

# Plan Budget and Investments

## Metropolitan Transportation Plan - 2011-2035

### Table of Contents

- 1) Plan Finances**
- 2) Plan Investments**
- 3) Transit Operations and Capital Cost Analysis**
- 4) Local Streets and Roads Financial Analysis**
- 5) Funding Shortfall and Vision Element**

**Attachment A: Revenue Projections in millions of Nominal Dollars**

**Attachment B: Revenue Projections in millions of Current Dollars**

## PART 1: Plan Finances

The funding to support the transportation investments in the MTP/SCS comes from a number of federal, state, and local sources, each with specific purposes and restrictions. The dollar amounts are presented in both current year (2010) dollars and nominal or “year of expenditure” nominal values. The MTP/SCS provides current year dollars to illustrate the magnitude of investments in terms of the 2010 fiscal year. However, federal statute requires regional transportation plans to provide costs and revenues in “year of expenditure” nominal dollars. Accordingly, the discussions below provide dollar values first in current year terms, followed in parentheses by “year of expenditure” (YOE) values.

In total, SACOG forecasts \$35.2 billion in revenues (\$49.8 billion YOE) over the planning period. On average, this comes out to approximately \$1.4 billion (\$2.0 billion YOE) per year over 25 years. Compared to the 2008 MTP, the revenues supporting this MTP/SCS reflect a roughly 13 percent drop in total budget as a result of the economic recession, which was particularly hard on local revenues. However, SACOG anticipates the population of the region will grow more slowly over the next 25 years, resulting in nearly 300,000 fewer people by 2035 than estimated in the 2008 MTP. This smaller population results in a decrease in revenues of only 5 percent on a per capita basis.

---

### Conversion between Current Year (2010) and Year of Expenditure (YOE) Dollars

---

The federal Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requires that all cost estimates be escalated to YOE or nominal values to reflect both the decrease in purchasing power of today’s dollar and the increase in costs for maintaining and building the transportation system over time. The average rate of inflation used in the MTP/SCS is 2.7 percent. The first five years of the plan uses an inflation rate consistent with the California Legislative Analyst’s Office assumptions used in *The 2010-11 Budget: California’s Fiscal Outlook*. Following fiscal year 2015, the MTP/SCS assumes a 1/10 percent increase in the inflation rate per year until reaching the historical average of 3.2 percent and then maintains this average through the rest of the planning period. Table 1.1 below illustrates the inflation rate assumptions for each year of the MTP.

**Table B1.1. MTP/SCS Inflation Rate Assumptions**

	2011	2012	2013	2014	2015	2016-2028	2029-2035
<b>Inflation rate</b>	2.2%	2.1%	1.9%	2%	1.9%	Previous year + 0.1%	3.2%

2011 through 2015 based on California Legislative Analyst’s Office assumptions in *The 2010-11 Budget: California’s Fiscal Outlook*

On the revenue side, the nominal rate of growth for each funding source is determined by extrapolating recent trends, either on a straight line basis or in some cases using a trend curve.

This methodology yields revenues in YOE dollars, which are then de-escalated using the ROI described above to yield current year dollars.

On the expenditure side, project sponsors provide SACOG with project costs in current year dollars, which are then uniformly escalated to YOE dollars using the inflation rate described above through the assumed completion year for the project.

## **Summary of Revenue Sources and Assumptions**

---

The MTP/SCS must be financially constrained, meaning that the amount of funding programmed must not exceed the amount of funding estimated to be reasonably available within the planning period. To meet this requirement, the revenue assumptions in the plan are based on existing federal and state sources of funding and existing or SACOG Board-approved sources of local funding for transportation purposes. Each funding source is extrapolated at historic rates of growth to determine the total amount of that source that will be available for implementation of the MTP/SCS. Attachments A and B describe the revenue amounts for each funding source over five-year increments throughout the planning period. In developing the MTP/SCS, SACOG has taken into consideration both transportation funding revenues and the costs of building, operating, and maintaining the regional transportation system over 25 years (Federal FFY 2010-11 through FY 2034-35).

### **Changes from the 2008 MTP**

Since the adoption of the 2008 MTP, a major economic recession has seriously reduced the amount of funding available for transportation purposes. Local revenues making up two-thirds of the MTP/SCS budget have been particularly hard hit by the economic decline. Compared to the 2008 MTP, this MTP/SCS assumes a 13 percent reduction in the revenues available to support investments over the next 25 years (from \$40.2 to \$35.2 billion). However, this represents only a five percent decline per capita given the slower population growth assumed in this MTP/SCS. Wherever relevant, the tables in this document show the difference between assumptions from the 2008 MTP and the current MTP/SCS.

### **Federal Funding**

Federal funding assumptions are derived from the annual apportionments provided to SACOG by the federal government or from historical funding levels. SAFETEA-LU, which was signed into law in 2005, sets the program structure and distribution formulas for federal transportation funds. Despite its expiration in September of 2009, Congress has extended the act through a series of continuing resolutions, the latest of which extends the bill through March, 2012. Despite potential changes that may occur as part of the next federal transportation act authorization, SAFETEA-LU provides the basis for the federal assumptions in the MTP/SCS financial plan. SACOG projects funding from both the Federal Highway Administration and Federal Transit Administration Programs listed below, with revenue assumptions outlined in Table B1.2, compared with those in the 2008 MTP.

Federal Highway Administration Programs

- Regional Surface Transportation Program (RSTP)
- Congestion Mitigation and Air Quality Program (CMAQ)
- Other federal programs including Highway Bridge Program and federal discretionary funding

Federal Transit Administration Programs

- Section 5307 Urbanized Area Formula
- Section 5309 New Starts
- Section 5309 Fixed Guideway Modernization
- Section 5309 Bus Allocation
- Section 5310 Elderly and Disabled
- Section 5316 Job Access and Reverse Commute (JARC)
- Section 5317 New Freedom

**Table B1.2. Federal Revenue Sources and Assumptions**

<b>Federal Source</b>	<b>2008 MTP</b>	<b>MTP/SCS</b>
Congestion Mitigation and Air Quality (CMAQ)	<p><b>Base Year:</b> 2007 Board-Adopted Financial Assumptions</p> <p><b>Key Assumptions:</b> SACOG region will continue to receive CMAQ funds in a manner consistent with historical apportionments.</p> <p><b>Growth:</b> 2% annual growth plus 20% every six years for growth in federal reauthorizations beginning in 2010.</p>	<p><b>Base Year:</b> 2010</p> <p><b>Key Assumptions:</b> SACOG region will continue to receive CMAQ funds in a manner consistent with historical apportionments.</p> <p><b>Growth:</b> 5% annual growth. No increases in federal reauthorizations.</p>
Regional Surface Transportation Program (RSTP)	<p><b>Base Year:</b> 2007 Board-Adopted Financial Assumptions</p> <p><b>Key Assumptions:</b> SACOG region will continue to receive RSTP funds in a manner consistent with historical apportionments.</p> <p><b>Growth:</b> 2% annual growth plus 20% every six years for growth in Federal Reauthorizations beginning in 2010.</p>	<p><b>Base Year:</b> 2010</p> <p><b>Key Assumptions:</b> SACOG region will continue to receive RSTP funds in a manner consistent with historical apportionments.</p> <p><b>Growth:</b> 5% annual growth. No increases in federal reauthorizations.</p>
FTA Funds: 5307, 5309(a), (5309(c) 5310, 5311(b), 5313, 5317	<p><b>Base Year:</b> 2007 Board Adopted Financial Assumptions</p> <p><b>Key Assumptions:</b> SACOG region</p>	<p><b>Base Year:</b> 2010</p> <p><b>Key Assumptions:</b> SACOG region</p>

	will continue to receive FTA funds in a manner consistent with historical apportionments.  <b>Growth:</b> 5% annual growth plus 10% every six years for growth in Federal Reauthorizations beginning in 2010.	will continue to receive FTA funds in a manner consistent with historical apportionments.  <b>Growth:</b> 5% based on historic precedent set by TEA-21 and SAFETEA-LU.
FTA 5309(b) New Rail Starts	<b>Base Year:</b> N/A  <b>Key Assumptions:</b> Presume continuation of FTA grants to Sacramento Regional Transit at 50% of new rail capital project costs.	<b>Base Year:</b> N/A  <b>Key Assumptions:</b> No Change

### State Funding

Senate Bill 45 (SB 45) establishes the program structure and distribution formulas for most state transportation funds. The MTP/SCS assumes state funding will continue in a manner consistent with SB 45. Additionally, every two years, the California Transportation Commission (CTC) approves a STIP Fund Estimate that details the distribution of funding for state transportation programs that pass through the State Highway Account over a six-year period. The MTP's assumptions for state revenues, shown in Table B1.3, are derived primarily from the 2010 State Transportation Improvement Program Fund Estimate (STIP-FE). SACOG made appropriate adjustments to state transportation funding to compensate for the passage of ABX8 6 and ABX8 9 (Gas Tax Swap) passed by the California Legislature during the Eighth Extraordinary Session in March, 2010.

The state funding programs assumed in the MTP/SCS include:

- State Highway Operations and Protection Program - (SHOPP)
- State Transportation Improvement Program - (STIP) including;
  - Interregional - ITIP
  - Regional - RTIP
- Traffic Congestion Relief Program - (TCRP)
- State Transit Assistance - (STA)
- Intercity Rail
- State Highway Maintenance
- Proposition 1B- Public Transportation Modernization, Improvement, and Service Enhancement Account Program (PTMISEA)

**Table B1.3. State Revenue Sources and Assumptions**

Federal Source	2008 MTP	MTP/SCS
State Highway Operations and	<b>Base Year:</b> 2007 Board Adopted Financial Assumptions	<b>Base Year:</b> 2010

<p>Protection Program (SHOPP)</p>	<p><b>Key Assumptions:</b> Based on historical transfers from the State Highway Account (SHA) and the Federal Trust Fund.</p> <p><b>Growth:</b> Growth in SHA dependent on annual growth in Truck Weight Fees (3% real), Diesel Fuel Tax (3% real), and State Gas Tax (varies).</p> <p>Growth in Federal Trust Fund equal to 2% annual growth plus 20% every six years for growth in Federal Reauthorizations beginning in 2010.</p>	<p><b>Key Assumptions:</b> Based on transfers from the State Highway Account (SHA), Federal Trust Fund, and the new excise tax on gasoline.</p> <p>Includes adjustments resulting from ABX8 6 and ABX8 9 (Gas Tax Swap) including 12% of the revenues generated by the new excise tax on gasoline following transfers for bond debt service.</p> <p><b>Growth:</b> 3.1 % average annual growth based on:</p> <ol style="list-style-type: none"> <li>1. California Energy Commission 2009 estimates for fuel price and consumption</li> <li>2. Caltrans 2009 estimates for truck weight fees</li> <li>3. Obligation Authority from Federal Trust Fund</li> </ol>
<p>Interregional Transportation Improvement Program (STIP- ITIP)</p>	<p><b>Base Year:</b> 2007 Board Adopted Financial Assumptions</p> <p><b>Key Assumptions:</b> ITIP will continue to receive 25% of the total STIP allocations from the Federal Highway Trust Fund, State Highway Account, and the State Transportation Investment Fund.</p> <p><b>Growth:</b> Real growth of federal revenues equal to 2% per year plus 20% at each reauthorization. Adjust for inflation.</p> <p>Escalate state sources (excluding the PTA) by 2.2% for VMT growth, escalate by 33% in 2011 and another 17% in 2021 for state gas tax increases, add in</p>	<p><b>Base Year:</b> 2010</p> <p><b>Key Assumptions:</b> ITIP will continue to receive 25% of the total STIP allocations from the Federal Highway Trust Fund, State Highway Account, Public Transportation Account and the new excise tax on gasoline. Includes adjustments resulting from ABX8 6 and ABX8 9 (Gas Tax Swap) including STIP receipt of 44% of the revenues generated by the new excise tax on gasoline following transfers for bond debt service.</p> <p><b>Growth:</b> 6.7% average annual growth based on:</p> <ol style="list-style-type: none"> <li>1. California Energy Commission 2009 estimates for fuel price and consumption</li> <li>2. Caltrans 2009 estimates for truck weight fees</li> </ol>

