

# Appendix B1

## Budget Assumptions

### Metropolitan Transportation Plan - 2008-2035

#### General Assumptions for Revenue Estimate Rate of Growth (ROG) for the Metropolitan Transportation Plan (MTP)

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SAFETEA-LU requires that all cost estimates must be escalated to the Year of Expenditure (YOE) to reflect the decrease in purchasing power of today's dollar as costs for all project phases (eg. preliminary engineering, right of way, and construction) increase. The average Rate of Inflation (ROI) is 3.2%. The following sections of the appendix identify the Rate of Growth (ROG) for revenues by source.

The ROG for revenue sources is determined by extrapolating recent trends, either on a straight line or in some cases using a trend curve, customized for each specific revenue source; use the trend line for planning purposes and do not attempt to forecast yearly variations on either side (except within programs using Public Transit Account funds). This method in real life leads to plan years when revenues turn out to be higher than the trend and some projects can be advanced, and plan years when revenues fall short of the trend line amounts and some projects must be delayed.

Below is a summary of the detailed revenue assumptions that follow:

- Assume Congress and the State Legislature will behave going forward during the upcoming 28 years (out to 2035) in ways similar in aggregate to historic behavior over the past 28 years (back to 1979) with regard to tax rates and program funding levels.
- Assume growth in gasoline sales and use, which has run at 2% per year nationwide and 2.2% per year in California over the last decade, will continue indefinitely, yielding growth in those revenues based on gasoline sales, and assume gasoline sales and use decreases on a curve developed by California Air Resources Board to account for gradual improvements in overall fuel efficiency of the fleet (more hybrids, fewer SUVs, technology improvements), offsetting the growth rate by 2020, overcoming cumulative growth by 2032, and ending up at a 53% decrease by 2035.
- Assume fuel prices increase at an average rate of 4% per year, representing an increase from \$2.65/gallon today to \$8.25/gallon in 2035, yielding commensurate growth in those revenues based on a percentage of fuel price (sales taxes on gasoline), and assume four temporary (3 year) price spikes, at 2006, 2015, 2023, and 2031.
- Assume small increases in the region's proportional share of statewide population at each census, which affects funding formulas, and assume the region's share of federal clean air funds diminishes as the region reaches clean air attainment (in 2019) and goes to zero ten years later (in 2029).

## Assumptions for Rate of Growth (ROG) of Federal Revenue Sources

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**Increase federal highway (formula) revenues** by 2% per year and an extra 20% every sixth year (in 2010, 2016, 2022, 2028, and 2034) corresponding to reauthorization of federal surface transportation acts. This continues Congressional practice for each of the past three acts, which saw funding levels up by 50% in 1991, 40% in 1997, and 40% in 2005; implicit in these assumptions is a periodic increase in the federal gas tax rate to support funding programs at these levels, which Congress in fact did during the 1980s and 1990s.

**Increase federal transit (formula) revenues** by 5% every year and an extra 5% every sixth year (in 2010, 2016, 2022, 2028, and 2034) corresponding to reauthorization of federal surface transportation acts. This continues Congressional practice for each of the past three acts, which have increased federal transit funds by 5% year over year with one-time increases Congress built into the new acts in 1991, 1997, and 2005.

**Increase federal discretionary funds** (including earmarks, bridge, public lands, bus, railroad, and other non-formula programs) at a 50/50 blended rate from the highway and transit formula program growth noted above, and assume the Sacramento region will continue to get the same proportional shares as it has in the past. Discretionary programs as a group have tended to track with overall funding levels in the acts; this blended rate works out to about 5% growth per year.

**Estimate federal new rail starts funds** at 50% of the capital cost of eligible rail transit projects included in the plan, spread according to estimated construction schedules for the projects. This continues past federal practice of funding one rail extension at a time in regions that have match funds and can show ability to operate a rail system of growing size.

## Assumptions for Rate of Growth (ROG) and Rate of Inflation (ROI) of State Revenue Sources

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**Increase the State Transportation Improvement Program (STIP)**, both regional and state shares, directly proportional to the rate of increase in sales taxes on gasoline, since the STIP is now backed only by a share (about 45%) of Proposition 1A revenues.

**Increase state programs that fund transit**, including State Transit Assistance and intercity rail operations as well as a piece of the STIP, via a complex calculation based on five funding sources that feed the Public Transit Account, whose main components include a share (about 15%) of Proposition 1A revenues from sales taxes on gasoline, the sales tax on diesel fuel (increases 3% per year), and the very volatile spillover that varies with gasoline prices on the margin (above about \$1.95/gallon currently).

