

CHANGE IN MOTION

“Change is the law of life, and those who look only to the past or present are certain to miss the future.”

JOHN F. KENNEDY





Finances

Predicting the financial future is a difficult and rather speculative exercise, even in the most placid of periods. This point needs no underscoring today, in the wake of the serious financial crisis that started on Wall Street and spread to markets all around the globe during the fall of 2008. Still, one of the core functions of a long-range plan is to forecast how much money will be available to support the region's surface transportation investments over the next 25 years. In doing this, planners must “financially constrain” the plan, to ensure that the program of projects adopted will not exceed reasonably foreseeable future revenues. For this Transportation 2035 Plan, MTC's financial model takes a realistic approach. We contacted partner agencies for the latest estimates of local funds, examined historical growth trends of traditional and nontraditional revenue sources, and performed retrospective analyses of predecessor long-range plans to fine-tune our financial assumptions.

The nuts and bolts of the financial forecasts and plan expenditures are detailed in this chapter. However, the actual investment decisions made by the Commission to support pressing maintenance, system efficiency and expansion needs are presented in the “Investments” chapter, which follows this one.

Financial Assumptions

In the 1990s, two landmark bills — the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA 21, enacted in 1998) — helped reshape the federal surface transportation program to meet the nation's changing transportation needs. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA), signed into law in 2005, builds on this firm foundation, supplying the funds and refining the framework for investments needed to maintain and grow our vital transportation infrastructure.

In compliance with SAFETEA, this Transportation 2035 Plan includes a financial plan demonstrating how the program of projects can be implemented, using resources that are reasonably expected to be available. Further, federal law now requires that revenues and project cost estimates must use an inflation rate to reflect “year of expenditure dollars.” This plan does that. Past long-range plans have shown these figures in current, or nominal, dollars.

SAFETEA expires in 2009. Congress has begun drafting a new, multiyear act that could make sweeping changes in the way that transportation is funded at the federal level. However, for purposes of this financial plan, the best currently available financial assumptions were used in preparing the 25-year revenue projec-



tions. Specifically, revenue projections for federal transportation programs were made based on the existing structure of federally funded programs.

The financial assumptions for the financially constrained Transportation 2035 Plan are as follows:

- The federal highway program is assumed to continue in its current form. Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement (CMAQ) Program and Highway Bridge funds are

assumed to grow at a rate of 4 percent annually. Base year revenue is set at the SAFETEA nationally authorized level for fiscal year (FY) 2008-09, and the Bay Area is projected to receive its historical proportionate share of these programs.

- Federal Transit Administration programs — Sections 5307, 5309, 5310, 5311, 5316 and 5317 — are based on the FY 2008-09 nationally authorized levels and are assumed to grow at a rate of 4 percent annually. The Bay Area is assumed to receive its historical proportionate share.

- State gas tax subventions and the Surface Transportation Improvement Program (STIP) revenue are assumed to maintain the current structure and distribution formula, as laid out in Senate Bill 45 (1997), over the 25-year period. Revenue projections and regional distribution shares for state funds are based on FY 2007-08 levels, and projections for fuel price and consumption growth are based on estimates developed by the Legislative Analyst's Office in 2007. Revenue estimates and regional shares for STIP funds are also consistent with the state's adopted 2008 STIP Fund Estimate.
- State Transit Assistance (STA) revenue is also based on current funding formulas and projections for fuel price and consumption growth developed by the Legislative Analyst's Office in 2007. However, the 25-year projection for STA revenue takes into account two financial adjustments. The STA revenue projection includes funds generated by the growth in sales tax on gasoline, which are commonly known as "spillover" funds. It also reflects the state Legislature's suspension of the STA program and spillover funds from FY 2009–10 through FY 2012–13; however, the projection assumes reinstatement of the STA program and spillover funds in FY 2013–14.
- State Highway Operations and Protection Program (SHOPP) revenues are based on funding levels and growth rates assumed in the 2008 STIP Fund Estimate. The share of SHOPP funds assumed to flow to the Bay Area over the 25-year period is based on historical expenditure averages as reported in the 2006 SHOPP plan.
- Proceeds from Proposition 42 — the 5 percent sales tax on gasoline that is dedicated for transportation — augment funding for STA, STIP, and local streets and roads. Projected revenue from Proposition 42 is consistent with the assumptions on fuel cost and gasoline consumption growth provided by the Legislative Analyst's Office.
- Proposition 1B, the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act, approved by voters in 2006, provides funding for a variety of transportation programs. Senate Bill 88 (2007) lays out the structure and distribution method for several of the bond programs. For those programs that do not currently have a structure or distribution formula in place on which to base assumptions regarding the region's share of these funds, it was assumed that the Bay Area's share of the funding would be proportionate to the region's share of population relative to the rest of the state.
- Bridge toll revenues are based on projected travel demand on the region's seven state-owned toll bridges. Toll-paid travel on the bridges is projected to grow at varied annual rates of between 0.3 and 0.5 percent over the 25-year period.
- Bay Area Express Lane Network revenues included in the financially constrained plan represent projected net revenues available for other investments after financing the completion of the network and funding its operations and maintenance costs over the 25-year period. The revenue estimates are from the *Bay Area HOT Network Study*, completed in December 2008.
- Revenues from Assembly Bill 1107 (1977), the half-cent sales tax for the three BART counties of Alameda, Contra Costa and San Francisco, are assumed to grow at a rate derived by taking a weighted average of recent historical growth in sales tax revenue generations within the three counties.
- Transportation Development Act (TDA) revenue, derived from the statewide quarter-cent sales tax, is based on a five-year historical average of funding levels in each county. The growth rates assumed for TDA revenues in Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara and Sonoma counties are based on estimates provided by the respective sales tax authorities in those counties. The growth rate used for Napa and Solano counties is the average of the growth rates in the other seven Bay Area counties.