	<p>Prop 42 sales tax on gasoline starting in 2009.</p> <p>Escalate PTA revenues by 4% for gasoline prices, escalate for windfall price spikes in 2011-12 and 2019-20, add in Prop 42 PTA funding starting in 2009.</p> <p>Reduce the combined total transfers to Caltrans SHOPP and Maintenance programs escalated by 2%.</p>	
<p>Regional Transportation Improvement Program (STIP- RTIP)</p>	<p><b>Base Year:</b> 2007 Board Adopted Financial Assumptions</p> <p><b>Key Assumptions:</b> 50% of revenues are from federal sources and 50% from state sources (20% PTA and 30% other state).</p> <p><b>Growth:</b> Escalate federal revenues by 2% per year plus 20% at each reauthorization, for growth in authorizations, based on historic trend from 1991.</p> <p>Escalate state sources (excluding the PTA) by 2.2% for VMT growth, escalate by 33% in 2011 and another 17% in 2021 for state gas tax increases, add in Prop 42 sales tax on gasoline starting in 2009. Escalate PTA revenues by 4% for gasoline prices, escalate for windfall price spikes in 2011-12 and 2019-20, add in Prop 42 PTA funding starting in 2009.</p> <p>Reduce the combined total transfers to Caltrans SHOPP and Maintenance</p>	<p><b>Base Year:</b> 2010</p> <p><b>Key Assumptions:</b> RTIP will continue to receive 75% of the total STIP allocations from the Federal Highway Trust Fund, State Highway Account, Public Transportation Account and the new excise tax on gasoline. Includes adjustments resulting from ABX8 6 and ABX8 9 (Gas Tax Swap) including STIP receipt of 44% of the revenues generated by the new excise tax on gasoline following transfers for bond debt service.</p> <p><b>Growth:</b> 6.7% average annual growth based on:</p> <ol style="list-style-type: none"> <li>1. California Energy Commission 2009 estimates for fuel price and consumption</li> <li>2. Caltrans 2009 estimates for truck weight fees</li> </ol>

	programs escalated by 2%.	
Traffic Congestion Relief Program	<p><b>Base Year:</b> 2007 Board Adopted Financial Assumptions</p> <p><b>Key Assumptions:</b> Based on existing state commitments</p>	<p><b>Base Year:</b> NA</p> <p><b>Key Assumptions:</b> Based on existing state commitments</p>
State Transit Assistance	<p><b>Base Year:</b> 2007 Board Adopted Financial Assumptions</p> <p><b>Key Assumptions:</b> Transit agencies in the region will continue to receive STA funds in a manner consistent with historical allocations.</p> <p><b>Growth:</b> Escalate FY 2004 amount by 4% per year for increase in gasoline price, add half of Prop 42 PTA funds after 2009 escalated by 2.2% for VMT growth and 4% for gasoline price inflation, de-escalate for fleet fuel efficiency at 3.5%. Escalate for windfall price spikes in 2011-12 and 2019-20.</p>	<p><b>Base Year:</b> 2011 (state projected)</p> <p><b>Key Assumptions:</b> STA will receive \$400 million for the remainder of FY2010 and FY2011. The STA will receive an infusion of Non-Article XIX revenues in FY2012 and FY2013. In 2011-12 and thereafter, 75% of diesel sales tax revenues will be transferred from the PTA to STA.</p> <p><b>Growth:</b> 4.2% average annual growth based on California Energy Commission 2009 estimates for diesel price and consumption.</p>
Intercity Rail (Operations)	<p><b>Base Year:</b> 2007 Board Adopted Financial Assumptions</p> <p><b>Key Assumptions:</b> Based on 15% transfer from ITIP.</p> <p><b>Growth:</b> Same as STIP-ITIP</p>	<p><b>Base Year:</b> 2010</p> <p><b>Key Assumptions:</b> ITIP portion of Intercity Rail capital revenues included in the ITIP assumptions above. Intercity Rail Operations based on historical share of state resources to CCJPA and San Joaquin.</p> <p><b>Growth:</b> 4.9% based on rate of increase in estimated operating expenses reported in the 2008 California State Rail Plan.</p>
State Highway Maintenance	<p><b>Base Year:</b> 2007 Board Adopted Financial Assumptions</p> <p><b>Key Assumptions:</b> Equivalent to 80% of total SHOPP, plus escalations for population and lane miles.</p> <p><b>Growth:</b> Same as SHOPP.</p>	<p><b>Base Year:</b> 2010</p> <p><b>Key Assumptions:</b> State Highway Maintenance will continue to receive transfers from the State Highway Account at an escalating rate indexed to inflation.</p> <p><b>Growth:</b> 2.8 % average annual growth.</p>

## Local Funding

Local revenues are based on historical funding from local sources for each city, county, transportation commission, and transit operator in the region. Local funding sources provide the majority of the funds that support the MTP/SCS and include:

- Local Transportation Fund (LTF)
- Sacramento County Measure A - (1/2-cent)
- Sacramento County Measure B - (1/2-cent)
- Gas Tax Subventions
- Gas Tax Swap (Excise Tax Subventions)
- Local Streets and Roads
- Developer In-Kind
- Caltrans Discretionary
- Transit Fares

### *Note on Local-Option County Sales Tax in the MTP*

All of the local revenues assumed in the MTP/SCS are based on the continuation of existing funding mechanisms with the exception of a new local option county sales tax measure in Sacramento County. Measure B would institute a new ½-cent sales tax equivalent to support road maintenance and transit operations within the county of Sacramento. In the 2008 MTP, Measure B was anticipated to take effect in fiscal year 2012. However, in air quality nonattainment and maintenance areas, such as the SACOG region, projects may only be included in the first two years of the federal transportation improvement program (TIP) if funds are “available” or “committed.” Because Measure B is not yet adopted, it did not meet the requirements of available or committed and therefore was pushed out to an anticipated adoption year of 2014.

**Table B1.4. Local Revenue Sources and Assumptions**

	2008 MTP	MTP/SCS
Local Transportation Fund (LTF)	<p><b>Base Year:</b> 2007 Board-Adopted Financial Assumptions</p> <p><b>Key Assumptions:</b> ¼-percent general sales tax for transportation will remain in place at existing rate.</p> <p><b>Growth:</b> Escalate FY 2005 amounts by 8% in Placer County, 6% in Sacramento County, and 5% in the other four counties for sales tax growth.</p>	<p><b>Base Year:</b> 2010</p> <p><b>Key Assumptions:</b> ¼-percent general sales tax for transportation will remain in place at existing rate.</p> <p><b>Growth:</b> 1% in FY2012 increasing by 1% per year until 5% in 2016, then 5% annually thereafter based on preliminary draft estimates from the Sacramento</p>

		Transportation Authority.
Measure A	<p><b>Base Year:</b> 2007 Board-Adopted Financial Assumptions</p> <p><b>Key Assumptions:</b> ½-cent general sales tax in Sacramento County will remain in place at existing rate.</p> <p><b>Growth:</b> Escalate by 5% per year for growth in sales.</p>	<p><b>Base Year:</b> 2010</p> <p><b>Key Assumptions:</b> ½-cent general sales tax in Sacramento County will remain in place at existing rate.</p> <p><b>Growth:</b> 1% in FY2012 increasing by 1% per year until 5% in 2016, then 5% annually thereafter based on preliminary draft estimates from the Sacramento Transportation Authority</p>
Measure B	<p><b>Base Year:</b> 2007 Board Adopted Financial Assumptions</p> <p><b>Key Assumptions:</b> 1/2-percent general sales tax will begin in 2012 and last through 2035.</p> <p><b>Growth:</b> Escalate by 5% per year for growth in sales.</p>	<p><b>Base Year:</b> 2014</p> <p><b>Key Assumptions:</b> Equivalent of 1/2-percent general sales tax will begin in 2014 and last through 2035.</p> <p><b>Growth:</b> 5% annually based on preliminary draft estimates from the Sacramento Transportation Authority.</p>
Gas Tax Subventions	<p><b>Base Year:</b> 2007 Board Adopted Financial Assumptions</p> <p><b>Key Assumptions:</b> Subventions will continue to flow to cities and counties based on existing formulas.</p> <p><b>Growth:</b> Escalate for increases in VMT and population based on SACOG forecasts. Escalate by 33% in 2011 and another 17% in 2021 for state gas tax increases; add in Prop 42 sales tax on gasoline starting in 2009.</p>	<p><b>Base Year:</b> 2010</p> <p><b>Key Assumptions:</b> Subventions will continue to flow to cities and counties based on existing formulas. Revenues will grow with increases gasoline consumption. In 2011 and thereafter there will be a slight reduction in subventions due to the reduction in the diesel excise tax. The amount of diesel excise tax available will depend on State Controller adjustments to maintain revenue neutrality with the diesel sales tax.</p> <p><b>Growth:</b> 2% average annual growth</p>
New Gasoline Excise	<b>Base Year:</b> N/A	<b>Base Year:</b> 2011

<p>Tax Subventions</p>	<p><b>Not Applicable:</b> The new gasoline excise tax supplants the Proposition 42 transfers to the Transportation Investment Fund.</p>	<p><b>Key Assumptions:</b> Beginning in 2011, 44% of the revenues generated by the new excise tax on gasoline (after reductions for debt service payments) will flow to local streets and roads. The state will adjust the excise tax annually to compensate for the loss of the gasoline sales tax.</p> <p><b>Growth:</b> 7% average annual growth based on California Energy Commission 2009 estimates for fuel price and consumption</p>
<p>Local Streets and Roads</p>	<p>Previously, this category was broken out into several categories including Impact fees from Development, Special District Funds, and General funds and Other.</p>	<p><b>Base Year:</b> 2009</p> <p><b>Key Assumptions:</b> Based on 10-year historical average of budget information provided by local jurisdictions to the California State Controller. Contains all revenues from local sources dedicated to local streets and roads.</p> <p>*This category increases the level of funding over the combined total of the budget line items identified in the MTP/SCS due to capture of revenues not included previously.</p> <p><b>Nominal Growth Rate:</b> 1% per year through 2014, 2% in 2015, 3% in 2016, 3.2% in 2017 through 2024, and 4% in 2025 and thereafter.</p>
<p>Developer In-Kind</p>	<p><b>Base Year:</b> 2007 Board Adopted Financial Assumptions</p> <p><b>Key Assumptions:</b> Estimated using average cost per mile for developer built roads. Growth based on growth in new housing units.</p> <p><b>Growth:</b> 3.2% average annual growth</p>	<p><b>Base Year:</b> Projected 2010 from MTP 2035</p> <p><b>Key Assumptions:</b> Same as previous. Updated to grow with new draft housing unit assumptions.</p> <p><b>Growth:</b> Held flat through 2014. Average annual growth of 3.1% thereafter</p>
<p>Caltrans Discretionary Funds</p>	<p><b>Base Year:</b> 2007 Board Adopted Financial Assumptions</p> <p><b>Key Assumptions:</b> Assume 5% of</p>	<p><b>Base Year:</b> Projected 2010 from MTP 2035</p> <p><b>Key Assumptions:</b> Assume 5% of statewide</p>

	statewide total goes to Region.  <b>Growth:</b> escalate 2% per year plus 20% at each reauthorization	total goes to Region.  <b>Growth:</b> 2.5% average annual growth
Transit Fare revenues	<b>Base Year:</b> 2007 Board-Adopted Financial Assumptions  <b>Key Assumptions:</b> Fare revenues grow with anticipated growth in ridership and fare increases based on SACOG and operator forecasts.  <b>Growth:</b> 6.4% average annual growth in fare revenues	<b>Base Year:</b> 2009  <b>Key Assumptions:</b> Based on SACOG ridership projections and average fare per rider.  <b>Growth:</b> 5% average annual growth in fare revenues

## PART 2: Plan Investments

The MTP/SCS spends \$32.5 billion (\$49.8 billion YOE) to build, operate, and maintain the region’s transportation system. MTP/SCS expenditures are distributed among five general purposes including: 1) maintenance and rehabilitation of existing and future facilities; 2) expansion, operations, and maintenance of public transit; 3) road and highway expansion and operational improvements; 4) bicycle and pedestrian retrofits and new facilities; and 5) programs and planning. Table B1.5 shows how revenues in the MTP/SCS are invested among the various purposes. A more detailed discussion of each expenditure purpose follows.