**Increase state highway maintenance** to keep pace with gasoline sales and use (2.2%); the State funds maintenance off the top from the state share of gasoline taxes, and we assume it to be funded at an adequate level today and recognize that the State could by policy alter the size of that program at any time, thus cutting into other uses of the state share of gasoline taxes.

**Increase Caltrans' State Highway Operations and Protection Program (SHOPP)** at a varying rate calculated against the entire remainder of the State's share of state gas taxes plus federal funds that go to the State, since that is how the State funds the program currently. The plan assumes the Legislature will increase the state gas tax rate periodically to regain purchasing power as

has been the practice in the past (increased by 158%, or 11 cents/gallon during 1979-2007), yielding an increase of 122% or 22 cents/gallon in three increments - +5 cents/gallon in 2013, +7 cents/gallon in 2023, and +10 cents/gallon in 2033 - going into the SHOPP.

**Presume the Traffic Congestion Relief Program** will be funded to completion, providing one-time lump sum funding for two designated projects in Sacramento.

**Assume Proposition 1B state transportation bond funds**, which flow through a complex array of 16 programs, augment funding estimated for specified formula-based programs individually as defined in the bond package, provide \$360 million for Corridor Mobility Improvement and Route 99 projects recently programmed, and another \$240 million from other not-yet-programmed bond funds during 2008-2012.

## Assumptions for Rate of Growth (ROG) of Local Revenue Sources

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**Increase programs backed by a designated share of general sales taxes** – sales tax measures at ½% or ¼% and Transportation Development Act at ¼% – at the rate of growth in general economic activity; that growth is assumed to average 6% per year (except in Placer County which assumes 8% per year) before adjusting down for inflation. Assume for this MTP two sales tax measures in Sacramento County – a ½% Measure A already approved by voters through 2039 plus an additional ¼% Measure B starting in 2012 (based on stated local intent to pursue another measure, favorable polling showing public approval under specified conditions, and existence of second measures in six comparable large urban counties around the state) – and no sales tax measures in the other five counties.

**Estimate developer fee revenues** according to the development fee schedules in each jurisdiction (which in some cases include future increases) and the amount and timing of development based on the pace of Blueprint development around which the plan is built, estimating them both by jurisdiction and cumulatively regionwide. In-kind turnkey construction of roads and other transportation infrastructure built as part of development projects supplement developer-fee-based programs.

**Increase/decrease local share of gas taxes** according to gasoline sales and use, as noted above, and increases in the state gasoline tax as noted above (under Caltrans SHOPP).

**Increase transit fare revenues** based on higher ridership projected by SACOG’s travel model, from new Blueprint land uses and higher levels of transit service in the Final plan, and assume periodic modest fare increases in line with historical practice (at 2015, 2020, and 2025).

**Hold other local funds** constant in purchasing power, protecting the local policy intent behind the existing use of these funds for transportation purposes.

## Consequences from these Assumptions

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SACOG controls decisions on only about 15% of funds in this plan, enough to fund perhaps one-third of planned regional-scale improvements, so state and local agencies will have to serve as funding partners on essentially all regional-scale projects; this represents a declining role for regional investment relative to local investment compared to past plans, and reflects the growing importance of local funding sources in overall transportation investment.

Development-based funding comprises more than 20% of the funding underlying this plan, and is notably the largest single funding source in the plan; local agencies that collect higher levels of development fees and have substantial development will find the plan can contain considerably more improvements in their jurisdictions.

Local road maintenance, funded primarily with gas tax supplemented with Transportation Development Act funds in rural areas and sales tax measure funds in Sacramento County, becomes modestly better funded over time despite the gas tax declining in purchasing power, but does not rise to the point where deferred maintenance can be overcome, unless the Legislature expands or reforms the funding structure that supports local road maintenance.

Funding for transit operations continues to be a constraint and challenge in the early years of the plan; sales-tax-based revenue sources expand with the economy in later years, to the benefit of transit operations, but the need to find ways to fund transit service expansion in earlier years to match Blueprint land uses remains an issue.

The plan assumes the state/Caltrans will take care of maintenance and rehabilitation on state highways using the State's share of both state gas tax and federal highway funds; the federal funds expand with renewal of federal transportation acts (2009, 2015, 2021, 2027, and 2033) and Caltrans can eventually catch up with deferred maintenance and rehabilitation by the late 2020s, but achieving that will consume all state gas tax and federal funds leaving no excess to expand state or regional capital investments.