

BayArea Plan

July 2013

Strategy for a
Sustainable
Region



Association of
Bay Area
Governments



Metropolitan
Transportation
Commission

Final Transportation Air Quality
Conformity Analysis
for Plan Bay Area and the
2013 Transportation Improvement Program

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**TRANSPORTATION-AIR QUALITY CONFORMITY ANALYSIS
FOR PLAN BAY AREA &
2013 TRANSPORTATION IMPROVEMENT PROGRAM**

Final: July 18, 2013



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I. INTRODUCTION

The Metropolitan Transportation Commission (MTC) prepares a transportation air quality conformity analysis when MTC amends or updates its long-range regional transportation plan (RTP), or adds or deletes regionally significant, non-exempt projects into the Transportation Improvement Program (TIP).

The purpose of this conformity analysis is to conform Plan Bay Area and the 2013 TIP in accordance with the latest U.S. Environmental Protection Agency (EPA) transportation conformity regulations and the Bay Area Conformity State Implementation Plan (Conformity SIP), which is also known as the Bay Area Air Quality Conformity Protocol (MTC Resolution No. 3757). This conformity analysis addresses the national 8-hour ozone standard, national carbon monoxide standard, and the national 24-hour fine particulate matter (PM_{2.5}) standard.

This report explains the basis for the conformity analysis and provides the results used by MTC to make a positive conformity finding on Plan Bay Area and the 2013 TIP.

Purpose of Conformity Analysis

The Federal Clean Air Act, as amended in 1990 (CAAA) outlines requirements for ensuring that federal transportation plans, programs and projects are consistent with (“conform to”) the purpose of the State Implementation Plan (SIP). Conformity to the purpose of the SIP means that transportation activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant national ambient air quality standards. A conformity finding demonstrates that the total emissions projected for a RTP or TIP are within the emissions limits (“budgets”) established by the SIP, and that transportation control measures (TCMs) are implemented in a timely fashion.

Conformity requirements apply in all nonattainment and maintenance areas for transportation-related criteria pollutants and related precursor emissions. For the Bay Area, the criteria pollutants to be addressed are ground-level ozone, carbon monoxide, and PM_{2.5}; and the precursor pollutants to be addressed include volatile organic compounds (VOC) and oxides of nitrogen (NO_x) for ozone and NO_x for PM_{2.5}. EPA’s most recent revisions to its transportation conformity regulations to implement the 1990 Federal Clean Air Act section 175A were published in the Federal Register on March 14, 2012¹.

Metropolitan Planning Organizations such as MTC are required to follow these regulations, and any other procedures and criteria contained in the EPA-approved Conformity SIP (Transportation Air Quality Conformity Protocol) for the Bay Area. In the Bay Area,

¹ The current version of the regulations is available on EPA’s Transportation Conformity website at <http://www.epa.gov/otaq/stateresources/transconf/regs/420b12013.pdf>.

procedures were first adopted in September 1994 to comply with the 1990 CAAA. Four subsequent amendments to the transportation conformity procedures in August 1995, November 1995, August 1997, and July 2006 have been adopted by the three co-lead agencies (MTC, Association of Bay Area Governments (ABAG), and Bay Area Air Quality Management District (BAAQMD)). MTC Resolution 3757 represents the latest San Francisco Bay Area Transportation Air Quality Conformity Protocol adopted by the three agencies in July 2006. Acting on behalf of the three agencies, the BAAQMD submitted this latest Protocol to California Air Resources Board (CARB) as a revision to the Bay Area Conformity SIP. CARB approved this proposed revision to the Bay Area's Conformity SIP in December 2006, and transmitted it to EPA for final action. EPA approved the Bay Area Conformity SIP in December 2007 (40 CFR Part 52).