**Table B1.5: MTP/SCS Expenditures by Purpose (in billions)**

Expenditure Purpose	Total Expenditures (Current)	Total Expenditures (YOE)
Maintenance and Rehabilitation	\$11.5	\$16.4
Public Transit	\$11.3	\$15.9
Road and Highway	\$7.4	\$10.5
Bicycle and Pedestrian	\$2.8	\$4.0
Programs and Planning	\$2.2	\$3.1
<b>TOTAL</b>	<b>\$35.2</b>	<b>\$49.8</b>

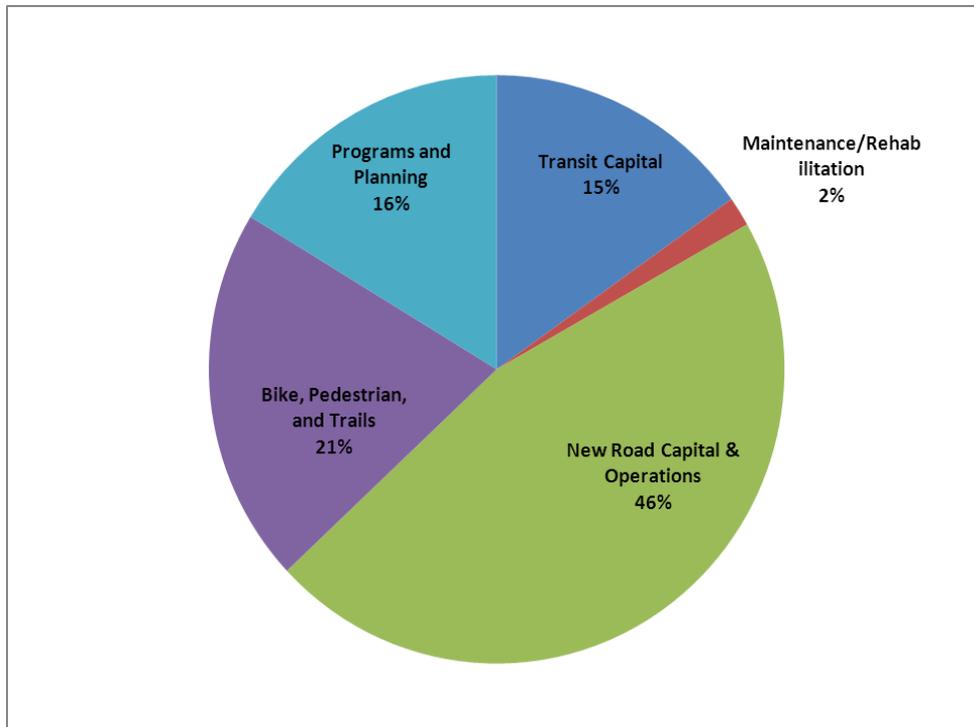
Nearly two-thirds of the revenues supporting the MTP/SCS are already dedicated or committed to specific purposes as described in Table B1.6.

**Table B1.6. MTP/SCS Revenues by Purpose (in millions - 2010 dollars)**

	2008 MTP			MTP/SCS				
	Total 2008 MTP Revenues (millions)	% of Total	Revenues per Capita (dollars)	Total MTP/SCS Revenues (millions)	% of Total	Revenues per Capita (dollars)	% Change in Total Revenues	% Change in Per Capita Revenues
Transit Operations	\$9,570	24%	\$2,858	\$7,866	22%	\$2,547	-19%	-11%
Transit Capital	\$1,649	4%	\$492	\$1,335	4%	\$433	-14%	-12%
Caltrans Restricted Capital	\$1,368	3%	\$408	\$1,064	3%	\$345	-22%	-15%
Dedicated Road Maintenance/Rehabilitation	\$11,933	30%	\$3,563	\$11,285	32%	\$3,657	-15%	3%
Discretionary Funding	\$15,658	39%	\$4,675	\$13,601	39%	\$4,407	-6%	-6%
<b>Total</b>	<b>\$40,178</b>	<b>100%</b>	<b>\$11,997</b>	<b>\$35,150</b>	<b>100%</b>	<b>\$11,389</b>	<b>-13%</b>	<b>-5%</b>

The remaining third is discretionary funding that the region can elect to spend on a number of purposes. SACOG controls decisions on only about 20 percent of the discretionary funds in the plan. State and local agencies serve as funding partners on essentially all regional-scale projects, reflecting the importance of local funding sources in overall transportation investment.

**Figure B1.1. Discretionary Funding Distribution**



Discretionary funding in the MTP/SCS is distributed among the purposes described in Figure B1.1. New road capital and operations make up the largest share with 46 percent of the total. Of this, about 80 percent pays for road and highway capacity improvements with the remaining 20 percent paying for operational improvements. Bicycle and pedestrian improvements receive the next largest share with 21 percent of the total. However, this number represents only those investments that are exclusively for bicycle and pedestrian modes. A number of road capital and rehabilitation projects also contain bicycle, pedestrian, and ADA improvements. On average, between 10 percent and 30 percent of the total expenditures on road capital and rehabilitation projects go toward enhancements or retrofits that improve bicycle and pedestrian access on roadways.

The transit capital budget is the third largest receiver of discretionary funding in the MTP/SCS with 15 percent of the total. Most of this goes toward purchasing replacement and expansion vehicles as well as strategic infrastructure expansion for the region’s transit system.

Discretionary funding is generally not available to support local transit operations, partly because of the ongoing nature of operating expenses. More discussion on funding for transit operations is contained in Part 5 of this appendix.

Programs and planning make up 16 percent of discretionary expenditures. These expenditures include support for community design incentives, travel demand management (including the regional rideshare program), clean air, open space, technology deployment, and enhancement programs. Some of this funding also goes toward local planning efforts such as the development of local bicycle and pedestrian plans.

Road maintenance and rehabilitation receive the remaining 2 percent of discretionary funds. However, this amount is in addition to an assumed set-aside of SACOG controlled funds dedicated to road maintenance purposes. Since 1998, the region has diverted between 15 and 25 percent of state and federal funds to road rehabilitation instead of road capacity. The MTP/SCS assumes that this practice will continue, and maintains a commitment of 25 percent of Regional Surface Transportation Program funds to fund road rehabilitation projects.

The sum of committed funds dedicated for specific uses and the distribution of discretionary funds for various purposes make up the full investment outlined in the MTP/SCS. Table B1.7 provides a summary of MTP/SCS expenditures by category followed by a discussion of each.

**Table B1.7: MTP/SCS Expenditures by Purpose (in millions - 2010 dollars)**

	2008 MTP			MTP/SCS				
	2008 MTP Expenditures (millions)	% of Total	Expenditures per Capita (dollars)	MTP/SCS Expenditures (millions)	% of Total	Expenditures per Capita (dollars)	% Change in Total Expenditures	% Change in per Capita Expenditures
Transit Operations	\$9,570	24%	\$2,858	\$7,866	22%	\$2,553	-18%	-11%
Transit Capital	\$4,048	10%	\$1,209	\$3,400	10%	\$1,104	-16%	-9%
Maintenance/Rehabilitation	\$11,967	30%	\$3,573	\$11,505	33%	\$3,734	-4%	4%
New Road Capital & Operations	\$9,330	23%	\$2,786	\$7,348	21%	\$2,385	-20%	-14%
Bike, Pedestrian, and Trails	\$2,853	7%	\$852	\$2,812	8%	\$913	-1%	7%
Programs and Planning	\$2,411	6%	\$720	\$2,221	6%	\$721	-8%	0%
<b>TOTAL</b>	<b>\$40,178</b>	<b>100%</b>	<b>\$11,997</b>	<b>\$35,151</b>	<b>100%</b>	<b>\$11,409</b>	<b>-13%</b>	<b>-5%</b>

## **Public Transit Investments**

The MTP/SCS provides \$11.3 billion (\$15.9 billion YOE) in transit capital and operating investments. Most of this investment, about 70 percent of the total, is consumed by the cost of operating and maintaining the transit system. The balance pays for capital expenses, such as purchasing replacement and new buses and rail vehicles, infrastructure associated with adding routes and stations to the bus and rail system, building new storage and maintenance facilities, and other improvements to help bus transit vehicles move quickly through traffic.

The level of transit investment in the MTP/SCS results in a 98 percent increase in transit service from today. Much of the increase in transit service is due to higher frequency of buses and rail vehicles on the most productive transit lines. The MTP/SCS quadruples the amount of 15-minute or faster service by 2035, with an emphasis on serving areas that can be productive with higher ridership due to the density and mix of land uses served. The MTP/SCS provides a mix of transit options including bus rapid transit (BRT), express (or commuter) bus routes, local fixed route bus service, limited service rural bus routes, neighborhood shuttles, light rail, streetcar, and regional rail. The types of transit offered throughout the plan area vary by area; investments include increasing the amount of service on existing fixed route and express bus lines, to introducing new services including BRT and neighborhood shuttles or adding high capacity rail to high-demand corridors.

## **Maintenance and Rehabilitation**

The MTP/SCS prioritizes maintenance of existing assets before considering expansion of the system. The maintenance and rehabilitation budget spends \$11.5 billion, (\$16.4 billion YOE), to preserve, maintain, and rehabilitate the region's roadways, trails, sidewalks and other bicycle and pedestrian facilities. Cities and counties are responsible for approximately 57 percent of the maintenance and rehabilitation budget to maintain local streets and facilities for bicycles and pedestrians. The state maintained highway system consumes the remaining 43 percent. In current dollars, the MTP/SCS sustains an annual investment between \$200 and \$300 million per year through 2035 to maintain and rehabilitate local streets and facilities for bicycles and pedestrians. State highways in the MTP/SCS receive around \$200 million annually from state funding sources the region does not control.

The plan area covers an estimated 22,000 lane miles of existing collector and local streets and over 5,000 lane miles of freeway, carpool, auxiliary, expressway, and arterials that must be kept in a good state of repair for the transportation system to operate efficiently. Additionally, the MTP/SCS accounts for the future maintenance and rehabilitation needs of new roads and highway lane miles in the plan, including approximately 6,000 lane miles of collectors and local streets and 1,730 of freeway, carpool, auxiliary, expressway, or arterial lane miles.

The plan includes a number of activities that maintain a state of good repair on both the existing and expanded systems including routine maintenance and more extensive repairs, reconstruction,

and rehabilitation. Routine maintenance activities include sealing cracks, repairing pavement, cleaning and repairing drains, fixing signals, and sweeping streets. Major repairs, rehabilitation, and reconstruction activities include sealing pavement, repaving, reconstructing subgrade and drainage, replacing obsolete bridges, and reconfiguring intersections.

### **Road and Highway Investments**

The MTP/SCS spends \$7.4 billion (\$10.5 billion YOE) on road and highway capital and operational projects. The MTP/SCS contains a mix of road and highway investments including expansion of existing facilities to relieve existing or future bottlenecks, realignments and bypasses to improve or redirect traffic flow, other operational and safety improvements such as the addition of guardrails to highways, rumble strips, intersection signalizations, restriping, etc., and new facilities that serve new development and high-growth areas.

More than two-thirds of the total road and highway investment pays for improvements to existing facilities such as road widenings, intersection or interchange improvements, intelligent transportation system upgrades, turn pockets, high-occupancy vehicle (HOV) lanes, auxiliary and transition lanes, and other improvements. The remainder of the budget pays for new road and highway facilities such as roads serving high-growth areas or new development, new interchanges, road extensions, and new river crossings to connect development across the region's three major rivers.

