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Memorandum

TO: Regional Advisory Working Group DATE: June 7, 2011

FR: Mat Adamo

RE: Plan Bay Area: Draft Revenue Projections

Background

The following memo summarizes the draft revenue projections for Plan Bay Area. The revenue projections are largely based on the financial assumptions discussed with the various stakeholder groups in late January and early February 2011. Where there are revisions in the assumptions, more detail is provided. The funds in the Plan are divided into four categories: 1) Federal; 2) State; 3) Regional; and 4) Local. Each section explains the relevant revenue sources and how MTC prepared those estimates, followed by a summary table comparing the estimated total revenue in Plan Bay Area with the previous regional transportation plan, Transportation 2035 (T2035).

Schedule

These draft projections will be presented to the Partnership Technical Advisory Committee (PTAC), the Regional Advisory Working Group (RAWG), and the Policy Advisory Council in May for review and input. The draft projections are scheduled to be reviewed by the Planning Committee in June. The financial projections, however, will not be finalized until shortly before the adoption of Plan Bay Area in FY 2013, in order to allow for updates to revenue estimates based on legislative or economic changes.

General Assumptions

By way of background, the proposed timeframe and inflation assumptions are as follows:

- <u>Time Frame</u> –The time horizon for Plan Bay Area will be FY 2013 through FY 2040 (28 years).
- <u>Inflation Rate</u> – T2035 assumed a three percent inflation rate. For Plan Bay Area, staff consulted the Office of Management and Budget (OMB), which is projecting a long-term inflation rate of 1.8 percent. Staff believes this to be on the low side for the Bay Area. A 10-year historical average of the Bay Area's Consumer Price Index (CPI) yields an annual growth rate of 2.6 percent. Staff recommends using a 2.2 percent rate—which is the average of the Bay Area's historical average and the OMB's long-term rate— in order to moderate for the potential difference in Bay Area vs. national CPI growth.

Key Revenue Sources

The most significant revenue sources in Plan Bay Area are summarized in the table below. Both the percent share of total revenues and the dollar amount are shown. Transit fares and sales tax-based sources account for roughly 39% of the total projected revenues, or about $94 billion.

Figure 1: Fund Sources by Relative Contribution to Plan Bay Area Revenues

Revenue Source	Plan Bay Area *(In $ Billions)*	% Share of Total Revenue
Federal Transit Administration (FTA) Programs	18.9	7.8%
Federal Surface Transportation Program (STP) and Congestion Mitigation and Air Quality Improvement (CMAQ) Program	8.0	3.3%
State Transportation Improvement Program	7.6	3.1%
State Highway Operation and Protection Program	14.1	5.8%
State Transit Assistance Program	8.3	3.4%
Gas Tax Subvention and LSR portion of AB 105	12.3	5.0%
Bay Area Toll Authority Toll Revenue	20.9	8.6%
Sales Tax Revenues (County, TDA, and AB 1107)	58.0	23.8%
Transit Fares	36.0	14.8%
All Other Revenues	59.4	24.4%
Total	**243.6**	**100.0%**

Estimates by Revenue Category

The four main categories of funding in Plan Bay Area (Federal, State, Regional, and Local), are described below. Each section contains a table summarizing the total revenues available for that category.

Federal Funds:

The current projections generally assume a 3% growth rate over actual receipts in a FY2009-10 base year for most federal fund sources. The 3% growth rate for Plan Bay Area represents a 1% decrease as compared with the 4% growth rate assumed for federal fund in T2035. Table A (in the next page) summarizes the federal funds projected for Plan Bay Area.

