenance and improvements of local streets and roads.

#### Optional Local Sales Taxes Contribute Significant Transportation Funding

Agency	Tax Rate (%)	Year Established	Year Expires	Annual Revenue (Millions)
Permanent Measur	es			
BART <sup>a</sup>	0.5%	1970	None	\$238
LACMTA <sup>b</sup>	1.0	1981 and 1991	None	1,300
San Mateo County	0.5	1982	None	61
Santa Clara VTA <sup>C</sup> Santa Cruz	0.5	1976	None	150
Metropolitan	0.5	1979	None	16
Subtotal				(\$1,765)
Fixed-Term Measur	es			
Alameda	0.5%	2002	2022	\$106
Contra Costa	0.5	1989	2009	66
Fresno	0.5	1987	2007	46
Imperial	0.5	1990	2010	8
Marin	0.5	2005	2025	20
Orange	0.5	1991	2011	226
Riverside	0.5	1989	2009	104
Sacramento	0.5	1989	2009	93
San Bernardino	0.5	1990	2010	104
San Diego	0.5	1988	2008	213
San Francisco	0.5	2004	2034	66
San Joaquin	0.5	1991	2011	38
San Mateo	0.5	1989	2009	61
Santa Barbara	0.5	1990	2010	29
Santa Clara	0.5	2006	2036	150
Sonoma	0.25	2005	2025	23
Subtotal				(\$1,353)
Total				\$3,118

a Bay Area Rapid Transit.

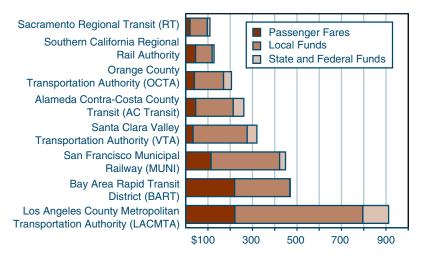
b Los Angeles County Metropolitan Transportation Authority.

<sup>&</sup>lt;sup>C</sup> Valley Transportation Authority.

- > History of Local Optional Sales Taxes. Optional local sales taxes for transportation originated in 1970, when the Legislature authorized several counties served by the BART District to impose a regional sales tax. Since 1987, state law has authorized counties to impose special sales taxes for transportation purposes, subject to voter approval. Currently, a two-thirds vote is required for approval of any local optional sales tax for transportation purposes.
- > Current Use. In most cases, counties proposing to impose local option sales taxes must provide voters with an expenditure plan that specifies how the funds would be used. As of 2006, 17 counties have optional local sales taxes for transportation. (Starting in early 2007, two additional counties—Madera and Tulare—will levy a local sales tax for transportation.)

### Fares and Local Funds Comprise the Bulk of Transit Revenues

**2003-04** (*In Millions*)



- Transit services are funded by a combination of passenger fares and local, state, and federal funds.
- For the state's largest transit operators, local funds (such as local sales tax and property taxes) tend to provide the largest source of revenues. For 2003-04, VTA reported the highest proportion of total revenues met through local funds (76 percent). At the low end, BART reported that local funds constitute 53 percent of total revenues.
- ➤ Passenger fares also provide an important source of revenues for operators. For instance, passenger fares made up 47 percent of BART's revenues in 2003-04. However, passenger fares represented a much smaller proportion (10 percent) of total revenues for VTA.
- The proportion of total revenues from state and federal funds varied among transit operators. These revenues are estimated to range from 0.2 percent of BART's total revenues to 18 percent of revenues for AC Transit.

## Federal Transportation Act and Its Impact on California

## The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

#### **Major Provisions**

#### General:

- Maintains overall structure of previous transportation act (TEA-21), but increases emphasis on safety.
- Continues TEA-21's flexibility allowing up to 50 percent of most program formula funds to be redirected.

#### **Funding Nationwide:**

- Provides 42 percent increase in average annual funding over TEA-21. Authorization of \$241 billion for fiscal years 2005 through 2009 includes \$190 billion for highways, \$45 billion for transit, and \$5.7 billion for safety enhancements.
- Earmarks over \$26 billion worth of congressionally specified projects, including \$14.8 billion for High Priority Projects and \$1.8 billion for Projects of National and Regional Significance.

#### **Highways:**

- Guarantees "donor states" a minimum of 90.5 percent return on state fuel tax contributions in 2005 and 2006, 91.5 percent in 2007, and 92 percent in 2008 and 2009.
- Provides incentives for private sector participation in construction of major transportation facilities.
- Pilots include: federal delegation of environmental review responsibilities to states and toll programs on interstate highways.

#### Transit:

- Most discretionary funds remain available for competitive project applications.
- Provides capital funding for smaller transit projects requiring less than \$75 million in federal funds.

## Federal Transportation Act Provides Funding Through 2009

Authorized Funding for California			
(In Billions)			
	Formula	Earmarks	Totals
Highway	\$15.4	\$2.4	\$17.8
Transit	3.9	1.3	5.2
Safety	0.4	_	0.4
Totals	\$19.7	\$3.7	\$23.4

- > Source of Federal Funds. The federal government levies a fuel excise tax—18.4 cents per gallon of gasoline and 24.4 cents per gallon of diesel. These revenues are deposited in the federal Highway Trust Fund—the primary account for federal transportation spending. Annually, California receives a share of these funds via the federal transportation program (SAFETEA-LU), which authorizes \$241 billion to be invested in highways, transit, and transportation safety projects nationwide from 2005 through 2009.
- > Funding to State. The federal act authorizes \$23.4 billion for California through 2009, including about \$18 billion for highways, \$5 billion for transit, and \$452 million for safety improvements. Roughly 15 percent of this funding (\$3.7 billion) is earmarked for specific projects. For 2005-06, federal funds provided about \$4.6 billion for California's transportation system.