The main focus of road and highway capacity investments on existing and new facilities is to provide access to infill development areas, support bus transit, and reduce congestion. The MTP/SCS assumes that the Sacramento region is unlikely to support significant freeway widening or new freeways, therefore the plan conserves a portion of existing freeway capacity for trucking and interregional travel by providing arterial system alternatives for regional and local travel. The majority (97 percent) of new roadway lane miles in the MTP/SCS are on surface streets, not freeways. Added freeway lane miles account for 3 percent of total new roadway capacity. Of the added freeway lane miles, 75 percent are carpool, auxiliary lanes, new ramps or widened ramps; 25 percent are added mainline, mixed-flow lanes. Most of the carpool, auxiliary, and transition lane additions occur in the urbanized part of the plan area and are directed at closing gaps that relieve congestion along major commute corridors during peak commute periods. The MTP/SCS also includes increased frequency of express bus services along these corridors to maximize the capacity of the carpool lanes and give transit a travel-time advantage.

### **Bicycle and Pedestrian Investments**

The MTP/SCS includes \$2.8 billion (\$4.0 billion YOE) in investments for bicycle and pedestrian facilities. Bicycle and pedestrian facilities in the MTP/SCS facilitate walk and bike trips within and between communities in the plan area. Projects include direct bicycle and pedestrian investments such as new shared-use paths and trails, as well as complete streets projects that incorporate bicycle and pedestrian infrastructure into existing, expanded or new road and transit facilities. In addition to the projects listed in the project list contained in Appendix A-1—

Project List, the MTP/SCS contains funding for a number of unspecified bicycle and pedestrian improvements intended to increase connectivity and safety.

## **Programs and Planning**

The MTP/SCS invests \$2.2 billion (\$3.1 billion YOE) in supportive programs and planning that encourage efficient use of transportation investments contained in the MTP/SCS. The programs and plans contained in the MTP/SCS include the following:

- Community Design Program: provides seed funding to smart-growth development projects;
- Sacramento Emergency Clean Air and Transportation Grant Program (SECAT): provides funding for replacing or retrofitting commercial diesel engines and trucks;
- Spare the Air Program: provides notifications and incentives to avoid driving on days when air quality conditions are poor;
- Intelligent Transportation System (ITS) Strategic Deployment Plan: includes management and installation of automated message signs, crosswalk signals with pedestrian countdown timers, real-time transit message signs, transit signal priority for buses, operation of the regional Traffic Operations Center, and other ITS strategies;
- Travel Demand Management (TDM) Program: includes management and operation of the 511 Traveler Information website and call center as well as funding for initiatives that provide assistance to travelers seeking information on carpools, vanpools, walking, biking, and transit services; and
- Development of local plans and programs related to transportation planning and system management.

## PART 3: Transit Operations and Capital Cost Analysis

The MTP/SCS Transit Cost Model relies on certain assumptions to estimate the capital and operating costs associated with implementation of the transit service planned in the MTP/SCS. These assumptions are the basis for determining how much transit service the region can support given the financial constraints of the MTP. In the following pages, the major assumptions driving the MTP/SCS Transit Cost Model are identified and explained.

### 2008 Base Year Transit Service Assumptions

The MTP/SCS base year is 2008. Although recent service cuts have reduced transit service in the region, the 2008 service levels must be used to be consistent with other base year considerations, such as land use allocations. Table B1.8 outlines the vehicle service hours (VSH) and peak vehicles for the base year. This level of service is assumed to be operated throughout the life of the MTP, with new (expansion) service on top of the 2008 level of service added incrementally throughout the plan.

Table B1.8: Base Year Assumptions for Transit Cost Model

Operator	2008 Annual VSH*			2008 Weekday Peak Vehicles**		
	Bus	Rail	Demand Response	Bus	Rail***	Demand Response
Auburn Transit	4,653	-	-	3	-	-
Davis Community Transit	-	-	4,285	-	-	3
Delta Breeze (Isleton only)***	567	-	189	1	-	1
El Dorado Transit	31,161	-	20,811	18	-	16
Elk Grove Transit	80,720	-	15,987	43	-	7
Folsom Stage Line	11,910	-	7,831	4	-	3
Lincoln Transit	4,618	-	3,453	3	-	2
Paratransit, Inc.	-	-	284,706	-	-	130
Placer County Transit	26,588	-	16,623	18	-	6
Roseville Transit	41,139	-	13,023	14	-	7
Sacramento Regional Transit	677,676	215,947	-	187	56	-
South County Transit	19,612	-	8,415	7	-	7
Unitrans	68,477	-	-	35	-	-
Yolo County Transportation District	92,813	-	11,069	34	-	5
Yuba-Sutter Transit	50,496	-	20,535	21	-	10
<b>Total</b>	<b>1,110,430</b>	<b>215,947</b>	<b>406,927</b>	<b>388</b>	<b>56</b>	<b>197</b>
<b>Total with 20% spares****</b>				<b>466</b>	<b>97</b>	<b>236</b>

\*Data taken from 06/07-08/09 Triennial Performance Audits

\*\*Data taken from 06/07-08/09 Triennial Performance Audits and 2008 State Controller's Reports

\*\*\*Isleton has an MOU with the City of Rio Vista in Solano County for transit services in their City. The data reflects Isleton operations only based on 06/07-08/09 Rio Vista's Triennial Performance Audit prepared by MTC.

\*\*\*\*The total regional bus and demand response fleet is assumed to be 20% higher than the vehicles needed for peak service. The total light rail fleet is known to be 97 vehicles.

## Operating Cost per Hour Assumptions

Table B1.9 shows the transit operating cost assumptions used by the MTP/SCS, based on revenue hours (cost per hour when transit vehicles are in active service).

**Table B1.9: Operating Cost per Hour Assumptions**

Mode	Cost per Revenue Hour
Light Rail Train	\$220
Hybrid Light Rail Train	\$220
Streetcar	\$145
Express Bus	\$139
BRT	\$139
Fixed Route Bus	\$116
Shuttle	\$74
Demand Response	\$74

- **Light rail** assumptions are based on Regional Transit’s December 2010 Key Performance Report. **Hybrid light rail** operating costs are assumed to be the same as traditional light rail.
- **Streetcar** operating cost assumptions are based on a review of peer city operating costs.
- **Fixed route bus, demand response, and shuttle** operating cost assumptions are based on regional averages taken from the 2008 NTD and inflated to 2010 dollars.
- **Express bus and bus rapid transit** operating costs are assumed to be 20 percent higher than the cost of fixed route service.

## Annual Days in Operation Assumptions

The MTP/SCS Transit Cost Model expresses transit service in Daily Vehicle Service Hours. In order to calculate annual service hours, or to convert annual VSH to daily VSH, the model makes assumptions about the annual number of days in operation. All vehicle types, including demand response vehicles, are assumed to operate 312 days per year (about 6 days per week), except express buses, which operate only on weekdays and are assumed to be operated 260 days per year. This in turn underlies the operating cost of providing service over the life of the plan.

## Vehicle Cost Assumptions

All replacement and new vehicles included in the MTP/SCS Transit Cost Model use the unit cost assumptions shown in Table B1.10. Unit cost assumptions are based on recent procurements by regional operators. For vehicle types not currently operated in the region (streetcar, BRT), estimates were taken from peer city procurements and industry averages

**Table B1.10: Vehicle Unit Cost Assumptions**

<b>Vehicle Type</b>	<b>Cost per Vehicle</b>
Light Rail Vehicle	\$4,000,000
Hybrid LRT Vehicle	\$4,000,000
Streetcar	\$3,750,000
Express Bus	\$550,000
BRT (60')	\$750,000
Fixed Route Bus (40')	\$450,000
Shuttle	\$120,000
Demand Response (cutaway)	\$75,000

## Useful Life

In order to calculate the number of replacement vehicles needed throughout the MTP/SCS planning horizon, the MTP/SCS Transit Cost Model makes the following assumptions regarding the useful life of transit vehicles:

**Table B1.11: Useful Life Assumptions**

<b>Vehicle Type</b>	<b>Useful Life (years)</b>
Light Rail Vehicle	32.5
Hybrid LRT Vehicle	32.5
Streetcar	32.5
Express Bus	14
BRT (60')	14
Fixed Route Bus (40')	14
Shuttle	5
Demand Response (cutaway)	5

- **Light rail vehicle** assumptions are taken from the RT SRTP, which begins replacing light rail vehicles at 30 years and finishes replacing vehicles at 35 years. **Hybrid LRT vehicles and streetcar vehicles** are assumed to have the same useful life as traditional light rail vehicles.
- **Fixed route bus, express bus, bus rapid transit, shuttle, and demand response vehicle** assumptions were taken from current practice and industry standards.

## Replacement Cycles for Existing (2008 base year) Vehicles

Vehicles that are currently in revenue service (2008 base year levels) will require replacements throughout the life of the MTP, based on the useful life of the particular vehicle class and the average age of the fleet. Table B1.12 shows the varying number of replacement cycles assumed necessary by 2020 and by 2035 to operate **existing transit service (2008 base year levels)**.

**Table B1.12: Vehicle Replacement Assumptions**

Vehicle Type	# of Vehicle Replacement Cycles 2020	# of Vehicle Replacement Cycles 2035
LRT	0.27	1.00
Express Bus	1.13	2.20
Fixed Route Bus	1.13	2.20
Shuttle	2.46	5.46
Demand Response	2.46	5.46
Hybrid LRT, Street Car, BRT	0.00	0.00

- RT’s entire existing **light rail** fleet will need to be replaced during the life of the MTP. Based on RT’s SRTP, it is assumed that about one-quarter of those replacement vehicles will be needed before 2020.
- For **fixed route and express bus** service, the MTP/SCS Transit Cost Model assumes that the entire regional bus fleet will need to be replaced slightly more than one time by 2020 and 2.2 times by 2035.
- Since **demand response and shuttle** vehicles have a much shorter useful life than fixed route buses, they are assumed to need 2.5 full fleet replacements by 2020 and nearly 5.5 full fleet replacements by 2035.
- Since the region does not currently operate **hybrid LRT, streetcar, or bus rapid transit** service, there will be no replacements for existing service; however, the plan does include adding such service in the future. Replacement cycles for expansion service are shown below.

**Average Years of New (Expansion) Transit Service**

The MTP/SCS uses 2008 vehicle service hours as the base for the amount of service provided to the region. This base level of service is operated for the entire length of the plan. Additionally, new (expansion) transit service is added incrementally. Some expansion service might begin operating earlier, while other service will not begin operating until the last few years of the MTP. Table B1.13 shows the MTP/SCS Transit Cost Model’s assumptions for the number of years new service will be in operation. These assumptions affect both the number of vehicle replacements needed for expansion service and the cost to operate expansion service over the life of the MTP. The bullet points below the table provide some insight into which major service expansions influence the average years of new service.

**Table B1.13: New Service Assumptions**

<b>Mode</b>	<b>Average Years of New Service (to 2020)</b>	<b>Average Years of New Service (to 2035)</b>
LRT	6.00	16.67
Hybrid LRT	6.00	16.67
Streetcar	3.00	9.50
Express Bus	3.00	13.00
BRT/Enhanced Bus	3.00	13.00
Fixed Route Bus	4.00	14.13
Shuttle	5.20	13.00
Demand Response	5.20	13.00

- By 2020, the Green Line to the River District and the Blue Line to Consumnes River College **light rail** extensions will both be operational. By 2035, new light rail service will also include Phases 2 and 3 of the Green Line to Natomas and terminating at Sacramento International Airport.
- The West Sacramento/Sacramento **streetcar** project will come on line pre-2020, with additional streetcar service in Sacramento becoming operational in the last year of the MTP.
- Because of recent cuts to many transit services, **fixed route, express, and enhanced bus** services do not experience a great deal of growth above 2008 base year levels before 2020. It is assumed that the bulk of these expansion services will come on line in the later years of the MTP.