These regulations and resolutions state in part that, MTC cannot approve any transportation plan, program or project unless these activities conform to the purpose of the federal air quality plan (officially titled the State Implementation Plan, or SIP). "Transportation plan" refers to the RTP. "Program" refers to the TIP, which is a financially realistic set of highway and transit projects to be funded over the next six years. A "transportation project" is any highway or transit improvement, which is included in the RTP and TIP and requires funding or approval from the Federal Highway Administration (FHWA) or the Federal Transit Administration (FTA). Conformity regulations also affect regionally significant non-federally funded projects which must be included in a conforming transportation plan and program.

Status of Regional Transportation Plan

A Regional Transportation Plan, or RTP, is a long-range plan which includes both long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand. By federal law, the RTP covers a minimum planning horizon of 20 years and is updated every four years in areas which do not meet federal air quality standards. The RTP is financially constrained to the projected transportation revenues that will be reasonably available to the region over the planning period. Once adopted, the RTP guides the development of the TIP for the region.

The latest updated RTP is called Plan Bay Area. Plan Bay Area represents a strategic investment plan to improve asset condition and system performance for Bay Area travelers over the next 28 years. It includes a set of highway, transit, local roadway, bicycle, and pedestrian projects identified through regional and local transportation planning processes. As required by federal and state planning regulations, the long-range plan is financially constrained, identifying investments that are funded within the \$289 billion 28-year revenue estimate.

The Commission adopted the Transportation 2035 Plan in April 2009 (MTC Resolution 3893). The FHWA and FTA approved MTC's conformity determination for the Transportation 2035 Plan and 2009 Transportation Improvement Program/Amendment #09-

06 on May 29, 2009. The Transportation 2035 Plan was subsequently amended on May 25, 2010 via an administrative modification. This administrative modification did not trigger a new conformity determination because there are no changes to project scopes for projects previously identified in the plan and no additions of regionally significant, non-exempt projects to the plan.

This conformity analysis serves to conform Plan Bay Area. Refer to **Appendix A** for detailed project listing of projects/programs included in the proposed Plan Bay Area. See MTC's Draft Plan Bay Area for full details about the plan².

Status of Transportation Improvement Program

The federally required Transportation Improvement Program, or TIP, is a comprehensive listing of Bay Area surface transportation projects that receive federal funds or are subject to a federally required action, or are considered regionally significant for air quality conformity purposes. MTC and the other Metropolitan Planning Organizations (MPOs) in California have historically followed a Caltrans directed update schedule (that is consistent statewide) to update the TIP every two years. The TIP must cover at least a four-year period and contain a priority list of projects grouped by year. The TIP is also financially constrained – meaning that the amount of funding programmed does not exceed the amount of funding reasonably expected to be available. Adoption of the TIP must be accompanied by an air quality conformity analysis and finding, and all projects included in the TIP must be derived from and/or be consistent with the RTP. Whenever a new RTP is adopted, a new air quality conformity analysis must be prepared for the TIP, to ensure consistency between the current Plan (RTP) and Program (TIP).

The Draft 2013 TIP includes projects “programmed” in six fiscal years: FY 2012-13, FY 2013-14, FY 2014-15, FY 2015-16, FY 2016-17 and FY 2017-18. This conformity analysis serves to conform the draft 2013 TIP and Plan Bay Area.

Refer to **Appendix B** for detailed project listing of projects/programs in the 2013 TIP. Note that specific funding sources are identified in the TIP itself. See MTC's draft 2013 TIP for full details about the TIP.

II. BAY AREA AIR POLLUTANT DESIGNATIONS

National 1-Hour Ozone Standard

On November 6, 1991, the U.S. Environmental Protection Agency (EPA) designated the Bay Area as a moderate ozone non-attainment area. Based on “clean” air monitoring data from 1990 to 1993, the co-lead agencies—BAAQMD, MTC, and ABAG—determined that no

² See MTC's *Draft Plan Bay Area* at: <http://onebayarea.org/>

ozone violations had occurred and requested the California Air Resources Board (ARB) to forward a redesignation request and an ozone maintenance plan to U.S. EPA.

On May 25, 1995, the Bay Area was classified as an ozone maintenance area, having attained the 1-hour national ozone standard for five years (1990-1994). However, on July 10, 1998 the U.S. EPA published a Notice of Final Rulemaking redesignating the Bay Area back to an ozone non-attainment (unclassified) area. This action was due to violations of the 1-hour standard that occurred during the summers of 1995 and 1996, and became final on August 10, 1998.