- County and transit district transportation sales tax revenues in Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara and Sonoma counties are based on estimates provided by the respective sales tax authorities in those counties. Measures that are set to expire within the 25-year period are assumed not to be renewed. Where they do not currently exist, transportation sales tax measures were not assumed in the financially constrained plan.
- Local streets and roads revenue includes revenue made available from local sources (not including county transportation sales tax measures) and Proposition 1B funding specific to street and road maintenance purposes. Local revenue estimates were based on information provided to MTC through a comprehensive survey conducted of local agencies. A regionwide growth rate based on historical average was applied to these revenues over the 25-year period.
- Operator-specific revenue projections including transit fares, Golden Gate Bridge tolls, AC Transit and BART property taxes, AC Transit parcel taxes, BART seismic bond proceeds, and San Francisco Municipal Transportation Agency general fund and parking revenue, have been provided by the respective operators.
- Proposition 1A (2008), the Safe, Reliable High-Speed Passenger Train Bond Act, author-



izes \$10 billion in general obligation rail bond proceeds to help finance construction of a high-speed rail link between San Francisco and San Diego. Estimates of the Bay Area's share of revenue from Proposition 1A include \$408 million from the act's formula-based local connectivity program. The region's share was calculated based on 2007 data from the National Transit Database on track mileage, revenue vehicle miles and annual passenger trips for the region's rail operators. It was also assumed that the region would receive 12.5 percent, or \$1.13 billion, of the \$9 billion in nonformula-based bond funding that will

be available statewide. The region's share was estimated based on the percentage of the entire high-speed rail project (\$40 billion in total) that is estimated to be invested in the Bay Area.

Furthermore, in February 2009, President Obama signed into law (see photo above) the American Recovery and Reinvestment Act of 2009 (ARRA), which contained an \$8 billion appropriation for high-speed rail. Based on California's demonstrated commitment to high-speed rail (as evidenced by the passage of Proposition 1A) and its head start on

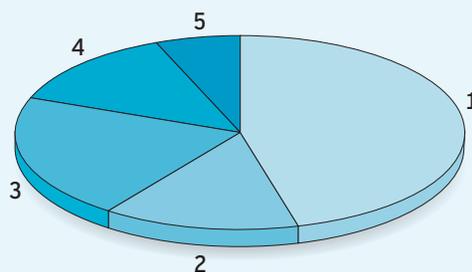
selecting routes, it is assumed that the state and, as a result, the Bay Area, are well situated to receive a significant portion of the ARRA high-speed rail funds. The revenue estimates assume that the Bay Area will receive about 19 percent, or \$1.5 billion, of the total nationwide appropriation.

- The inclusion of “Anticipated” revenues in the financially constrained plan strikes a balance between the past practice of only including specific revenue sources currently in existence or statutorily authorized, and the more flexible federal requirement of revenues that are “reasonably expected to be available” within the plan period.

MTC performed a retrospective analysis of projections for predecessor long-range plans, including a review of unexpected revenues that had come to the region but had not been anticipated or included in these projections. Over a 15-year analysis period, the San Francisco Bay Area received an annualized amount of roughly \$400 million (in 2008 dollars) from these “unanticipated” fund sources. These revenue sources include Traffic Congestion Relief Plan, Proposition 42, nonformula federal funds, and Proposition 1B funding. For each fund source, only the amount distributed to the Bay Area was included.