## The Transportation System: How Decisions Are Made

## The Key Players: Who Decides What Gets Built and When?

	State
Legislature	<ul> <li>Sets overall transportation policies, including establishing revenue sources and expenditure priorities.</li> <li>Appropriates lump sum for capital improvements through annual budget and provides oversight on implementation of the state transportation program.</li> <li>In general, delegates the authority to select specific projects to Caltrans, regional and local agencies, as well as CTC.</li> <li>Occasionally designates transportation projects statutorily. In 2000, selected 141 projects to be funded through the Traffic Congestion Relief Program.</li> </ul>
Department of Transportation (Caltrans):	<ul> <li>Implements the state transportation program in general through 12 districts and headquarters in Sacramento.</li> <li>Owns, operates, maintains, and repairs the state highway system.</li> <li>Plans and designs capital improvement projects on the state highway system.</li> <li>Selects projects for the interregional portion of the five-year State Transportation Improvement Program (STIP).</li> <li>In 2006-07, 22,352 authorized positions in department.</li> </ul>
California Transportation Commission (CTC)	<ul> <li>Consists of nine members appointed by the Governor.</li> <li>Recommends policy and funding priorities to the Legislature.</li> <li>Adopts estimates (prepared by Caltrans) of available transportation funds for capital projects.</li> <li>Reviews and adopts STIP and State Highway Operation and Protection Program to ensure compliance with statutory guidelines.</li> <li>Allocates state and federal funds to projects</li> </ul>
	nominated by Caltrans and regional agencies.  • Provides oversight on Caltrans and local project delivery.  (Continued)

#### Regional Regional Currently, there are 48 RTPAs statewide. **Transportation** Formed by specific legislation. These RTPAs are **Planning Agency** usually in the form of council (or association) of (RTPA) governments, and local transportation commissions. Administers state funds and allocates federal and local funds to projects. Selects projects for the regional portion of the STIP. • Currently, there are 17 MPOs in California. Metropolitan **Planning** Federally required planning bodies; typically the Organization same as an urban region's RTPA. (MPO) Prepares the 20-year Regional Transportation Plan and selects projects. The Governor designates an MPO in every urbanized area with a population over 50,000. Other **Other Players** County transportation authorities develop expenditure plans for voter-approved local option sales tax measures and administer funds. • Federal transportation agencies—such as the Federal Highway Administration and the Federal Transit Administration—oversee the use of federal transportation funds.

Environmental agencies at the local, state, and federal level review transportation projects and issue permits to ensure transportation improvements comply with environmental laws.
 Cities and counties set land-use policy and nominate transportation projects for funding by

 Transit agencies—such as the Bay Area Rapid Transit and Los Angeles County Metropolitan Transportation Authority—nominate projects for funding and deliver transportation services and

the RTPA.

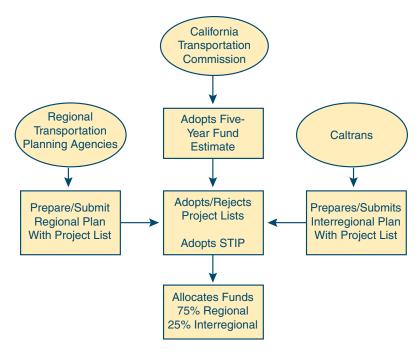
improvements.

## Four Major Programs Guide State Capital Spending

Currently, there are four major programs which guide state capital spending for transportation in California:

- The State Transportation Improvement Program (STIP) funds new construction projects that add capacity to the transportation system. These projects include capital improvements to highways, streets and roads, and transit systems. Funding comes from a mix of the state gas tax and sales tax on motor fuels, as well as federal funds. This program is ongoing.
- > The State Highway Operations and Protection Program (SHOPP) funds capital projects to improve existing highways. Projects include pavement rehabilitation (reconstruction), as well as projects to enhance highway safety and operations. Funding comes from state gas tax, truck weight fees, and federal funds. This program is ongoing.
- ➤ The Traffic Congestion Relief Program (TCRP) funds 141 capital projects specified in the Traffic Congestion Relief Act of 2000 (AB 2928, Torlakson). The TCRP includes mainly highway and transit projects located in urban areas. Funding comes primarily from gasoline sales tax revenues provided each year through 2007-08. However, TCRP will likely receive revenues into the next decade from repayment of loans it made to the General Fund in past years.
- > Proposition 1B Bond Program funds projects to relieve congestion, facilitate goods movement, improve air quality, and enhance the safety and security of the transportation system. Specific projects have yet to be selected, but will include projects that add capacity to highways and transit systems, improve major trade infrastructure (including highways with high truck volumes, ports, and freight rail lines), as well as enhance the safety of existing transportation infrastructure. These projects are to be funded by almost \$20 billion in general obligation bonds sold by the state.

## Availability of Funds Determines What Gets Built and When in the STIP



#### How Are State Transportation Dollars Estimated?

- > Fund Estimate. Caltrans estimates biennially all federal and state transportation funds that would be available over a five-year period. These funds include mainly revenues from state and federal excise tax on motor fuels, sales tax on motor fuels, and truck weight fees.
  - The estimate projects the amounts to be committed to various purposes over the period. Priority is given to highway maintenance and operations, local assistance, and SHOPP projects. Any remaining funds would be available for STIP projects.