Table A: Plan Bay Area Federal Revenues

Federal Funding Program	Plan Bay Area (28-Year Total) *(In $ Billions)*	T2035 (25-Year Total) *(In $ Billions)*
FTA 5307 Urbanized Area Formula	10.2	9.3
FTA 5309 Bus	0.2	1.3
FTA 5309 Fixed Guideway	6.1	5.4
FTA 5309 New Starts	1.8	1.5
FTA 5309 Small Starts	0.2	0.1
FTA 5310 Elderly & Disabled	0.2	0.2
FTA 5311 Non-Urbanized Area Formula	0.1	0.1
FTA 5316 Job Access and Reverse Commute Program (JARC)	0.1	0.1
FTA 5317 New Freedom	0.1	0.1
STP	4.2	3.2
CMAQ	3.8	3.0
Ferry Boat Discretionary	0.1	0.03
High Speed Rail	1.3	1.5
Bridge/Safety Program	2.7	2.4
Federal Funds Total	**31.0**	**28.1**

Note: Totals may not match due to rounding
** For FTA New Starts and Small Starts, the amounts assumed are equal to the approved Resolution 3434 project requests.

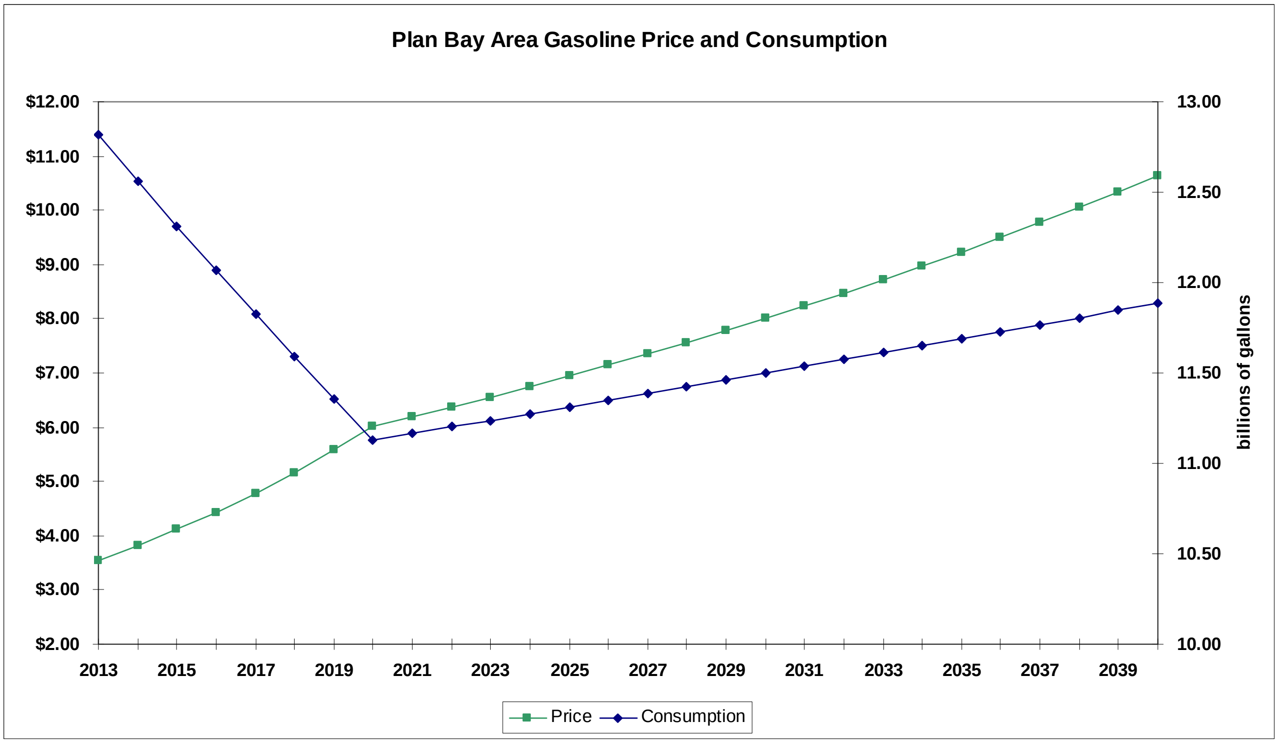
State Funds:

The majority of state funds for transportation are based on various fuel taxes. Therefore, the projections are derived from a model based on a standard set of assumptions concerning fuel price and consumption during the 28-year period. The fuel price assumptions are consistent with the MTC travel demand model. The consumption levels were derived using both MTC's travel demand model and the EMFAC 2007 forecasting software. EMFAC 2007 is an emission inventory model that calculates emission inventories for motor vehicles operating in California. We derived our consumption estimate by making assumptions regarding increases in the fuel efficiency of the vehicle fleet. The Plan Bay Area consumption path assumes full implementation of Pavley Phase I and adherence to the Low Carbon Fuel Standard. The result of these assumptions is that we expect state gasoline consumption to steadily decline until 2020, and then grow slowly at a constant long term rate. The fuel price and consumption data have been revised since the draft financial assumptions were released earlier in the year.

The price of gasoline is expected to mirror the same growth rate as diesel over the forecast period. From 2013 through 2020, fuel prices are projected to grow at a 7.9% rate, from a base price of $3.53 per gallon in 2013. After 2020, fuel prices are projected to grow at an annual rate of 2.9% until 2040. The consumption estimates for diesel assume a constant annual growth rate of approximately 0.6% for the forecast period. Gasoline consumption is projected to decline each year by 2.0% until 2020, at which point consumption will grow at 0.3% each year.

The chart below shows the price and consumption levels for the 28-year timeframe of Plan Bay Area. The decline in the initial years for consumption is attributable to the improvements in the fuel efficiency of the fleet.

Chart 1: Plan Bay Area Fuel Price and Consumption



The following sources of revenue are affected by the fuel price and consumption data. Other assumptions for these sources, unless noted, remain unchanged from the assumptions described in January/February 2011.

- State Highway Operation and Protection Program (SHOPP)
- State Transportation Improvement Program (STIP)
- State Transit Assistance (STA)
- Gas Tax Subvention and AB 105

State Highway Operation and Protection Program (SHOPP)

The SHOPP program funds the maintenance and operations of the state's highway system. The primary sources of funding for the SHOPP includes a portion of the statewide fuel tax revenue and federal funding. Plan Bay Area estimates SHOPP revenue using the fuel tax model, and assumes the Bay Area's share of statewide SHOPP revenue remains constant during the 28-year forecast.

State Transportation Improvement Program (STIP)

The STIP consists of two main parts, the Regional Transportation Improvement Program (RTIP) and the Interregional Transportation Improvement Program (ITIP). The RTIP is the 75% regional share of the capital improvement program that includes projects on and off the state highway system. The ITIP is the 25% interregional share that focuses on projects in the states that cross metropolitan boundaries or are generally more regional in scope. The majority of STIP revenue is derived from state fuel taxes.

The county shares for RTIP are based on the 2010 STIP fund estimate. The regional share for ITIP is based on an average historical share. These shares are assumed fixed for the duration of the estimate. In addition, STIP-Transportation Enhancement (TE) revenues are projected using a 3% growth rate (since the source is federal funds) using a 2010 STIP base year.

State Transit Assistance (STA)

State Transit Assistance funds transportation planning, and mass transit operating and capitol projects. STA revenue is also tied to the fuel tax revenue model and funded primarily through the 1.75% sales tax on diesel instituted by AB 105, and revenue transfers for the PTA. The regional share of revenue-based STA assumes the state controller's factors for the FY 2010-11 STA distributions and are assumed fixed for the duration of the forecast.

Gas Tax Subvention and AB 105

The gas tax subvention revenues reflect the current share of State excise tax revenue distributed to the cities and counties, and the portion of the gas tax swap that funds local streets and roads. These revenues are also tied to the fuel tax model, and are distributed to the cities and counties according to lane mileage, population, and registered vehicles.