Based on this retrospective analysis, MTC believes it is reasonable to anticipate that

Projected 25-Year Plan Revenues

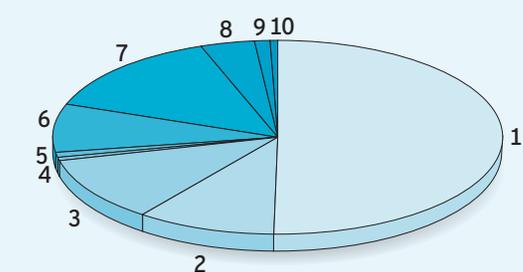


	Billions of Dollars	Percent of Total
1 Local	\$101	46%
2 Regional	\$ 31	14%
3 State	\$ 45	21%
4 Federal	\$ 28	13%
5 Anticipated	\$ 13	6%
Total Plan Revenues	\$218	100%

additional revenues will become available to the region over the course of the Transportation 2035 Plan period. MTC generated an estimate of these anticipated revenues by projecting the \$400 million figure forward at a 3 percent annual growth rate. To be conservative, these revenues are not assumed in the first five years of the plan.

Additional detail on Transportation 2035 financial assumptions and funding amounts is available in the *Project Notebook*, listed in Appendix 2.

Transportation 2035 Plan Expenditures



	Billions of Dollars	Percent of Total
Maintenance		
1 Transit	\$111	51%
2 Highway	\$ 22	10%
3 Local Roads	\$ 24	11%
System Efficiency		
4 Transit	\$ <1	<1%
5 Highway	\$ 3	1%
6 Local Roads	\$ 17	8%
Expansion		
7 Transit	\$ 30	14%
8 Highway	\$ 8	4%
9 Local Roads	\$ 3	1%
10 Risk Contingency	\$ <1	<1%
Total Expenditures	\$218	100%

Transportation 2035 Risk Assessment

The Federal Highway Administration and Federal Transit Administration encouraged MTC to take a more detailed look at the cost estimates in the long-range plan to address concerns about financial plans for large-scale transportation projects. Accordingly, MTC conducted a risk assessment to identify and quantify high risks for the program of projects included in the Transportation 2035 Plan, and to determine the appropriate amount of funding reserve needed to assure successful completion of projects.

MTC used a probabilistic risk model to calculate the risks associated with project costs, scopes and schedules, taking into account project unknowns and unanticipated expenses. In its evaluation, MTC found that a majority of the project sponsors accounted adequately for risks by setting aside the appropriate level of project contingency for each phase of their project (environmental, design, right-of-way and construction). However, to protect against cases where project risks might not have been adequately or accurately estimated, the Commission decided to add a risk contingency at the plan level. Evaluation results suggested a minimum risk contingency of \$200 million



would be appropriate, and the Commission included this amount in the Transportation 2035 budget to cover any cost overruns, schedule conflicts and other unknowns that may occur during project delivery for nearer-term projects.

Transportation 2035 Budget

Applying these assumptions to the main transportation revenue sources yields a 25-year revenue estimate of \$218 billion. This becomes the budget for the financially constrained plan. As shown in the “Revenues” pie chart on page 35, nearly half of these funds are from local sources, primarily transit fares, dedicated sales tax programs, and state and county tax subventions to local streets and roads. Making up the remainder of the pie are state and federal revenues (mainly derived from gas taxes), regional sources (mostly bridge tolls), and “Anticipated” revenues (see previous page for explanation).

Prioritizing these funds for projects that offer the highest performance “bang for our buck” is a necessary first step of this plan. Given the many competing needs — whether for system maintenance, efficiency or expansion — the full impact of working within a \$218 billion budget can only be appreciated when matching available revenues against the costs incurred in managing a mature, but growing, transportation system. The tradeoffs that the Commission had to consider in making its investment decisions were tough to say the least, especially since the shortfalls for replacing transit capital assets and maintaining local streets and roads have doubled since the last plan (after adjusting for the conversion to escalated dollars).

Plan Investments Address Core Concerns

The \$218 billion in plan expenditures support the Three Es of Economy, Environment and Equity, and attempt to foster the kinds of changes envisioned in Transportation 2035.

Support for Public Transit Benefits Economy and Environment

Almost two-thirds of plan expenditures are spent on public transit (see pie chart top middle) in an effort to reduce vehicle miles traveled, congestion on Bay Area freeways, and greenhouse gas and particulate matter emissions.