### Replacement Cycles for Expansion Service

As noted above, the number of years that expansion service is operated and the useful life of the vehicle type in question determine how many vehicle replacement cycles are necessary. Table B1.14 below shows the replacement cycles assumed necessary to operate expansion service throughout the MTP/SCS timeframe.

**Table B1.14: New Service Assumptions**

<b>Mode</b>	<b>Replacement Cycles 2020</b>	<b>Replacement Cycles 2035</b>
LRT	0.00	0.00
Hybrid LRT	0.00	0.00
Streetcar	0.00	0.00
Express Bus	0.21	0.93
BRT	0.21	0.93
Fixed Route Bus	0.29	1.01
Shuttle	1.04	2.60

Demand Response	1.04	2.60
-----------------	------	------

- Any expansion **light rail, hybrid light rail, or streetcar** vehicles bought to implement expansion services will not need to be replaced during the life of the MTP/SCS because the useful life of such vehicles is longer than the plan timeframe.
- Replacement cycles for **all other modes** are calculated by taking the average years of new service and dividing by the useful life of the vehicle type.

## PART 4: Local Streets and Roads Analysis

Since the 2008 MTP was developed, local jurisdictions have been hit hard by an economic crisis that has encompassed the nation. Increased volatility and uncertainty has led to greater scrutiny of financial planning assumptions statewide by the U.S. Department of Transportation, particularly surrounding local sources of revenue. In response, SACOG and other regional agencies across the state are reducing their short and long term projections to adjust to the new realities.

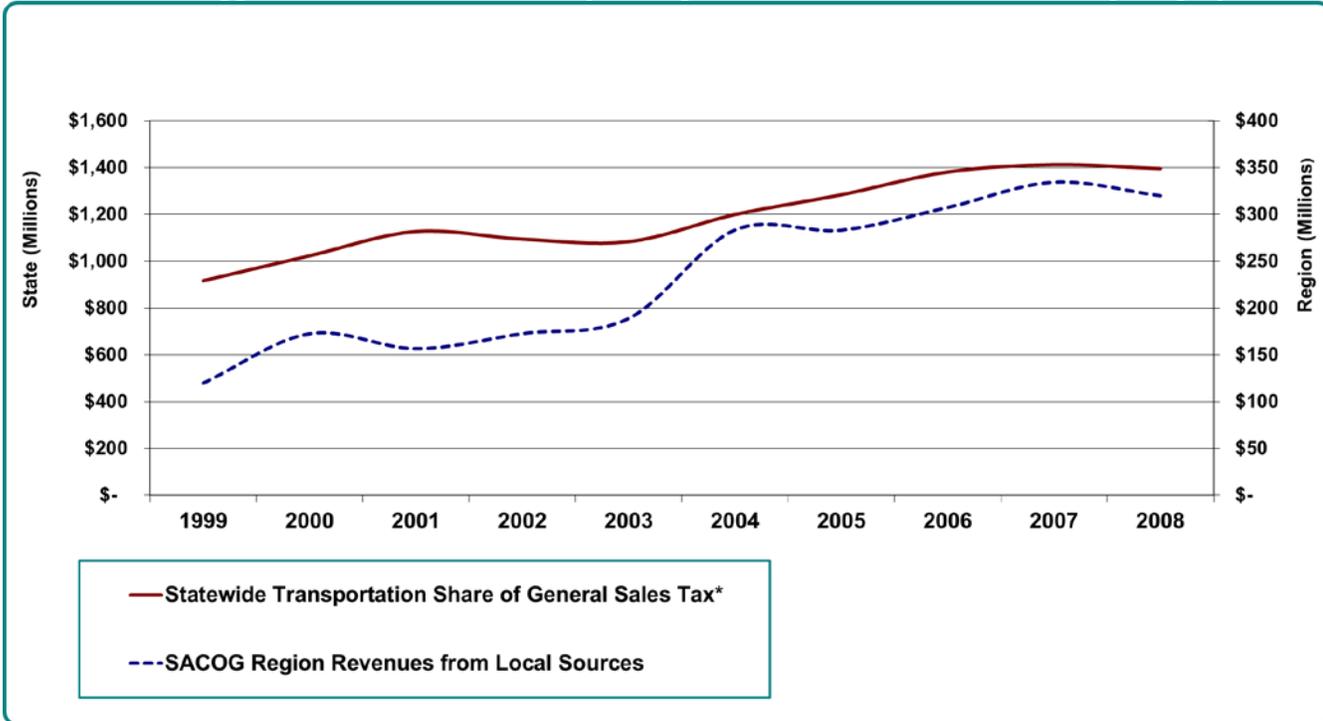
To better understand local revenue sources, SACOG conducted an analysis of historical revenues generated by the cities and counties in the region. This analysis serves as the basis for the local street and road revenues assumed in the MTP/SCS and as a guide for refining local investments in transportation projects. As part of this effort, SACOG collected data for each local jurisdiction in the region from the California State Controller’s *Streets and Roads Annual Report*, which notes:

California Streets and Highways Code section 2151 requires each city and county to file an annual report of expenditures for street or road purposes with the State Controller’s Office on or before October 1 of each year. Streets and Highways Code section 2154 requires the California State Controller’s Office to distribute a compilation of those reports annually. The State Controller’s Office prepared the financial tables presented in this report from data submitted by each city and county in its report; the data in these tables has not been audited.

SACOG collected information on local revenues generated and expended specifically for transportation purposes for the years 1999 through 2008. Figure B1.2 provides a time-series glimpse of the local revenues used for transportation in the SACOG region. The figure also shows a trend line for the local transportation share of the statewide general sales tax. SACOG uses the general sales tax as a proxy for indicating overall economic conditions across the state. The purpose of this analysis was to determine whether the State Controller Reports provided an accurate representation of annual local transportation revenues. Because both lines follow a similar trend line, SACOG concluded that the transportation expenditures reported by the cities and counties in the region track fairly well with statewide economic conditions and therefore are a fair representation of local revenues on an annual basis.

**Figure B-1.2. SACOG Region Locally-Generated Revenues and Revenues from the Statewide General Sales Tax.**

In addition to serving as the baseline for projecting future local revenues (as described in Part 1 of this appendix), the historical background provided a useful tool for ensuring the project



listings within each city and county were in proportion with that jurisdiction’s available resources. On average, SACOG assumed that each local agency would need to meet roughly two-thirds of its expenditure needs using local sources. This two-thirds rule of thumb was applied to the project submissions from each local agency to determine whether it was reasonable to assume that local resources would be sufficient to cover the local share of the total investment.

## **PART 5: Funding Shortfall and Vision Element**

The new draft MTP/SCS is referred to as the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) because the transportation investments of the MTP/SCS are intended to support the forecasted land use pattern of the SCS. These two elements together achieve the air quality, congestion, and greenhouse gas performance benefits that federal and state laws require the plan to address and that the region hopes to achieve.

At the same time, the MTP/SCS does not contain the complete picture of where the Board and partner agencies would like to go by 2035 because it is a financially-constrained plan. A key objective of the SCS is to achieve performance benefits through local implementation of plans that reflect Blueprint principles and transportation investments that support those land use decisions. One challenge is that the financially-constrained MTP/SCS can include only projects backed by revenues reasonably expected to be available during the planning period. As a result, there are unfunded transportation investments that would help support the land use pattern of the SCS, and if additional funding were available, could further enhance the implementation of a high-performing and cost-effective regional transportation plan by the 2035 horizon year.

### **Project Development Expenditures**

To keep the plan financially constrained, not all of the projects envisioned by local agencies could be included in the MTP/SCS. However, a number of projects that are not included would still provide performance benefits for the regional transportation system. To provide flexibility for local agencies to respond to changes in the economy or other conditions, the MTP/SCS sets aside roughly \$400 million for future project development work, to support early stages including project design, preliminary engineering, environmental clearance, and right-of-way acquisition for these projects. However, due to the limited revenues in the financially constrained MTP/SCS, these projects are not anticipated to have sufficient funding to complete construction during the planning period. These projects remain eligible to seek federal and state funding. If sufficient funding is secured for a project prior to the next major update to the MTP/SCS, it may be amended into the MTP/SCS to reflect full construction.

### **Vision Element**

Improved maintenance of the existing transportation system has been raised consistently as a key interest of stakeholders during the planning process. While the MTP/SCS places a high priority on system maintenance, there are revenue limitations in the financially-constrained portion of the plan. An increase in system maintenance investments beyond the financially constrained levels would support the following outcomes:

- Increased transit operating funds for expanding bus and rail services sooner. An estimated \$510 million would generate enough revenues to increase transit services by 25 percent by 2020. These services are currently anticipated in the post-2020 phase of the financially-constrained MTP/SCS.

- Increased road maintenance/rehabilitation funding to reduce the rolling backlog of deferred investments and raise the regional transportation system to a state of good repair. An estimated additional \$110 million annually over the course of the planning period would raise the region's average Pavement Condition Index (PCI) for roads from the "at-risk" range to the "good" condition range. The "good" range is when lower-cost and regular preventative maintenance investments make it possible to minimize costly reconstruction efforts. Better-maintained local roads and bicycle/pedestrian facilities also increase road safety and reduce repair costs to the traveler from poor pavement conditions.
  
- Additional funding for road maintenance/rehabilitation investments also helps the region develop a more extensive network of Class II and III bicycle facilities, safer intersections, and ADA accessible walkways. At a minimum, when major repairs are undertaken on public right-of-way, the facility must be brought up to federal and state ADA standards through improvements that include curb ramps at intersections and access improvements on public walkways. Because the ADA improvements are costly, other opportunities to improve bicycle and pedestrian travel are sometimes missed. These opportunities include bike lane striping and improved signage that is better to do through a comprehensive rehabilitation project than attempting to do as a retrofit between rehabilitation cycles. Other opportunities that are often missed through limited maintenance/rehabilitation funds are road diets, roundabouts, lighting, sidewalk bulb-outs and refuge islands at intersections.

The following sections of this appendix provide more detailed background on the needs and opportunities for increased investment in road maintenance/rehabilitation and transit operations.

## **Road Maintenance / Rehabilitation**

Maintaining a state of good repair for the region's local roads is a significant challenge for SACOG's 22 member jurisdictions. The roadways carry high volumes of vehicular traffic, and also must absorb the increasingly damaging impacts of heavy trucks. All the while, preservation costs are increasing due to a rapidly deteriorating system but current revenue sources are lagging. Deferred maintenance caused by ongoing budget shortfalls has led to roads and bridges that are in worse shape by the time they are rehabilitated, significantly raising costs. All of these challenges have taken their toll, with investments in the preservation of the transportation network not keeping pace with our demands on those systems. This underfunding has led to the deterioration of one of our region's most important transportation assets.

### **Current Conditions**

The "California Statewide Local Streets and Roads Needs Assessment" – first released in 2009 for 2008 conditions and updated in March 2011 for 2010 conditions – provides a comprehensive analysis of statewide needs for local street and road system maintenance and preservation. The study solicited data from local jurisdictions regarding the current condition of the local road network. The 2011 Assessment found further deterioration and a growing funding shortfall just

since the 2009 analysis. Table B1.15 below shows the number of centerline and lane miles in the assessment for each county of the SACOG region and also gives a score for the county's Pavement Condition Index (PCI).