➤ The fund estimate, when adopted by CTC, provides the basis for determining how many STIP projects can be funded over the five-year period.

#### How Are STIP Funds Distributed?

- > 75 percent of STIP funds are designated for the Regional Transportation Improvement Program (RTIP) to fund projects chosen by the RTPAs.
- ➤ 25 percent of funds are designated for the Interregional Transportation Improvement Program (ITIP) to fund projects chosen by Caltrans.
- > Projects may also be jointly funded by ITIP and RTIP.

#### How Are Regional Funds Programmed?

- Funds for the RTIP are geographically divided by the "north-south split." Specifically, the north-south split allocates 60 percent of funds to the 13 southern counties and allocates the remainder to the 45 northern counties.
- These funds are further divided into county shares based on a statutory formula allocating 75 percent of funds based on population, and 25 percent based on highway lane-miles.

#### How Are Projects Chosen in the Regional Program?

- ➤ Projects are selected for funding by RTPAs based on regional priorities, as defined in 20-year regional transportation plans. Projects are selected from a large pool of projects proposed by cities, counties, and transit agencies. The RT-PAs then submit their respective lists to CTC for approval.
- ➤ The CTC can either adopt or reject an individual RTIP in its entirety, but cannot delete or add specific projects. Together, the 48 regional proposals form the statewide RTIP.

#### How Are the Interregional Funds Distributed?

- ➤ Of the ITIP funds, 40 percent may be spent in either urban or nonurban areas subject to the north-south split. The remaining 60 percent must be spent on improvements outside of urban areas.
- ➤ About 10 percent of ITIP funds must be programmed for intercity rail projects, while the remainder may be programmed for highway improvement projects.

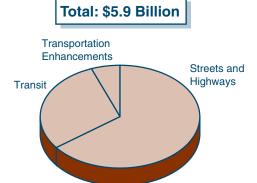
#### **Expenditures During the 2006 STIP Period**

For the 2006 STIP period (from 2006-07 to 2010-11), Caltrans estimates that available transportation funds total \$45 billion. (This estimate does not include bond funds available under Proposition 1B.)

- > Non-STIP Expenditures. Most available funds will not go to STIP projects (new construction). About \$39 billion will be spent on other priorities:
  - About \$18 billion for noncapital expenditures (including highway maintenance and operations) and local assistance.
  - Almost \$12 billion for SHOPP projects to rehabilitate highways and improve highway safety and operations.
  - About \$9 billion for other purposes, including operating assistance for local transit systems, local streets and road improvements, TCRP projects, and the state's intercity rail program.
- > STIP Expenditures. About \$5.9 billion—the remaining amount after other requirements have been funded—will be available for new construction projects.
  - Historically, most of the funds available for STIP projects came from the SHA (state gas tax and weight fees) and federal funds. In recent years, however, growing highway rehabilitation and maintenance expenditures have consumed an increasing proportion of these revenues, leaving fewer funds for STIP projects.
  - For the 2006 STIP period, most of the funds available for STIP projects will come from TIF and PTA (primarily sales tax on motor fuels).

#### **Most STIP Funds Used for Roads**

2006 Through 2011



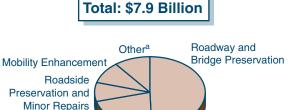
Funding for Projects in the 2006 STIP. The 2006 STIP provides about \$5.9 billion over a five-year period for capital improvements. Of this amount, 65 percent is for highways and roads, 29 percent is for transit, and 6 percent is for transportation enhancements (including roadway)

beautification, as well as bicycle and pedestrian facilities).

- > Many STIP Funds Are Restricted to Specified Uses. Projects funded in STIP are constrained by the types of funds available. For instance, funds from PTA may only be used for transit projects, whereas funds from TIF are more flexible in their use. Thus, there could be a mismatch between available funds and the projects proposed to be funded over a STIP period.
  - For instance, there were considerably more highway and road projects proposed in the 2006 STIP than dollars available for these types of projects (TIF, SHA, and federal funds). Because most of the funding available for new projects was from PTA, the adopted 2006 STIP includes additional funds only for transit projects.
- > Funding Provided for Discrete Project Development Phases. These phases include engineering and design (known as capital outlay support), environmental review, right-of-way acquisition, and construction.

# The SHOPP Includes Primarily Highway Pavement and Safety Projects

2006 Through 2010



<sup>a</sup>Other costs include upkeep of facilities, railroad grade crossings, and hazardous waste mitigation.

Safety

The SHOPP primarily funds pavement rehabilitation and projects that improve roadway safety. It also funds roadside preservation (including rest areas and freeway plant-

ings), operational improvements (such as ramp metering), upkeep of facilities (including office buildings and equipment shops), construction of railroad grade crossings, and hazardous waste mitigation.

- The SHOPP is based on a ten-year plan prepared by Caltrans. Caltrans develops this plan by periodically inspecting the state highway system to identify areas in need of rehabilitation, safety, or operational improvements. The SHOPP is updated every two years.
- ➤ Projects are selected by Caltrans based on statewide need, rather than a geographic formula, such as percentage of population or highway lane-miles. Available funds also constrain the number of projects included in the four-year SHOPP.
- ➤ For the four-year period from 2006 to 2010, CTC adopted a SHOPP of about \$7.9 billion. Most of this amount (\$6.7 billion) has been programmed for specific projects. (This amount does not include the support costs to design and engineer projects.) The remainder is left unallocated for unanticipated needs.