Traffic Congestion Relief Program (TCRP)

The TCRP was enacted by Gray Davis, with the objective of relieving congestion, promoting the transport of goods, and connecting different modes of travel. The TCRP revenue was projected based on the total Bay Area Tier I and Tier II projects, starting in 2013, from the CTC-approved TCRP allocation plan.

High Speed Rail (HSR)

The High Speed Rail revenue estimate is base on the region's share of track mileage, roughly 12.5%, multiplied by $20 billion. The $20 billion figure is an assumption of the total commitment of public funds to the HSR project over the period.

Table B: Plan Bay Area State Revenues

State Funding Program	**Plan Bay Area (28-Year Total) *(In $ Billions)***	**T2035 (25-Year Total) *(In $ Billions)***
SHOPP	14.1	10.2
RTIP	6.2	5.5
ITIP	1.5	1.9
STIP-TE	1.1	0.3
STA Population-Based	2.2	2.5
STA Revenue-Based	6.1	6.8
Gas Tax Subvention & AB 105 Revenue for LSR	12.3	11.9
TCRP	0.1	0.4
Prop 1B	0.2	3.4
High Speed Rail	1.3	1.5
State Total	**45.0**	**44.6**

*Totals may not match due to rounding

Local Funds:

The major local fund sources in Plan Bay Area include transit fare revenues, street and road local revenue, and sales tax based revenues. The method of estimation for each of these sources is detailed below.

County Sales Tax Measures

Estimates for county sales tax measures were submitted by each county sales tax agency. MTC staff is proposing to use these projections to maintain consistency with sales tax expenditure and strategic plans. Plan Bay Area also assumes that any county sales tax measure that is set to expire during the 28-year period will be reauthorized. These funds are proposed to be committed in Plan Bay Area. The table below summarizes the annual average revenue growth rate for each county.

	County Measures
County	**Average Annual Growth Rate (2013-2040)**
Alameda	4.0%
Contra Costa**	4.4%
Marin	2.5%
Napa*	0.0%
San Mateo	3.0%
San Francisco	4.5%
Santa Clara**	2.6%
Solano*	0.0%
Sonoma	4.0%
SMART	3.0%

Notes:
*Napa and Solano do not have a county sales tax measure
**Contra Costa and Santa Clara submitted different growth rates for each year of the forecast; the figure above reflects the average of these values.

Transportation Development Act (TDA)

TDA is a ¼ cent sales tax levied in each of the nine Bay Area counties that supports transit operations and capital projects, bike projects, planning, and in limited cases, street and road projects. Plan Bay Area's TDA revenue estimate is based on a multivariate regression model derived by ABAG that projects sales tax based on several demographic and economic factors such as median income, regional employment, and population growth. The inputs for this model are consistent with the demographic estimates used in the Sustainable Communities Strategy portion of Plan Bay Area. Although these estimates take into account the trend in several important variables, it is not possible to predict the occurrence of major economic contractions, such as the recent financial crisis. The table below details the growth rates for TDA and AB 1107 revenues over the forecast period.

Figure 3: TDA Growth Rates (Annual averages)

	TDA Growth Rates		
County	**2011-2020**	**2021-2030**	**2031-2040**
Alameda	2.7%	2.3%	2.2%
Contra Costa	3.2%	3.0%	2.9%
Marin	2.2%	2.2%	2.2%
Napa	3.7%	3.0%	3.0%
San Mateo	3.3%	2.9%	2.9%
San Francisco	2.9%	2.7%	2.6%
Santa Clara	4.6%	4.6%	4.0%
Solano	2.7%	2.5%	2.5%
Sonoma	4.4%	3.0%	3.0%
AB 1107	2.9%	2.6%	2.5%

Transit Agency Fare Revenue

Transit fare revenues were forecast by the individual operators, and submitted to MTC via a survey form. The figure recorded in Plan Bay Area reflects an aggregate of all operators for each year of the forecast period. This figure is significantly higher than T2035. Staff is working with the transit operators on a few questions related to their assumptions and will make revisions as necessary.