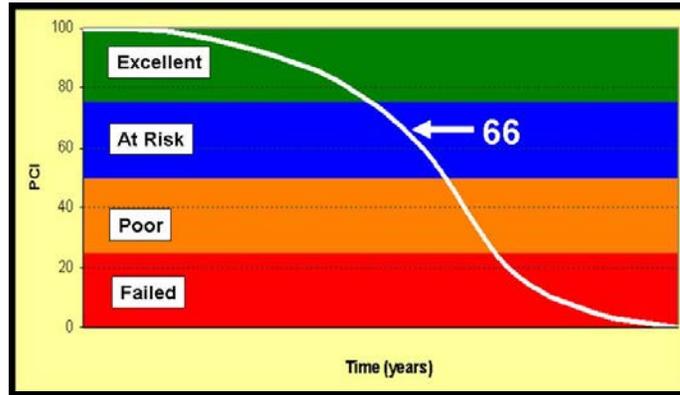
**Table B1.15: 2010 California Statewide Local Streets and Roads Needs Assessment**

County	Centerline Miles				Lane Miles				PCI		
	All	Major	Local	Unpaved	All	Major	Local	Unpaved	All	Major	Local
El Dorado	1,251	416	760	75	2,480	841	1,532	108	58	68	53
Placer	2,012	503	1,449	60	4,183	1,173	2,890	120	77	80	75
Sacramento	4,968	1,414	3,529	26	10,936	3,763	7,122	51	66	69	65
Sutter	1,029	279	587	163	2,106	621	1,156	326	56	59	54
Yolo	1,346	431	793	122	2,611	939	1,498	175	67	70	64
Yuba	724	282	340	102	1,504	592	708	204	56	55	57
Total	11,330	3,325	7,458	548	23,820	7,929	14,906	984	66	Weighted avg (centerline)	
									66	Weighted avg (lane miles)	

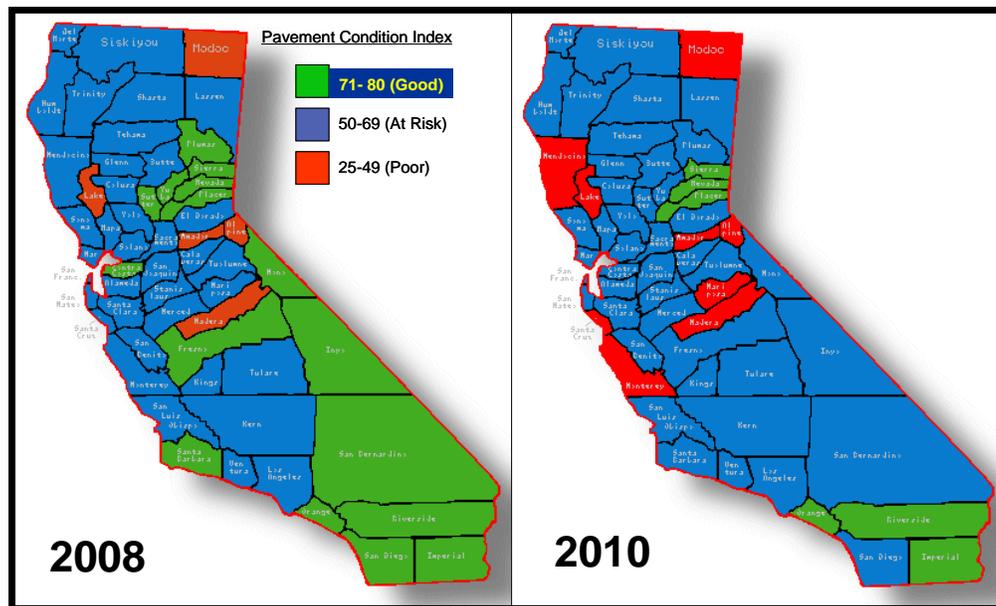
Placer County has the highest PCI score in the state and is the only county in the region to score in the “Good-Excellent” category. The other 5 counties all fall solidly into the “At-Risk” category, with PCI scores ranging from 56-66. The state average PCI score is 66, down from 68 in 2008.

An average pavement condition of 66 is not necessarily good news. While it seems just a couple of points shy of the “Good-Excellent” category, it has significant implications for the future. From the generalized pavement life cycle curve (shown below), a newly constructed pavement

will have a PCI of 100. In the first five years of its life, there is a gradual and slow deterioration. As more time passes, this pavement deterioration begins to accelerate, until the steep part of the curve is reached at approximately 15 years (the exact timing will depend on the traffic volume, climate, pavement design, maintenance, etc). From here, the pavement deterioration is very rapid. If repairs are delayed by just a few years, the costs of proper treatment may increase significantly, as much as ten times.



The financial advantages of maintaining pavements in good condition are many; they include saving taxpayer dollars, less disruption to the traveling public, as well as environmental benefits. Therefore, a PCI of 66 should be viewed with caution – it indicates that our local streets and roads are at risk, with potential exponential costs ahead.



As can be seen in the maps above, a majority of the counties in the state have pavement conditions that are in either “At Risk” condition (shown in blue) or “Poor” condition (shown in red). For 2010, this means that 62 percent of the state’s local streets and roads are at-risk and 5 percent rank as poor. Further, there has been an increase in the “blue” and “red” counties from

2008. Finally, despite their current color, none of the “green” counties have an index rating above 77; in fact, most are in the low 70’s, indicating that they will turn “blue” in a few years.

Road maintenance is a regionwide issue, but rural areas in particular face significant challenges in addressing road maintenance and rehabilitation. Rural areas have a small percentage of the SACOG region’s population but must maintain a much larger proportion of the region’s road miles.

### **Major causes of increased roadway deterioration**

Heavy vehicle traffic and wet weather comprise the two most critical factors in pavement deterioration:

- Heavy trucks (particularly those hauling gravel, logs, construction materials, overseas containers, agricultural products, garbage) and large transit buses flex the pavement and create spaces underneath. Heavy truck travel has increased significantly since 1990.<sup>1</sup>
- In 1997, via TEA-21, Congress authorized a 10 percent increase in maximum truck weight (from 72,000 pounds to 80,000 pounds), which increased road wear from those trucks by 25 percent, without an increase in road maintenance funding.
- Caltrans designs new state highway pavements for today’s heavy trucks, but heavy trucks do major damage to older rural county roads and urban arterials not built for 80,000-pound loads.
- With cracked pavement or poor drainage, wet weather can lead to water further undermining pavement.

### **Road Maintenance & Rehabilitation Funding**

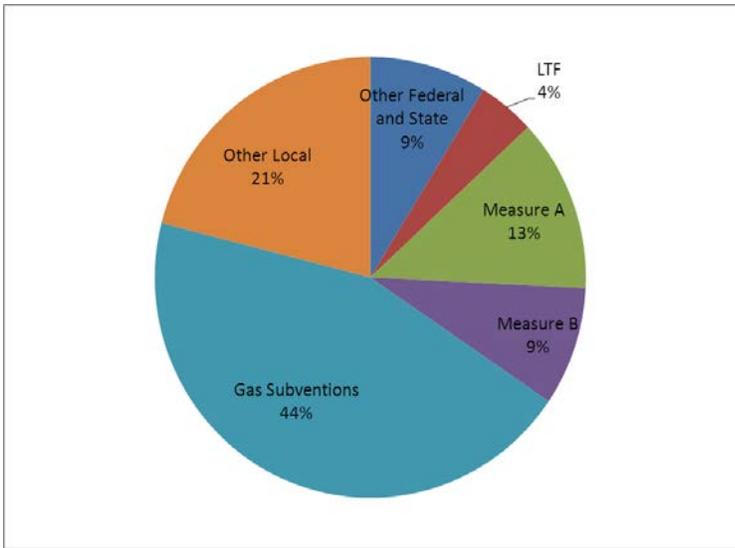
Road maintenance faces a funding squeeze, and there are no easy choices for more money. Preventive maintenance is the key to controlling long-term costs, but the primary funds available for this purpose are the local shares of the gas tax, sales tax funds, and local general funds. For rehabilitation, some state and federal funds can also be brought to bear.

In the typical local road maintenance and rehabilitation budget, about 44 percent comes from gas taxes, 26 percent from sales tax-based revenues, 21 percent from other local sources including general funds, and nine percent from state and federal funds for road rehabilitation, but it varies among jurisdictions. Figure B1.3 provides a breakdown of the funds available for road maintenance and rehabilitation in the MTP.

### **Figure B1.3 Road Maintenance and Rehabilitation Funding Sources**

---

<sup>1</sup> FHWA Vehicle Classes with Definitions: Equivalent Single Axle Load



The 2011 Statewide Assessment estimated the 10-year needs, shown in Table B1.16, to achieve a roadway pavement condition meeting industry Best Management Practices (BMPs) in each county in the region. This condition represents improving the pavement condition to a level where roads primarily need preventive maintenance treatments (i.e., slurry seals, chip seals, or thin overlays).

These treatments have the least impact on the public’s mobility and commerce. Furthermore, these treatment types are more environmentally friendly than the next level of construction that would be required (i.e., rehabilitation and reconstruction).

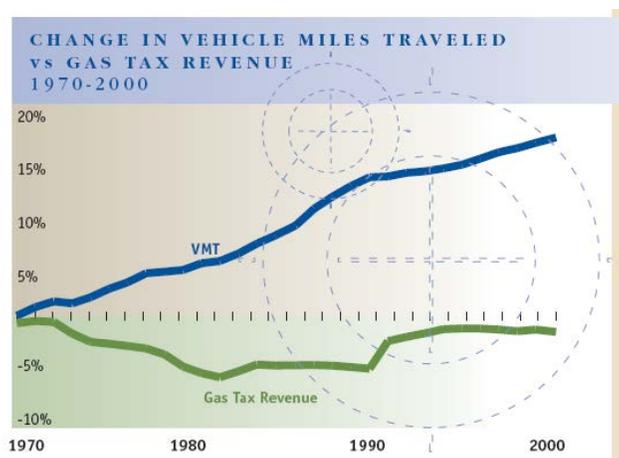
**Table B.16: 2010 California Statewide Local Streets & Roads Needs Assessment, 10-year Needs**

County	PCI 10-year Needs (in 2010 dollars)
El Dorado	\$562,000,000
Placer	\$577,000,000
Sacramento	\$2,505,000,000
Sutter	\$502,000,000
Yolo	\$589,000,000
Yuba	\$448,000,000
Region	\$5,183,000,000

--	--

## Funding Shortfalls

The inadequacy of the state gasoline tax is widely misunderstood; it now covers only 25 percent of actual local road maintenance and rehabilitation costs, with nothing left over for road improvements. In 2003, out of 16 sampled agencies, the local share of the gas tax covered actual road maintenance costs for Yolo and Yuba Counties only. When rehabilitation is included, the gas tax covered no more than 50 percent of these costs for any city or county. Gas tax revenues have increased very slowly - about 1 percent per year - for the past 25 years. Fleet efficiency nearly cancels out the large growth in vehicles and miles of travel. The gas tax rate has not kept up with inflation either; the equivalent purchasing power of the 7-cents-per-gallon tax rate of 1965 would have to be 42 cents per gallon, instead of the 18 cents it is today.



Sales tax revenues – from Measure A in Sacramento County and Transportation Development Act (TDA)/Local Transportation Funds in rural areas – have taken up the slack for the gas tax, and now provide about half of local road maintenance and rehabilitation funding in most cities and counties.

In rural counties, TDA/Local Transportation Funds (LTF) from a ¼-percent sales tax can be used for road purposes once all reasonable transit needs are determined to be met. For rural counties, none of which have enacted transportation sales tax measures, TDA/LTF funds cover 10 to 30 percent of road maintenance costs, and public works departments assiduously defend their share of TDA/LTF funds. TDA/LTF and Measure A revenues expand with the economy, as do road maintenance and rehabilitation costs; thus, at least this part of the funding base keeps up with inflation.

Some local agencies still also use general funds for road maintenance, but other local funds dedicated to transportation are typically restricted to capital improvements. In 1976, local general funds covered 40 percent of city street maintenance costs and 20 percent of county road maintenance costs, since property access is considered one of the basic purposes for property taxation. But property tax funds allocated to local governments have shrunk dramatically since Proposition 13 in 1978, averaging less than 10 percent today, and zero in some cities and

counties. Other local revenues used for transportation, including developer fees, assessments and bonds, are generally dedicated to capital improvements, not maintenance or rehabilitation. General sales taxes bear little relation to road use, so roadway users lose touch with the real cost of the system they drive on, and can – and do – over-use the system and ignore the public cost. Caltrans has been able to shift state and federal funds from the State Transportation Improvement Program (STIP) for maintenance and rehabilitation of the highway system– an elastic funding option not available to local agencies.