## **SHOPP and STIP Allocations by County**

(In Millions)

	SHOPP (2006-2010)	STIP (2006-2011)
Alameda	\$461	\$152
Alpine	7	29 <sup>a</sup>
Amador	21	a
Butte	35	18
Calaveras	26	a
Colusa	31	3
Contra Costa	159	65
Del Norte	46	2
El Dorado	245	16
Fresno	84	84
Glenn	17	5
Humboldt	138	27
Imperial	36	46
Inyo	34	55
Kern	118	155
Kings	62	18
Lake	69	14
Lassen	34	12
Los Angeles	994	874
Madera	20	9
Marin	11	32
Mariposa	2	4
Mendocino	113	47
Merced	137	12
Modoc	_	5
Mono	18	31
Monterey	81	97
Napa	38	11
Nevada	159	22
Orange	231	327
Placer	208	83
Plumas	44	9
Riverside	245	153
		Continued

	SHOPP (2006-2010)	STIP (2006-2011)			
Sacramento	137	72			
San Benito	2	1			
San Bernardino	639	287			
San Diego	219	174			
San Francisco	35	41			
San Joaquin	114	42			
San Luis Obispo	68	53			
San Mateo	175	78			
Santa Barbara	78	95			
Santa Clara	187	53			
Santa Cruz	42	28			
Shasta	286	30			
Sierra	_	3			
Siskiyou	40	19			
Solano	237	60			
Sonoma	99	78			
Stanislaus	54	65			
Sutter	23	21			
Tahoe RPA	N/A	3			
Tehama	101	8			
Trinity	13	17			
Tulare	43	53			
Tuolumne	24	6			
Ventura	62	78			
Yolo	95	25			
Yuba	13	7			
Subtotals	(\$6,710)	(\$3,812)			
Interregional Program	N/A	1,361			
Unallocated Funds	1,185	730			
Totals	\$7,895	\$5,904			
a Shared by Amador, Alpine, and Calaveras Counties.					

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- ➤ While STIP funds are distributed according to a formula based on population and highway lane-miles, SHOPP funds are distributed according to need.
- As a result, some counties—such as Marin and Orange—receive substantially more STIP funds than SHOPP funds, while the reverse is true for other counties, including Nevada and Del Norte.
- Counties often have the opportunity to advance their STIP funding. This means that counties can borrow from future-year STIP shares in order to fund a project sooner. Because some counties, like Fresno, advanced funds in prior years, these counties will receive less new funding in the 2006 STIP than the formula would otherwise provide.

## Traffic Congestion Relief Program: Projects Defined by Statute



> Projects Defined by Statute. The TCRP is a multiyear transportation funding program. In 2000, the Traffic Congestion Relief Act committed \$4.9 billion (largely in gasoline sales tax revenues) to fund 141 projects specified in statute. Because TCRP projects are speci-

fied in statute, rather than programmed by CTC, the project selection process for TCRP is very different from STIP and SHOPP.

- ➤ Large Share of Funds for Transit and Rail. Over one-half of TCRP funds (62 percent) are provided for transit and rail projects. Most of the remaining funds are for highway projects, with a small share of funds dedicated to other purposes, including local road enhancements, seismic retrofit, and air quality improvement.
- > Program Ends, but Projects Not Yet Delivered. Due to the state's fiscal condition, many TCRP funds were loaned to the General Fund during the early years of the program. Under current law, most of these loans will be repaid to TCRP by June 30, 2016. Because of these loans, as well as other delays related to specific projects, many TCRP projects will not be delivered until after 2010.
  - Through 2005-06, 26 projects have been completed which received about \$300 million in TCRP funds. So far, almost \$1.7 billion (35 percent of the total funding amount) has been expended on development of all TCRP projects.

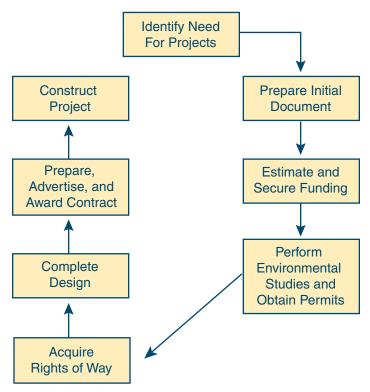
## Proposition 1B: New Funding Programs Guide Project Selection

In 2006, voters approved Proposition 1B, which provides almost \$20 billion in general obligation bonds to fund a variety of transportation purposes. These bond funds are subject to appropriation by the Legislature before they can be expended.

- ➤ Unlike TCRP, only a small portion of these funds are designated for specific projects (such as \$1 billion designated to enhance State Route 99). Many projects funded by the bonds will be selected through a competitive process based on performance criteria, as highlighted below.
- ➤ Proposition 1B creates several new transportation funding programs. The major programs include:
  - *Corridor Mobility*—provides \$4.5 billion for congestion relief projects on the state highway system and local roads connecting to highways. These projects will be selected by CTC based on performance criteria and ability to commence construction by December 31, 2012.
  - *Public Transit*—provides \$4 billion for capital improvements to transit infrastructure, including intercity rail, urban and commuter rail, and bus rapid transit. Most of these funds (\$3.6 billion) will be allocated by formula to local transit agencies (who will select their own projects), with the remainder going to Caltrans.
  - *Trade Corridors*—provides \$2 billion for projects to improve the movement of goods on highways and rail systems, through ports, and between Mexico and California. These projects are to be selected by CTC, in consultation with state and regional goods movement infrastructure plans.