On October 31, 2003, U.S. EPA proposed a finding of attainment of the national 1-hour ozone standard for the Bay Area. The proposed finding was based on air quality monitoring data from the 2001, 2002, and 2003 ozone seasons. In April 2004, U.S. EPA made a final finding that the Bay Area had attained the national 1-hour ozone standard. Because of this finding, some of the elements of the 2001 Ozone Attainment Plan, submitted to EPA to demonstrate attainment of the 1-hour standard, were suspended. The finding of attainment did not mean the Bay Area had been reclassified as an attainment area for the 1-hour standard. To be reclassified, the region would have had to submit a formal redesignation request to EPA, along with a maintenance plan showing how the region would continue to attain the standard for ten years. However, this redesignation request was no longer necessary upon the establishment of the new national 8-hour ozone standard.

National 8-Hour Ozone Standard

On April 15, 2004, EPA issued the first phase of the final implementation rule designating and classifying areas not meeting the federal 8-hour ozone standard. This phase of the implementation rule explained how EPA was classifying areas not meeting the national air quality standard for 8-hour ozone. It also established a process for transitioning from implementing the 1-hour standard for ozone to implementing the more protective 8-hour ozone standard. The rule also established attainment dates for the 8-hour standard and the timing of emissions reductions needed for attainment. The 8-hour designations and classifications took effect on June 15, 2004; and one year following this effective date, EPA revoked the 1-hour standard.

In July 1997, U.S. EPA revised the ozone standard, setting it to 0.08 parts per million in concentration-based form, specifically the 3-year average of the annual 4th highest daily maximum 8-hour ozone concentrations. In April 2004, EPA issued final designations for attainment and non-attainment areas. The Bay Area monitoring stations recorded concentrations that exceeded the national 8-hour ozone standard for 2001, 2002 and 2003. In June 2004, EPA formally designated the Bay Area as a non-attainment area for national 8-hour ozone, and classified the region as “marginal” based on five classes of non-attainment areas for ozone, ranging from marginal to extreme. Marginal, non-attainment areas must attain the national 8-hour ozone standard by June 15, 2007.

On July 1, 2004, EPA published a final rule amending the transportation conformity rule to address the new national 8-hour ozone standard. The amended rule stated that Plans and TIPs in nonattainment areas must be found to conform against the new standard by one year after the effective date of designation – by June 15, 2005 for 8-hour ozone areas. Conformity for the 1-hour ozone standard will no longer apply in existing 1-hour ozone nonattainment and maintenance areas once the 1-hour ozone standard is revoked; this occurred on June 15, 2005. Furthermore, prior to 8-hour budgets being established, all areas with adequate or approved 1-hour motor vehicle emission budgets must use them to demonstrate conformity with the 8-hour ozone standard, unless it is determined through interagency consultation that using the interim emissions tests is more appropriate. The conformity finding in this report is based on the approved 1-hour motor vehicle emissions budget.

In March 2008, EPA lowered the national 8-hour ozone standard from 0.80 parts per million to 0.75 parts per million. On March 12, 2009, ARB submitted its recommendations for area designations for the revised national 8-hour ozone standard. These recommendations were based on ozone air quality data collected during 2006 through 2008. The ARB recommended that the Bay Area be designated as nonattainment for the national 8-hour ozone standard. EPA had one year to review the recommendations and were to notify states by November 12, 2009 if they planned to modify the state-recommended areas. EPA issued final designations by March 12, 2010 based on more up to date monitoring data.

On January 6, 2010, the EPA extended the deadline for designating areas for the March 2008 national ambient air quality standards (NAAQS) for ground-level ozone. This was in light of EPA's decision to reconsider the ground-level ozone standards set in 2008 because the Clean Air Scientific Advisory Committee, EPA's panel of science advisors, found the ozone standards not as protective to the health and welfare of the public as recommended. Based on the scientific studies, EPA proposed to set different primary and secondary 8-hour ozone standards to protect public health.