### **Costs of Deferred Maintenance**

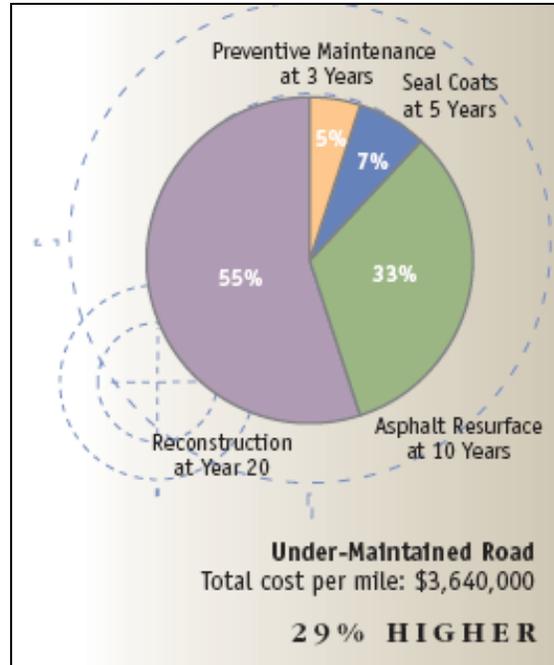
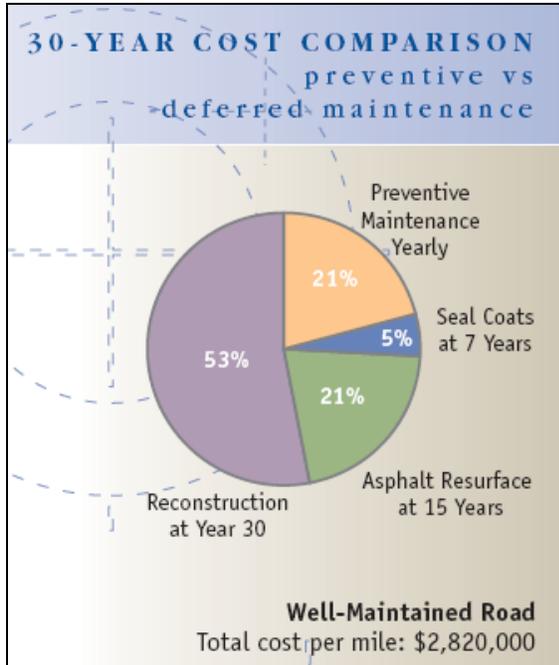
Deferred maintenance is the Achilles heel of the whole system. Deferred maintenance forces a costlier fix and shortens the cycle when rehabilitation comes due, but because of funding shortfalls, essentially all cities and counties have been deferring both more maintenance and rehabilitation than they should.

Texas Transportation Institute studies conclude that it costs less in the long run to have good roads than bad roads – if you keep up with preventive maintenance continuously. Deferred maintenance drives up long-term costs by shortening the cycle for rehabilitation which is four times as costly. Deferred rehabilitation compounds the problem, often leading to pavement failure and the need to reconstruct the whole roadbed, at ten times or more the cost.

Older built-out cities such as Sacramento, Citrus Heights, and Marysville have a larger number of older roads built to past standards and years of deferred road maintenance, so are facing continuing major rehabilitation costs. Newer developing cities such as Elk Grove, Folsom, and Lincoln benefit from modern developer-built road mileage that boosts funding formulas without adding major rehabilitation liabilities yet, but these cities will soon face an increasing load of preventive maintenance to keep ahead of the curve. As discussed above, rural counties end up as losers in funding formulas, but face disproportionate shares of road lane miles to maintain, and many must deal with resource-based economies such as agriculture, logging, or mining that overwhelm old narrow roads with heavy trucks.

Cities often must deal with extra costs due to utilities in the roadbed, pavement damage from past utility work, and landscaping in the right-of-way; counties must consider adding paved shoulders; and Caltrans faces added costs for complex traffic handling and night work. Increases of more than 50 percent in the cost of fuel and asphalt and nearly 100 percent in the cost of concrete and steel since 2004 are further squeezing beleaguered budgets for road maintenance and bridge repairs, affecting both local agencies and Caltrans. Given the shortfall of funding they have to work with, city and county public works agencies seek to do a creditable job at keeping roads serviceable but overall funding continues to lag behind maintenance needs.

The following figures illustrate that deferring maintenance can move reconstruction needs up by 10 years, and cost on average \$820,000 more per mile than a more regular maintenance cycle.



Improving the state of good repair for roads across the region has been a SACOG board policy priority since the development of the 2008 MTP began six years ago. This MTP/SCS allocates \$11.5 billion (\$16.4 billion YOE) for road maintenance and rehabilitation. Although the MTP/SCS forecasts an overall decline in revenue, the actual per-capita expenditure in road maintenance and rehabilitation increases due to continuing the shift, begun in 1998, in a portion of flexible funds away from system expansion to system maintenance purposes.

As part of the shift in flexible capital funds to system maintenance purposes, SACOG’s Regional and Local Funding Program allows agencies to submit road rehabilitation projects that help to maintain and support complete streets. These projects must demonstrate that the roadway rehabilitation will include key features that clearly improve the facility to accommodate more users of the right-of-way. Roadway users that would benefit from the project may include pedestrians, bicyclists, movers of commercial goods, and users of public transportation in a manner that is suitable to the urban, small community, or rural context of the proposed project. Investment areas covered include adding sidewalks or bike lanes to close gaps, safety improvements at intersections, signage, added or improved shoulders, rumble strips on rural roadways, or vehicle turn-outs.

## Transit Operations Funding

Significant funding challenges persist for the 14 transit agencies in the Sacramento region. In 2009, the latest year for which the state Controller has compiled data, the region’s transit operators provided over 4.4 million fixed-route transit trips and over 1.1 million demand-response/paratransit trips to the region’s residents. Between 2000 and 2008, “vehicle service hours” or the quantity of active service offered by fixed-route operators increased steadily overall, from 975,000 hours in 2001-02 to 1,293,000 hours in 2008-09. However, this expansion

of service was interrupted in 2009, with a 2.5 percent decrease in vehicle service hours due to transit funding reductions.

With the decline in transit revenues in recent years, a number of the region's transit operators have cut at least some transit service. Roseville Transit and Unitrans began reducing service hours in 2006 and 2007, respectively, and all of the Sacramento County operators have implemented significant service cuts or changes:

- In 2009, Folsom Stage cut some of its fixed-route service and also the hours available for Dial-a-Ride service.
- Sacramento Regional Transit (RT) cut over 20 percent of its bus and light rail service in June 2010, which included eliminating routes, reducing coverage or frequency on others, and cutting off most service on buses and light rail after 9:00 pm.
- SCT/Link fundamentally changed its service in Galt, switching from a fixed-route service to a higher-fare, general public dial-a-ride service requiring an advance reservation.
- Elk Grove Transit cut 30 percent of its service in the fall of 2010 by significantly restructuring fixed-route services and eliminating demand-response service to and from destinations outside Elk Grove, except for medical trips.

### **Major causes of transit funding declines**

Most of the MTP/SCS budget (about 70 percent) that supports transit operations comes from local sources, including transit fares and sales tax revenues. The rest comes from various federal and state programs. Figure 5-8 provides a snapshot of the revenue sources available for supporting transit operations in the SACOG region. Shifts in federal and state funding programs and declines in sales tax revenues have been the most critical factors in transit funding reductions:

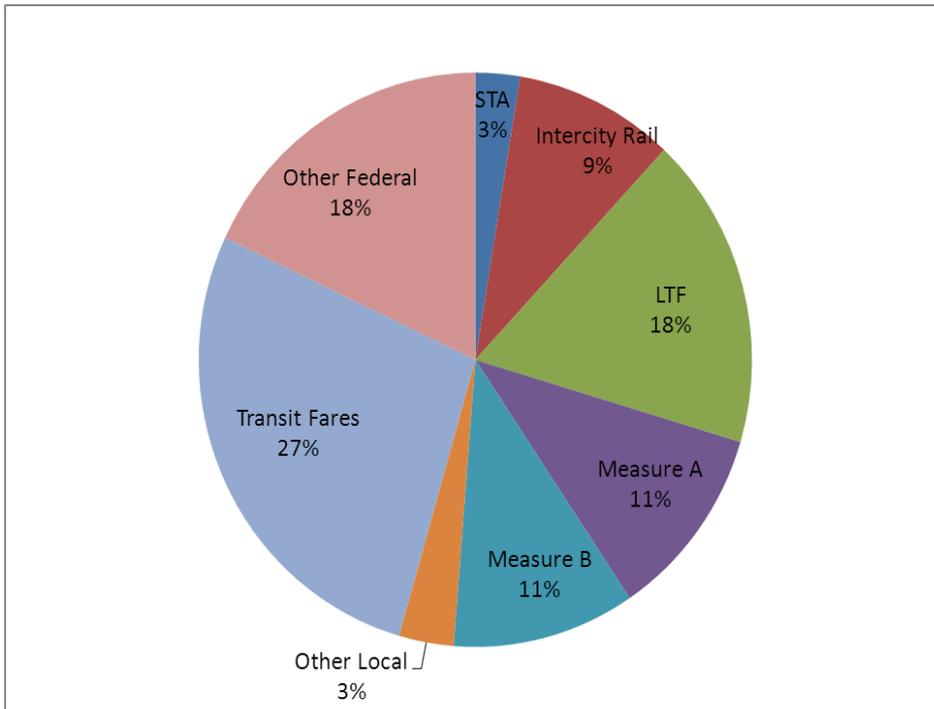
- Federal and state programs have increasingly tended to fund capital expenditures rather than operating expenses.
- In the last decade, over \$1 billion in funds that would have funded transit agencies statewide through the state's Public Transportation Account were shifted to other state uses.
- State Transit Assistance (STA) funds were reduced to the region's operators. For example, RT's revenues from the STA fell from \$9.6 million in 2007 to \$7 million in 2008 to \$2.8 million in 2009.
- Changes were also made to the state gas tax formula to eliminate the provision of more funds to transit agencies when gas prices rose.
- A significant percentage of total operating revenues for the region's operators now come from two volatile sales taxes sources: TDA/Local Transportation Funds (LTF) from a ¼-cent sales tax for transportation authorized by the state Transportation Development Act or TDA; and Sacramento County's Measure A, a ½-cent county transportation sales tax. With sales tax receipts declining due to the economic downturn, both of these sources have yielded significantly less revenue for transit agencies in the last few years. RT, as the largest transit agency in the Sacramento region, saw a drop in revenue from these sources from \$83.1 million in 2007 to \$67.9 million in 2009. Since RT uses 90 percent of

its receipts from Measure A for operating expenses, the drop from \$44 million in 2007 and \$44.9 million in 2008 to \$34.9 million in 2009 left a significant hole in the agency's operating budget, leading to service cuts.

### Board Direction and MTP/SCS Assumptions

The SACOG Board endorsed a framework for the MTP/SCS that included direction to use conservative revenue forecasts. The result is a forecast that includes an 18 percent reduction in total dedicated transit revenues compared to the MTP adopted in 2008. Due to lower population projections for the plan, the per-capita reduction in revenues is closer to 10 percent for both capital and operations.

The pie chart below shows the various sources assumed for transit operations funding in the MTP/SCS:



The MTP/SCS partially offsets the projected decline in

dedicated transit revenues by shifting more than \$2 billion of flexible revenue from road to transit purposes over the course of the planning period. The region spent approximately \$230 million/year in the 2008 base year on transit operations. The MTP/SCS increases annual operating expenditures by 90 percent to \$435 million/year in 2035, with a near doubling of

vehicle service hours (VSH). However, this growth is lower than the 2008 MTP, which assumed over 12,000 daily VSH by 2035.