- *Air Quality*—provides \$1 billion for projects to reduce emissions and improve air quality related to goods movement. The Air Resources Board will select projects that can achieve emissions reductions beyond that required by current law.
- State-Local Partnership—provides \$1 billion in matching funds for locally funded transportation projects.
   Projects will be selected by CTC over a five-year period from projects nominated by local transportation agencies.
- *Transit Security*—provides \$1 billion for projects that protect transit systems against a security threat or which make these systems better able to move people or goods in the aftermath of a disaster. The Legislature will designate the entity charged with project selection.
- ➤ In addition to providing funding for new transportation programs, Proposition 1B provides an additional \$2 billion for STIP projects and \$750 million for SHOPP projects. The bonds would also augment funding for local street and road improvements by \$2 billion.

### From Planning to Construction: How a Project Gets Built



In order to develop a transportation project from a concept—through design, engineering, and construction—to a useable facility, a number of steps have to be taken and requirements met. The key steps and processes are highlighted below.

#### Long-Term Transportation Planning to Identify Projects

Federal and state law require that every region with a population of 50,000 or more prepare and regularly update a 20-year Regional Transportation Plan (RTP). This plan identifies the transportation needs of the region based on projections of growth and travel demand, coupled with projections of estimated funding levels.

- Any project that is expected to have a negative air quality impact *must* be included in the RTP. This ensures that the project's air quality impact is considered in the evaluation of the region's ability to meet state and federal air quality standards.
- The RTP must be approved by the Federal Highway Administration (FHWA), the Federal Transit Administration, and must be consistent with the State Implementation Plan for air quality conformity with the federal Clean Air Act before a project is eligible for federal funds.

#### Prepare Initial Document

➤ To begin a transportation project, Caltrans prepares a project initiation document to define the project and describe its cost, scope, and schedule.

#### Secure Funding for Project

- Once a project has been included in the RTP, its sponsor (such as a city, county, or transit agency) must secure funding for the project. Funding may come from any combination of state, federal, local, or private sources.
- For projects built with state funds, funding is generally secured when a project is programmed in the STIP; for projects built with federal funds, but no state funds, projects must be included in the federal equivalent, known as the Federal Transportation Improvement Program.

#### Environmental Review

➤ Before extensive design or construction can begin, the project must comply with state and federal environmental laws. The two major laws affecting transportation projects are the California Environmental Quality Act and the National Environmental Policy Act (NEPA). These laws require that various alternatives be examined in order to meet the needs of the project while minimizing its negative environmental impact.

- Typically, environmental review is the longest and most unpredictable phase of the project delivery process. Project evaluation and permit approval by as many as 15 to 20 agencies on certain projects takes considerable time.
- The federal act, SAFETEA-LU, allows five states, including California, to takeover FHWA's NEPA review duties on a pilot basis. Chapter 31, Statutes of 2006 (AB 1039, Nuñez) allows Caltrans to use this delegation of authority through January 1, 2009. The law requires Caltrans to report on the costs and time savings realized through the pilot, so that California can assess the benefits of NEPA delegation.

#### Design

- ➤ Since the passage of Proposition 35 in 2000, both Caltrans and local transportation entities have the authority to contract out the design of transportation projects, including STIP projects. Prior to 2000, the State Constitution required that most state highway projects be designed by state staff.
- Although preliminary design must be done in order to conduct environmental review, final design work is not completed until the project has received environmental approval by the various state and federal agencies.

#### Construction

- ➤ Generally, once rights-of-way have been purchased and design completed, Caltrans and local agencies advertise the project for construction by the private sector.
- ➤ Recently, alternative contracting methods, such as designbuild and design-sequencing, have been proposed as ways to reduce project delivery times by integrating the design and construction processes. Local agencies (such as the Orange County Transportation Authority) have used design-build, which awards both the design and construction of a project to a single entity. In design-sequencing, the public agency continues to design the project; however, the private sector begins construction when design is roughly 30 percent complete.

# Issues for Legislative Consideration

#### **Implementing the Transportation Bond**

In November 2006, voters approved Proposition 1B, which allows the state to sell \$20 billion in general obligation bonds to fund transportation projects that relieve congestion, facilitate goods movement, improve air quality, and enhance safety and security. These bond funds, when appropriated by the Legislature, will be available for expenditure over multiple years for a number of existing as well as new transportation programs.

In order to achieve the objectives of Proposition 1B, the bond funds should be allocated to effective projects that can be constructed and open to users in a timely manner. We recommend that the Legislature take the following actions relating to Proposition 1B implementation to ensure that the bond act's objectives are met.

Adopt Additional Project Eligibility, Evaluation Criteria. Proposition 1B establishes a number of new funding programs, but provides only general guidelines for the use of the funds. This leaves fund recipients with broad discretion. For example, in allocating \$1 billion for Transit Security grants, the bond act language is very open-ended—conceivably these funds could be used either for projects that specifically address a security threat or for projects that more generally increase a transit system's capacity. Such a lack of specificity may allow projects to be funded that do not best align with state priorities. We think that the Legislature should adopt additional project eligibility and evaluation criteria for five new programs with funding totaling \$5.1 billion. These include Trade Corridors, Air Quality, Transit Security, State-Local Partnership, and Port Security.