Operator Specific Revenues

There are several operator specific funding programs that are included in Plan Bay Area. Some of these include San Francisco general fund contribution, AC Transit's Parcel tax, and the toll revenue from the Golden Gate Bridge used to fund transit operations for the Golden Gate Bridge Highway and Transportation District. These fund sources were submitted to MTC along with each agency's fare revenue estimates. For a complete list of these sources please see the table at the end of this section.

Transportation Fund for Clean Air (TFCA) / AB 434

TFCA/AB 434 revenue is derived from a $4 vehicle registration fee levied in each of the nine bay area counties. The projection assumes that the number of registered vehicle will grow at 1 percent each year during the 28-year forecast. Sixty percent of total AB 434 revenue is attributed to regional revenues in Plan Bay Area. The remaining forty percent is attributed to local revenue.

County Vehicle Registration Fees (SB 83)

Several counties have enacted a $10 vehicle registration fee in recent years. Registration fee revenue for Alameda, Marin, San Francisco, San Mateo, and Santa Clara counties are estimated assuming a 1 percent annual growth in registered vehicles.

Table D: Plan Bay Area Local Revenues

Local Funding Program	Plan Bay Area (28-Year Total) *(In $ Billions)*	T2035 (25-Year Total) *(In $ Billions)*
County Sales Tax Measures	26.9	31.0
County Sales Tax Reauthorization	8.5	N/A
LSR Local Revenue Contributions	14.2	16.5
Transit Fare Revenues	36.0	25.8
Transportation Development Act (TDA).	12.7	12.2
San Francisco General Fund (SFMTA)	7.7	9.0*
San Francisco Parking Revenue (SFMTA)	6.3	
Golden Gate Bridge Toll Revenue for Operations	3.0	2.2
Property Tax	4.5	3.5**
TFCA (Local Funds)	0.3	0.3
AC Transit Parcel Tax	0.8	0.6
County-wide Vehicle Registration Fee ($10)	1.3	N/A
Local Total	**122.2**	**101.2**

*SF General Fund and Parking were a combined estimate in T2035
**The T2035 Property tax figure includes BART's seismic retrofit revenues
*Totals may not match due to rounding

<u>Regional Funds:</u>

The majority of the regional revenue for Plan Bay Area is attributed to bridge tolls and the AB 1107 sales tax. There have not been any significant revisions to the assumptions since first release, except the use of ABAG's model for AB1107. AB434 funds were added, consistent with Transportation 2035. The table at the end of the section summarizes all regional revenue in the plan.

AB 1107

AB 1107 is a ½ cent sales tax levied in the three BART counties. Plan Bay Area forecasts $9.9 billion in AB 1107 revenue for the 28-year period. The estimate for AB 1107 utilizes a weighted average of the TDA growth rates for San Francisco, Contra Costa, and Alameda Counties. This weighted average is based on each counties historical share of total AB 1107 revenue generation. The TDA growth rate estimates were derived from a regression model produced by ABAG. The TDA growth rates will be explained in more detail below under the TDA section of Local Revenues.

Bridge Toll Revenue

The toll revenue growth assumptions are based on the Bay Area Toll Authority (BATA) model, and average 0.3 percent growth per year for the combined regional bridges. Plan Bay Area also assumes a $1 toll increase will occur during the 28-year period. This toll revenue increase is reported separately in the table below.

TFCA/AB 434 Funds

TFCA/AB 434 revenue is derived from a $4 vehicle registration fee levied in each of the nine bay area counties. We assume that the number of registered vehicle will grow at 1 percent each year during the 28-year forecast. Sixty percent of total AB 434 revenue is attributed to regional revenues in Plan Bay Area. The remaining 40 percent is attributed to local revenue.

Service Authority for Freeways and Express Ways Revenue (SAFE)

Similar to AB 434, SAFE revenue is raised by a $1 vehicle registration fee levied in each of the nine bay area counties. A one percent annual growth in registered vehicles is assumed, this growth rate is consistent with our other vehicle registration-based revenues.