The MTP/SCS assumes a continuing heavy reliance on sales taxes (40 percent of revenues) because of the limits on other funding sources for transit operations. However, the volatility of sales taxes, and uncertainty in state and federal funding due to the state's economic condition and yet-to-be-completed Federal Reauthorization may mean that transit revenues fall short of projections and leave a larger gap in operating costs. The MTP/SCS includes the revenue equivalent to a new ½-cent Measure B sales tax in Sacramento County beginning in 2014, with half of the revenue going to supporting transit operational and capital needs. The MTP/SCS also assumes a significantly higher percent of operating costs covered by fares, due to higher quality, 15-minute service in Centers and Corridors that attracts higher ridership. However, if operating revenues lag for these new services, fare revenues may not materialize at this rate.

Most of the region's transit operators are approaching service restorations and expansions cautiously until the revenue picture becomes clearer. RT is currently undergoing a Comprehensive Operational Analysis to plan for how to restore service over the coming years in light of projected operating revenues as well as planned completion of the Light Rail South Line and the new Green Line segment and their associated operating costs.

## Attachment A: Revenue Projections (in millions of nominal dollars)

	FFY 2011- 2015	FFY 2016- 2020	FFY 2021- 2025	FFY 2026- 2030	FFY 2031- 2035	Total
<b>Federal</b>						
<b>Federal Highway &amp; Other</b>	\$360	\$454	\$589	\$763	\$989	\$3,155
-Congestion Mitigation and Air Quality - (CMAQ)	\$140	\$172	\$220	\$280	\$358	\$1,169
-Regional Surface Transportation Program - (RSTP)	\$115	\$141	\$180	\$230	\$294	\$960
-Federal Discretionary Programs	\$105	\$141	\$189	\$252	\$338	\$1,025
<b>Federal Transit</b>	\$347	\$271	\$626	\$441	\$562	\$2,248
-FTA 5307 - Urbanized Area Formula Program	\$149	\$190	\$243	\$310	\$396	\$1,288
-FTA 5309 (a) - Rail and Fixed Guideway Modernization	\$26	\$33	\$42	\$54	\$69	\$224
-FTA 5309 (b) - New Rail Starts	\$135	\$0	\$281	\$0	\$0	\$416
-FTA 5311 (b) - Rural Transit Assistance Program	\$9	\$11	\$15	\$19	\$24	\$77
-FTA 5316 - Job Access and Reverse Commute Program	\$5	\$7	\$9	\$11	\$15	\$47
-FTA 5317 - New Freedom	\$2	\$3	\$4	\$4	\$5	\$19
-FTA 5310 - Elderly and Disabled Specialized Transit Program	\$6	\$7	\$9	\$12	\$15	\$48
-FTA 5309 (c) - Bus Allocations	\$15	\$19	\$24	\$31	\$40	\$129
<b>Federal Stimulus</b>	\$0	\$0	\$0	\$0	\$0	\$0
<b>Federal Subtotal</b>	<b>\$707</b>	<b>\$725</b>	<b>\$1,215</b>	<b>\$1,204</b>	<b>\$1,552</b>	<b>\$5,403</b>
<b>State</b>	FFY 2011- 2015	FFY 2016- 2020	FFY 2021- 2025	FFY 2026- 2030	FFY 2031- 2035	Total
<b>State Highway Operations and Protection Program - (SHOPP)</b>	\$715	\$807	\$956	\$1,136	\$1,376	\$4,991
<b>State Transportation Improvement Program - (STIP)</b>	\$273	\$323	\$484	\$712	\$1,049	\$2,841
-Interregional - IIP	\$66	\$78	\$116	\$171	\$253	\$684
-Regional - RIP	\$207	\$245	\$367	\$541	\$797	\$2,157
<b>Traffic Congestion Relief Program - (TCRP)</b>	\$69	\$0	\$0	\$0	\$0	\$69
<b>State Transit Assistance - (STA)</b>	\$79	\$91	\$113	\$146	\$201	\$629
<b>Intercity Rail</b>	\$132	\$168	\$214	\$273	\$349	\$1,136
<b>State Highway Maintenance</b>	\$378	\$414	\$469	\$543	\$636	\$2,440
<b>PTMISEA</b>	\$70	\$27	\$0	\$0	\$0	\$97

State Subtotal	\$1,716	\$1,830	\$2,235	\$2,811	\$3,611	\$12,204
Local	FFY 2011- 2015	FFY 2016- 2020	FFY 2021- 2025	FFY 2026- 2030	FFY 2031- 2035	Total
<b>Sales Tax</b>	<b>\$878</b>	<b>\$1,373</b>	<b>\$1,752</b>	<b>\$2,236</b>	<b>\$2,854</b>	<b>\$9,092</b>
-Local Transportation Fund (LTF)	\$301	\$371	\$473	\$604	\$771	\$2,520
-Sacramento County Measure A - (1/2%)	\$407	\$501	\$639	\$816	\$1,041	\$3,405
-Sacramento County Measure B - (1/2%)	\$169	\$501	\$639	\$816	\$1,041	\$3,167
<b>Gas Tax Subventions</b>	<b>\$374</b>	<b>\$415</b>	<b>\$453</b>	<b>\$499</b>	<b>\$558</b>	<b>\$2,300</b>
<b>Gas Tax Swap (Excise Tax Subventions)</b>	<b>\$213</b>	<b>\$247</b>	<b>\$388</b>	<b>\$591</b>	<b>\$895</b>	<b>\$2,334</b>
<b>Local Streets and Roads</b>	<b>\$1,404</b>	<b>\$1,588</b>	<b>\$1,873</b>	<b>\$2,261</b>	<b>\$2,751</b>	<b>\$9,877</b>
<b>Developer In-Kind</b>	<b>\$588</b>	<b>\$663</b>	<b>\$791</b>	<b>\$968</b>	<b>\$1,196</b>	<b>\$4,206</b>
<b>Caltrans Grants</b>	<b>\$148</b>	<b>\$166</b>	<b>\$192</b>	<b>\$223</b>	<b>\$258</b>	<b>\$986</b>
<b>Transit Fares</b>	<b>\$342</b>	<b>\$487</b>	<b>\$652</b>	<b>\$837</b>	<b>\$1,043</b>	<b>\$3,362</b>
<b>Local Subtotal</b>	<b>\$3,948</b>	<b>\$4,938</b>	<b>\$6,100</b>	<b>\$7,615</b>	<b>\$9,555</b>	<b>\$32,156</b>
<b>Federal, State, and Local Total</b>	<b>\$6,371</b>	<b>\$7,493</b>	<b>\$9,550</b>	<b>\$11,630</b>	<b>\$14,718</b>	<b>\$49,762</b>

## Attachment B: Revenue Projections (in millions of 2010 dollars)

Federal	FFY 2011- 2015	FFY 2016- 2020	FFY 2021- 2025	FFY 2026- 2030	FFY 2031- 2035	Total
<b>Federal Highway &amp; Other</b>	\$338	\$385	\$441	\$493	\$547	\$2,204
-Congestion Mitigation and Air Quality - (CMAQ)	\$131	\$146	\$165	\$181	\$198	\$821
-Regional Surface Transportation Program - (RSTP)	\$108	\$120	\$135	\$149	\$162	\$674
-Federal Discretionary Programs	\$99	\$119	\$141	\$163	\$187	\$709
<b>Federal Transit</b>	\$326	\$230	\$466	\$285	\$311	\$1,618
-FTA 5307 - Urbanized Area Formula Program	\$140	\$161	\$182	\$200	\$219	\$902
-FTA 5309 (a) - Rail and Fixed Guideway Modernization	\$24	\$28	\$32	\$35	\$38	\$157
-FTA 5309 (b) - New Rail Starts	\$127	\$0	\$207	\$0	\$0	\$334
-FTA 5311 (b) - Rural Transit Assistance Program	\$8	\$10	\$11	\$12	\$13	\$54
-FTA 5316 - Job Access and Reverse Commute Program	\$5	\$6	\$7	\$7	\$8	\$33
-FTA 5317 - New Freedom	\$2	\$2	\$3	\$3	\$3	\$13
-FTA 5310 - Elderly and Disabled Specialized Transit Program	\$5	\$6	\$7	\$8	\$8	\$34
-FTA 5309 (c) - Bus Allocations	\$14	\$16	\$18	\$20	\$22	\$90
<b>Federal Stimulus</b>	\$0	\$0	\$0	\$0	\$0	\$0
<b>Federal Subtotal</b>	\$664	\$615	\$907	\$778	\$857	\$3,822
State	FFY 2011- 2015	FFY 2016- 2020	FFY 2021- 2025	FFY 2026- 2030	FFY 2031- 2035	Total
<b>State Highway Operations and Protection Program - (SHOPP)</b>	\$672	\$685	\$717	\$735	\$761	\$3,570
<b>State Transportation Improvement Program - (STIP)</b>	\$256	\$273	\$362	\$460	\$579	\$1,930
-Interregional - IIP	\$62	\$66	\$87	\$111	\$139	\$464
-Regional - RIP	\$195	\$208	\$275	\$349	\$440	\$1,466
Traffic Congestion Relief Program - (TCRP)	\$64	\$0	\$0	\$0	\$0	\$64
State Transit Assistance - (STA)	\$74	\$77	\$84	\$94	\$111	\$441
Intercity Rail	\$124	\$142	\$160	\$177	\$193	\$796
State Highway Maintenance	\$356	\$352	\$352	\$352	\$352	\$1,762

<b>PTMISEA</b>	<b>\$66</b>	<b>\$23</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$89</b>
<b>State Subtotal</b>	<b>\$1,613</b>	<b>\$1,553</b>	<b>\$1,675</b>	<b>\$1,818</b>	<b>\$1,995</b>	<b>\$8,654</b>
<b>Local</b>	<b>FFY 2011- 2015</b>	<b>FFY 2016- 2020</b>	<b>FFY 2021- 2025</b>	<b>FFY 2026- 2030</b>	<b>FFY 2031- 2035</b>	<b>Total</b>
<b>Sales Tax</b>	<b>\$821</b>	<b>\$1,164</b>	<b>\$1,313</b>	<b>\$1,446</b>	<b>\$1,577</b>	<b>\$6,320</b>
-Local Transportation Fund (LTF)	\$283	\$314	\$354	\$391	\$426	\$1,768
-Sacramento County Measure A - (1/2-cent)	\$383	\$425	\$479	\$528	\$575	\$2,390
-Sacramento County Measure B - (1/2-cent)	\$155	\$425	\$479	\$528	\$575	\$2,162
<b>Gas Tax Subventions</b>	<b>\$352</b>	<b>\$352</b>	<b>\$340</b>	<b>\$323</b>	<b>\$309</b>	<b>\$1,677</b>
<b>Gas Tax Swap (Excise Tax Subventions)</b>	<b>\$200</b>	<b>\$209</b>	<b>\$290</b>	<b>\$381</b>	<b>\$494</b>	<b>\$1,574</b>
<b>Local Streets and Roads</b>	<b>\$1,320</b>	<b>\$1,348</b>	<b>\$1,404</b>	<b>\$1,463</b>	<b>\$1,521</b>	<b>\$7,056</b>
<b>Developer In-Kind</b>	<b>\$554</b>	<b>\$562</b>	<b>\$593</b>	<b>\$626</b>	<b>\$661</b>	<b>\$2,996</b>
<b>Caltrans Grants</b>	<b>\$139</b>	<b>\$141</b>	<b>\$144</b>	<b>\$144</b>	<b>\$143</b>	<b>\$710</b>
<b>Transit Fares</b>	<b>\$321</b>	<b>\$413</b>	<b>\$488</b>	<b>\$542</b>	<b>\$577</b>	<b>\$2,340</b>
<b>Local Subtotal</b>	<b>\$3,707</b>	<b>\$4,188</b>	<b>\$4,572</b>	<b>\$4,926</b>	<b>\$5,281</b>	<b>\$22,674</b>
<b>Federal, State, and Local Total</b>	<b>\$5,983</b>	<b>\$6,357</b>	<b>\$7,154</b>	<b>\$7,522</b>	<b>\$8,133</b>	<b>\$35,150</b>