Ensure Timely Project Delivery. Projects must be complete and open to users before offering any mobility, air quality, or economic benefits. To create incentives for timely delivery of projects and avoid bond funds remaining available indefinitely for projects that show no signs of progressing (as has occurred in the Traffic Congestion Relief Program [TCRP]), the Legis-

lature should adopt project delivery deadlines, as well as mechanisms to remove funds from lagging projects so they can be allocated elsewhere.

Provide Adequate Resources to Deliver Projects, Including Increased Use of Contracting. Considerable personnel resources will be necessary to plan and construct the multitude of transportation projects funded by these bonds. Given Caltrans' crucial role in delivering bond-funded projects, the department's project delivery capacity will likely need to be expanded significantly for a number of years. The Legislature should ensure that Caltrans, in its annual budget request, has an adequate combination of support resources—including both state staff and contracted services—that would enable the department to provide timely delivery of all transportation projects.

Provide Ongoing Program Oversight. Transportation projects often take five or more years to plan and construct. It is therefore important for the Legislature to monitor on an ongoing basis how well the bond-funded programs are delivering projects that cost-effectively relieve congestion and meet other objectives. Given the number of programs and fund recipients, we recommend that the Legislature designate one agency, such as California Transportation Commission (CTC), to oversee the entire transportation bond program and provide an annual report to the Legislature with specific information, including progress in delivering projects on time and on budget. We further recommend that the policy committees and budget subcommittees of the Legislature hold periodic joint hearings in which CTC, Caltrans, and other key implementing entities report on the use of bond funds and the timeliness of project delivery.

#### Measures to Streamline and Enhance Project Delivery

Expeditious delivery of transportation projects is important to meet Californians' increasing travel demand and to relieve congestion. The administration should identify and implement measures to streamline steps in the project development process, which may reduce state staff workload and improve delivery times. There are also measures that we recommend the Legislature adopt to expand the state's capabilities to deliver projects. Below, we list a few examples of various strategies.

Design-Build Contracting. The design-build contracting method awards both the design and construction of a project to a single entity. The use of design-build to construct projects seeks to reduce project delivery times by integrating the design and construction processes. Under SAFETEA-LU, virtually any transportation project is eligible to be built using this method. Current state law, however, authorizes the use of design-build only for specific transportation projects (for example, I-405). Thus, Caltrans has little experience using this contracting method. While there are advantages to using design-build, including potential shortening of project delivery time, there are also pitfalls to avoid.

➤ We recommend that the Legislature authorize a designbuild pilot program similar to that proposed by AB 143 (Nuñez) in 2006 and SB 56 (Runner) in 2007. Both bills propose a demonstration program that allows Caltrans and regional agencies to deliver a set number of projects using design build. These bills also require that transportation agencies report on their experiences so that the state can use the information in deciding whether to pursue future design-build projects.

Streamlining Environmental Review. As environmental clearance is typically one of the longest and least predictable phases of the delivery process, streamlining measures to minimize redundant steps or uncertainty in the environmental review phase may offer significant benefits.

- ➤ Chapter 31, Statutes of 2006 (AB 1039, Nuñez), streamlines environmental review by exempting certain earthquake safety projects from state reporting requirements and permitting Caltrans to prepare one master environmental impact report (EIR) for projects on Highway 99, rather than multiple EIRs for projects along the corridor. The statute also allows Caltrans to take over federal environmental reporting duties on a pilot basis through January 1, 2009. By allowing Caltrans to communicate directly to involved federal agencies, rather than doing so indirectly via the Federal Highway Administration staff, the pilot seeks to reduce project delivery times.
- Caltrans estimates that per-project time-savings gained from taking over federal reporting duties will range from a few weeks on the simplest projects to over six months on large projects requiring a federal EIR. If these estimates hold, the Legislature may want to extend this pilot for several more years, subject to federal approval. We further recommend the Legislature direct Caltrans to identify additional streamlining measures to improve delivery times for specific bond-funded programs.

Increase Use of Contracting-Out for Design Services. Under the State Constitution, Caltrans has the authority to contract for design and engineering services. To date, the department has annually contracted out about 10 percent of its design and engineering work. As Caltrans becomes responsible for the timely delivery of more projects under Proposition 1B, the department will likely need a significantly higher level of support resources to deliver these projects than it currently has. However, it will be difficult for Caltrans to hire and train within a short time frame the necessary level of state staff to handle the workload. In order for projects to be open to users in a timely manner, we recommend the Legislature direct Caltrans to expand its use of private consultants to deliver projects.

#### **Leveraging Additional Transportation Dollars**

While the transportation bond provides a substantial onetime infusion of state funds for transportation, there is still a substantial, ongoing funding shortfall in order to provide continuing capital improvements to meet Californians' travel demand. In our view, the state should leverage other fund sources to supplement state sources.

*Public-Private Partnerships.* Public-private partnerships (P3) provide a means to generate private investment for transportation facilities. These partnerships often take the form of a state or local government entering into a lease agreement with a private entity to design, construct, maintain, and operate a facility for a period of time. The federal act encourages the use of these partnerships to generate private sector investment in transportation.

➤ Chapter 32, Statutes of 2006 (AB 1467, Nuñez), allows Caltrans and regional agencies to pursue four P3 projects on goods movement facilities. Because P3s may also work well for other types of projects, for example highway toll facilities, we recommend that the Legislature authorize P3 projects around the state on a broader range of facilities.