EPA's final rule designating nonattainment areas for the 2008 ozone NAAQS was published in the Federal Register on May 21, 2012 and was effective July 20, 2012. This rule established initial air quality designations and classifications for the 2008 ozone NAAQS for most areas in the United States, including areas of Indian country.

Concurrent with this designation rule, EPA released an additional final rule that established the approach for classifying nonattainment areas, set attainment deadlines, granted reclassification for selected nonattainment areas in California, and revoked the 1997 ozone standard for transportation conformity purposes. The grace period for showing conformity to the 2008 O₃ standard was started by the May 21, 2012 (77 FR 30088) publication of designations for this standard. The grace period for completing these conformity analysis ends on July 20, 2013 and MTC will need to continue to include conformity to the 1997 ozone standard until the grace period is finished.

National PM_{2.5} Standard

In 1987, The EPA established a standard for particle pollution equal to or smaller than 10 micrometers in diameter. A decade later, the 1997 revision to the standard set the stage for change, when a separate standard was set for fine particulate matter, which are 2.5 micrometers in diameter and smaller. Citing the link between serious health problems and premature death in people with heart or lung disease, the 1997 revision ultimately distinguished and set forth regulation on particle pollutants known as particulate matter 2.5 (PM_{2.5}) and particulate matter 10 (PM₁₀).

In 2006 the EPA revised the air quality standards for particle pollution. Regulations for PM_{2.5} were tightened for the 24-hour fine particle standard, which lowered the level from 65 micrograms per cubic meter (µg/m³) to 35 µg/ m³. The annual fine particle standard at 15 µg/ m³ remained the same. In that same year, the EPA published a final ruling which established transportation conformity criteria and procedures to determine transportation projects that required analysis for local air quality impacts for PM_{2.5} in non-attainment and maintenance areas. From the 2006 revision, EPA had to complete designations of nonattainment areas by December 2009 for national standard for PM_{2.5}. The newly established criteria and procedures require those area designated as nonattainment areas must undergo a regional conformity analysis for PM_{2.5}. Furthermore, the procedures also mandates areas designated as nonattainment must complete an additional project-level PM_{2.5} hot-spot analysis of localized impacts for transportation projects of air quality concern.

On December 14, 2009, EPA designated the Bay Area as nonattainment for the national 24-hour PM_{2.5} standard based upon violations of the standard over the three-year period from 2007 through 2009. Pursuant to the Clean Air Act, the Bay Area and MTC were subject to the requirement (beginning on December 14, 2010) to demonstrate that the RTP and TIP conformed to the SIP. In addition, beginning on December 14, 2010, certain roadway and transit projects that involve significant levels of diesel vehicle traffic needed to prepare PM_{2.5} hot-spot analyses.

National 8-Hour Carbon Monoxide Standard

In April 1998, the Bay Area was redesignated to a “maintenance area” for the national 8-hour carbon monoxide (CO) standard, having demonstrated attainment of the standards. As a maintenance area, the region must assure continued attainment of the CO standard.

Approved Motor Vehicle Emissions Budgets and Conformity Tests

The Bay Area has conformity requirements for national ozone, CO, and PM_{2.5} standards. Under the ozone and CO standard, the Bay Area has to meet a motor vehicle emission “budget” test. Because the Bay Area does not have motor vehicle emission budgets for PM_{2.5} that have been determined to be adequate by EPA, it has to meet a motor vehicle emission interim test for the PM_{2.5} standard. To make a positive conformity finding for ozone and CO, MTC must demonstrate that the calculated motor vehicle emissions in the region are lower than the approved budgets. To make a positive “interim” conformity finding for PM_{2.5}, MTC must meet “build not greater than no build” or “build not greater than baseline year” tests based on PM_{2.5} exhaust, tire wear, and brake wear, and NO_x as a PM_{2.5} precursor, emissions.