Regional Express Lane Network

MTC's Regional Express Lane revenue estimates are scheduled to be available in summer 2011.

Table C: Plan Bay Area Regional Revenues

Regional Funding Program	Plan Bay Area (28-Year Total) *(In $ Billions)*	T2035 (25-Year Total) *(In $ Billions)*
AB 1107	9.9	11.5
BATA Base Toll Revenues	18.2	12.9
New Bridge Tolls	2.7	N/A
TFCA (Regional Funds)	0.5	0.5
SAFE	0.2	0.2
Regional Express Lanes	TBD	6.1
Regional Total	**31.5**	**31.2**

*Totals may not match due to rounding

<u>Reasonably Anticipated Revenue</u>

"Reasonably Anticipated Revenue" represents funding that is likely to become available from federal or state sources over the course of the Plan period, but is unspecified in terms of source or expenditure requirements. Reasonably anticipated revenues differ from new, specific revenue that would be generated under local or regional control such as sales tax reauthorizations or regional toll increases. An example of this revenue would be the American Recovery and Reinvestment Act (ARRA) transportation funding that was distributed by the federal government in FY 2009 in response to the national recession as well as Proposition 1B funding. In T2035, an estimated $13 billion in "anticipated" revenue was added to the financially constrained revenues based on revenue sources that materialized over a fifteen year period from 1998 through 2012. Shifting the period of analysis forward by four years yields approximately the same amount of 'anticipated' revenue.

	Plan Bay Area (28-Year Total) *(In $ Billions)*	T2035 (25-Year Total) *(In $ Billions)*
Reasonably Anticipated Revenue	**14.0**	**13.0**

Plan Bay Area Summary of Draft Revenue Projections

Table E on the next page summarizes Plan Bay Area and T2035 revenue by source category. The growth estimates and model assumptions for Plan Bay Area are generally more conservative than T2035; however, there is more total revue available in Plan Bay Area because of the longer time horizon. Staff welcomes any input on these draft projections.

Table E: Plan Bay Area Total Revenues

Constrained Revenues	**Plan Bay Area (28-Year Total)** ***(In $ Billions)***	**T2035 (25-Year Total)** ***(In $ Billions)***
Federal Funds	31.0	28.1
State Funds	45.0	44.6
Local	122.2	101.2
Regional Funds**	31.5	31.2
Anticipated Funds	14.0	12.8
Total Funds	**243.6**	**218.0**

**T2035 includes Express Lane Revenue in the Regional funds section
*Totals may not match due to rounding

Committed Funds Policy and Revenue Projections

Aligning the draft revenue projections with the approved committed funds policy suggest the following break-down by funding category:

Plan Bay Area Revenue Classifications ***(In $ Billions)***			
Revenue Category	Committed	Discretionary	Total
Federal	6.4	24.6	31.0
State	34.0	10.9	45.0
Local	109.5	12.7	122.2
Regional	25.1	6.4	31.5
Anticipated Funds	0	14.0	14.0
Total	**174.8**	**68.8**	**243.6**
% of Total	71.7%	28.3%	100%

*Totals may not match due to rounding

A few of the revenues projected were not included specifically in the committed policy approved by the Commission in April 2011 or need to be further clarified. Therefore, we recommend a revision to the policy to ensure transparency. The revenue sources to be added include the following: AB434 regional and local and county sales tax rollovers. MTC staff's preliminary recommendation is that AB 434 regional and local be identified as discretionary, while sales tax rollovers are committed. This recommendation may be updated based on input from the Air District. Further, express lane revenue for statutorily authorized corridors should be added to committed revenue. As noted above, revenue estimates for express lanes are not yet available.

Next Steps

Staff recommends releasing the financial projections for Plan Bay Area and presenting to the Planning Committee in June 2011. The financial projections, however, will not be finalized until shortly before the adoption of Plan Bay Area in FY 2013, in order to allow for updates to revenue estimates based on legislative or economic changes.