**Encourage Local Investment.** Most urban counties have adopted local option sales taxes with revenues dedicated to transportation. Because the benefits of transportation investments are felt most at the local level, the state should encourage more local investment.

➤ Proposition 1B provides \$1 billion in State-Local Partnerships (SLP) grants to match local funds for transportation projects over the next five years. The measure also allows the Legislature to add conditions and criteria to the program through statute. The CTC proposed guidelines that would provide funding to local jurisdictions that have adopted local sales tax measures or developer fees for trans-

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portation. These guidelines, however, do not set aside any of these funds to create incentives for new local revenues to be pursued in the future. In order to spur new local funding for transportation, we recommend that the Legislature adopt guidelines that would set aside a portion of SLP grants for cities and counties that establish new fees or tax measures for local transportation purposes.

*Tolling.* In recent years, there has been a growing public acceptance of charging tolls for road usage, particularly when tolls can finance new facilities or offer congestion relief. While many observers have equity concerns regarding access to tolled facilities across socioeconomic groups, recent research shows that it is not just high-income travelers who choose to pay a toll when pressed for time.

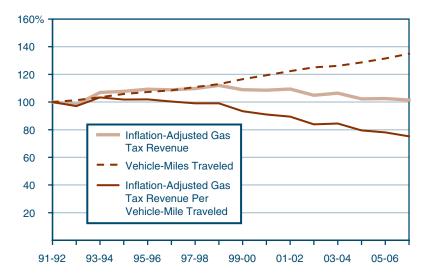
➤ Chapter 32 also authorizes regional agencies, in cooperation with Caltrans, to create four high-occupancy toll (HOT) lanes. Given increasing public acceptance of tolls and the revenue generated by these projects, we recommend the Legislature authorize Caltrans and the regions to build additional HOT and toll lane projects.

## Funding Highway Maintenance and Rehabilitation Over the Long Haul

While travel on the state's highway network continues to increase, many of California's highways have surpassed their design life. As a result, maintenance and rehabilitation costs have grown considerably in recent years. While Proposition 1B provides some one-time additional funding for highway rehabilitation projects, it does not address the long-term issue that maintenance and rehabilitation needs are growing faster than the revenues which pay for these activities.

Existing Gas Tax Inadequate to Cover Maintenance and Rehabilitation Costs. Growing maintenance and rehabilitation demands consume increasing portions of state gas tax revenues, which traditionally have been the state's primary source to fund capacity expansion on state highways. In its 2006 annual report, CTC projects that annual gas tax and weight fee revenues are insufficient to address highway maintenance and rehabilitation needs. This is because:

- ➤ Gas Tax Has Not Increased in Over a Decade. The current state gas tax rate (18 cents per gallon) has been in place since 1994. Since then, inflation has eroded the value of per gallon gas tax revenues by 29 percent, so that 18 cents is worth less than 13 cents today (in constant dollar terms).
- > Eroding Revenues. The figure (see next page) shows that between 1991 and 2006, travel on California's roads increased by an estimated 35 percent. Meanwhile, gas tax revenues (in constant dollar terms) have not increased. As a result, revenue generated per vehicle-mile traveled has declined by more than 20 percent over the period.



Several alternatives are available to the Legislature to increase maintenance and rehabilitation funding.

- ➤ Indexing for Inflation. We estimate that the current 18 cent per gallon state gas tax will generate \$37 billion over the next ten years. We recommend that the gas tax be indexed to inflation. Doing so could generate up to \$42 billion from this funding source over the next decade—\$5 billion more than would be generated if the gas tax was not indexed to inflation.
- > Indexing for Fuel Economy. Similarly, the increasing popularity of hybrid vehicles could result in a corresponding reduction in gas tax revenues as total gas consumption declines. For example, if the increasing market share of hybrid vehicles lead to a doubling in fuel economy, the Legislature could consider doubling the gas tax to ensure that total gas tax revenues remain at their current level into the future.
- > Taxing Alternative Fuels. Many alternative fuels (such as ethanol and natural gas) are taxed at a lower rate than gasoline and diesel fuel. Thus, if alternative fuels become a more

- prevalent energy source for transportation, the Legislature should consider taxing these fuels at a comparable rate to conventional motor fuels to ensure that revenues for uses like highway maintenance and rehabilitation do not decline.
- ➤ Mileage-Based Fees. Mileage-based fees offer an advantage over gas taxes in that their revenues are not eroded by increasing fuel economy or use of alternative fuels. Rather, the fees would closely match the extent motorists use highways and roads. There are privacy and technical obstacles to overcome in implementing a mileage-based approach to fund transportation. However, the state of Oregon is currently testing the feasibility of implementing a mileage-based fee in Portland. Similarly, we recommend that the Legislature examine the policy and implementation issues that must be addressed if mileage-based fees were to be imposed in California.

#### **Addressing Issues in the TCRP**

In 2000, the Traffic Congestion Relief Act committed \$4.9 billion in General Fund and gasoline sales tax revenues to 141 specified projects between 2000-01 and 2005-06. Due to the state's fiscal condition, much of this funding was delayed or loaned to the General Fund. Current law extends funding for TCRP through 2007-08 and establishes that most of the loaned funds are to be repaid by June 30, 2016. Because of the loans, as well as other delays related to specific projects, there are TCRP projects that will not be completed until after 2010.

Given this timeline and the problems with a number of TCRP projects, the Legislature should consider actions such as the following to ensure that TCRP funds are used effectively.