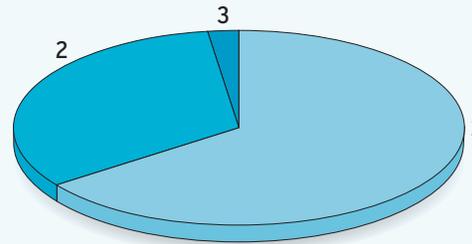
Investments Sustain Urban Core

Over 80 percent of the plan expenditures go toward maintaining and operating the existing transportation system. Most of our transportation infrastructure is located in the urban core, and funding system maintenance and operations helps support the vitality of the urban core (see pie chart top right).

Plan Fosters Focused Growth

Reflecting Transportation 2035's commitment to focused growth, 95 percent of plan expenditures are directed to maintenance and transit expansion, with another 2 percent (\$4 billion) being directed to bicycle and pedestrian improvements. (See pie chart top right.) This hefty financial investment supports the efforts of FOCUS to direct more housing and jobs in a network of

Plan Expenditures by Mode



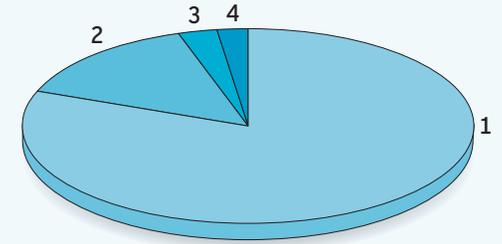
	Billions of Dollars	Percent of Total
1 Transit	\$ 141	65%
2 Roads and Bridges	\$ 73	33%
3 Bicycle, Pedestrian & Other*	\$ 4	2%
Total Expenditures	\$218	100%

transit-connected, bicycle-friendly and walkable neighborhoods, primarily located in the region's existing urban core.

Transit Promotes Equity and Access

Almost two-thirds of plan expenditures go to projects that improve transit services (see pie chart top middle). Directing a majority of our funds to transit maintenance and operations supports equitable access because the transit network largely provides lifeline services, and transit expansion is occurring in or near communities where low-income and minority residents are concentrated.

Plan Expenditures by Function



	Billions of Dollars	Percent of Total
1 Maintenance and Operations	\$ 177	81%
2 Transit Expansion	\$ 30	14%
3 Road Expansion	\$ 7	3%
4 Bicycle, Pedestrian & Other*	\$ 4	2%
Total Expenditures	\$218	100%

Climate-Friendly Investments Dominate Spending

The overwhelming share of plan expenditures — 97 percent — goes to support maintenance and operations, transit expansion, and bicycle and pedestrian improvements. These directly support the regional effort to respond responsibly to climate change. Many of the discrete investments in the plan are climate-friendly and aim to reduce greenhouse gas emissions from transportation sources.

*"Other" includes \$400 million for Lifeline Transportation serving low-income travelers and \$400 million for the Transportation Climate Action Campaign.

Revenues projected to be available over the 25-year Transportation 2035 Plan period are characterized as either Committed Funds or Discretionary Funds. Committed Funds are funds that have been reserved by law for specific uses, or allocated by MTC action (prior to the development of the Transportation 2035 Plan). These would include voter-approved funding mechanisms at both the local and regional level, and certain state and federal funds. (The plan's treatment of these funds is consistent with MTC policy concerning prior commitments, as adopted in MTC Resolution 3868.) Discretionary Funds are moneys available to MTC (and not already programmed as Committed Funds) for assignment to projects via the Transportation 2035 Plan planning process. Of the \$218 billion in projected Transportation 2035 revenue, \$186 billion (85 percent) is characterized as Committed Funds.

The remaining \$32 billion (15 percent) is discretionary revenue (mostly state and federal funds) that the Commission may direct to fully fund existing projects or support new investments as detailed in this plan.

The spending recommendations proposed by the Transportation 2035 Plan are focused on maintaining and operating the existing transportation system efficiently and pursuing investments that maximize system efficiency and support strategic expansions where needed. As shown in the pie chart to the right on page 35, \$157 billion of the budget — 72 percent — will



go toward ongoing maintenance and rehabilitation of the region's transportation infrastructure. The remaining expenditures include another \$20 billion (9 percent) toward system operations and efficiency projects and \$41 billion (19 percent) to expand our highways, transit and local roads. A \$200 million risk contingency is added for the first time as part of the plan expenditures for purposes of assuring successful delivery of nearer-term projects (see "Transportation 2035 Risk Assessment," on page 36).

Though the funding picture presented here covers most of the region's projected transpor-

ation expenses, it does not capture the entire "universe" of transportation spending in the region. For example, the \$218 billion does not include airports, seaports, and private freight and rail operations. Neither does it include the large personal expenditures on transportation by individuals, largely through out-of-pocket costs for automobiles — purchase price, gasoline, insurance, maintenance costs, etc.

In the following chapter, "Investments," we take a closer look at the key funding decisions and key program emphases in the Transportation 2035 Plan.