- > Establish Project Delivery Deadlines. Many TCRP projects have fallen behind schedule. Current law allows funds to remain available indefinitely to these projects. The Legislature should consider directing CTC to establish a final project delivery deadline in order to ensure that funds are used to construct projects in a timely manner.
- > Identify Projects That Are No Longer Viable. If there are stalled projects that are not progressing, the Legislature may want CTC to identify these projects so that funds may be put to other projects in the near term.
- ➤ Redirecting Funds From Failed Projects. For projects that miss their construction deadline or which CTC deems as no longer viable, the Legislature should redirect remaining TCRP funds to other transportation projects. The Legislature has a number of options in how it reallocates the freed-up funds. Funds could go to projects statewide that offer congestion relief benefits (in keeping with the goals of TCRP), projects which are similar in type to the failed project (to maintain the original level of investment in transit or highways), or other projects in the original region (to maintain the level of investment in a single region).

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## **ACRONYMS AND DEFINITIONS**

- AC Transit (Alameda Contra-Costa County Transit)—The transit authority serving Alameda and Contra Costa Counties.
- **BART** (Bay Area Rapid Transit District)—A commuter rail system serving the San Francisco Bay Area.
- *Caltrans* (California Department of Transportation)—The state agency responsible for building, maintaining, and operating the state highway and intercity rail system.
- **CEQA** (California Environmental Quality Act)—State law establishing environmental reporting requirements that apply to all transportation projects using state funds.
- CTC (California Transportation Commission)—A nine-member board appointed by the Governor to oversee and administer state and federal transportation funds and provide oversight on project delivery.
- *FHWA* (Federal Highway Administration)—The federal agency responsible for administering federal highway funds.
- *FTIP* (Federal Transportation Improvement Program)—A three-year list of all transportation projects proposed for federal transportation funding within the planning area of an MPO.
- *ITIP* (Interregional Transportation Improvement Program)— The portion of STIP that includes projects selected by Caltrans (25 percent of STIP).
- HOT lane (High Occupancy Toll lane)—An HOV lane, which also allows for use by single occupant vehicles that pay a toll.
- *HOV lane* (High Occupancy Vehicle lane)—A lane restricted to vehicles with two (and in some cases three) or more occupants to encourage carpooling.
- *LACMTA* (Los Angeles County Metropolitan Transportation Authority)—RTPA for the Los Angeles region.

- *MPO* (Metropolitan Planning Organization)—A federally required planning body responsible for transportation planning and project selection in the region. In many cases, is the same as the RTPA.
- **NEPA** (National Environmental Policy Act)—Federal environmental law establishing environmental reporting requirements that apply to all projects funded with federal funds or those requiring review by a federal agency.
- **P3** (Public-Private Partnership)—Partnership between state or local government and a private entity to design, construct, maintain, and operate a transportation facility for a period of time.
- **PTA** (Public Transportation Account)—The major state account for transit purposes. Revenues include a portion of the sales tax on gasoline and diesel fuels.
- *RTIP* (Regional Transportation Improvement Program)— Share of capital outlay improvement funds controlled by regional agencies (75 percent of STIP funds).
- RTP (Regional Transportation Plan)—Federally required 20year plan prepared by metropolitan planning organizations, updated every three years. Includes projections of population growth and travel demand, along with a specific list of proposed projects to be funded.
- *RTPA* (Regional Transportation Planning Agency)—Planning bodies established by statute to administer state, local, and federal funds to projects in a region.
- *SAFETEA-LU* (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users)—Federal transportation act covering the period from 2004 through 2009.
- **SHA** (State Highway Account)—The major state transportation account for highway purposes. Revenues include the state excise taxes on gasoline and diesel, and truck weight fees.

- **SHOPP** (State Highway Operation and Protection Program)— A four-year capital improvement program for rehabilitation, safety, and operational improvements on state highways.
- *SIP* (State Improvement Program)—State air quality plan to ensure compliance with state and federal air quality standards. In order to be eligible for federal funding, projects must demonstrate conformity with the SIP.
- *Spillover*—A source of revenue for the PTA, which is equal to the amount that gasoline sales tax revenues at the 4.75 percent rate exceed the amount generated from the sales tax on all other goods at the 0.25 percent rate.
- STA (State Transit Assistance)—State funding program for mass transit operations and capital projects. Current law requires that STA receive 50 percent of PTA revenues.
- STIP (State Transportation Improvement Program)—A fouryear capital outlay plan that includes the cost and schedule estimates for all transportation projects funded with any amount of state funds. The STIP is approved and adopted by the CTC and is the combined result of the ITIP and RTIP.
- *TCRF* (Traffic Congestion Relief Fund)—A state account which funds 141 projects specified in the Traffic Congestion Relief Act (2000). Funded largely through transfers from the TIF (gasoline sales tax revenues).
- TCRP (Traffic Congestion Relief Program)—The program created to fund 141 projects between 2000-01 and 2007-08, as specified in the Traffic Congestion Relief Act (2000) and subsequent statute. Funded largely through transfers from the TIF (gasoline sales tax revenues).

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- TIF (Transportation Investment Fund)—A state account which funds projects in STIP and improvements to local streets and roads, also transfers funds based on formula, to TCRF (through 2007-08) and PTA. Revenues include state portion of sales tax on gasoline.
- *VMT* (Vehicle Miles Traveled)—Common measurement used for tracking demand for driving.
- *VTA* (Valley Transportation Authority)—The transportation authority serving Santa Clara County.