Motor vehicle emissions budgets for Volatile Organic Compounds (VOC) and Nitrogen Oxides (NO_x), which are ozone precursors, were developed for the 2006 attainment year as part of the 2001 1-hour Ozone Attainment Plan. The VOC and NO_x budgets were found to be adequate by EPA on February 14, 2002 (67 FR 8017) and were subsequently approved by EPA on April 22, 2004 (69 FR 21717). The ozone budgets were approved by the Federal Register on March 27, 2008. Note that under EPA’s conformity rule for the national 8-hour ozone standard, the existing 1-hour motor vehicle emission budgets are to be used for conformity analyses until they are replaced.

For CO, the applicable motor vehicle emissions budget was developed for the 2004 Revisions to the California State Implementation Plan for Carbon Monoxide (herein referred to as the 2004 Carbon Monoxide Maintenance Plan).

The motor vehicle emission budgets are listed below:

VOC:	164 tons per day (2006 and beyond)
NO _x :	270.3 tons per day (2006 and beyond)
CO:	1,850 tons per day (2003 and 2018 and beyond)

For PM_{2.5}, initially the Bay Area was required to prepare a SIP by December 2012 to show how the region would attain the standard by December 2014. In addition, although the Bay Area was designated as non-attainment for the national 24-hour PM_{2.5} standard based on monitoring data for the 2006-2008 period, the region exceeded the standard by only a slight margin. Since then, Bay Area PM_{2.5} levels have continued to decline. Air quality data from the regional monitoring network shows that the Bay Area met the national 24-hour PM_{2.5} standard during the three-year period from 2008 through 2010, as well as the three-year period from 2009 through 2011.

Under US EPA guidelines, a region with monitoring data showing that it currently attains an air quality standard can submit a “redesignation request” and a “maintenance plan” in lieu of a SIP attainment plan. However, the BAAQMD believes that it would be premature to submit a PM_{2.5} redesignation request for the Bay Area at this time. Instead, the BAAQMD has

pursued another option provided by US EPA guidelines for areas with monitoring data showing that they currently meet the PM_{2.5} standard. In December 2011, the Air Resources Board submitted a “clean data finding” request on behalf of the Bay Area. On January 9, 2013, EPA took final action and determined that the Bay Area attained the 2006 24-hour PM_{2.5} standard. EPA’s determination was based on complete, quality-assured, and certified ambient air monitoring data showing that the area monitored attainment based on the 2009-2011 monitoring period³. Based on EPA’s determination, the requirements for the Bay Area to submit an attainment demonstration, together with reasonably available control measures (RACM), a reasonable further progress (RFP) plan, and contingency measures for failure to meet RFP and attainment deadlines are suspended for so long as the region continues to attain the 2006 24-hour PM_{2.5} standard.

Since an approved motor vehicle emissions budget for PM_{2.5} is not available for use in this conformity analysis, MTC must complete one of the two interim emissions tests:

- the build-no-greater-than-no-build test (“build/no-build test”) found at 40 CFR 93.119(e)(1), or
- the no-greater-than-baseline year emissions test (“baseline year test”), described at 40 CFR 93.119(e)(2).

Per the interagency consultation via the Air Quality Conformity Task Force meeting dated March 28, 2013, MTC elects to use the baseline year test. In this test, conformity would be demonstrated if in each analysis year, the transportation emissions reflected the RTP or TIP (the “build” scenario) are less than or equal to emissions from the transportation system in the “baseline year” on-road source emission inventory.

Under a determination of conformity, the following criteria are applied:

1. The latest planning assumptions and emission models are used.
2. The transportation plan and program pass an emissions budget test using a budget that has been found adequate by EPA or an interim emissions test when budgets have not been established.
3. The transportation plan and program provide for the timely implementation of transportation control measures (TCMs).
4. Interagency and public consultation is part of the process.

III. CONFORMITY ANALYSIS & RESULTS

Approach to Conformity Analysis

MTC has used the latest planning assumptions for the purpose of preparing this conformity analysis. Regional on-road motor vehicle emissions for future years are estimated using MTC’s travel demand forecast model *Travel Model One* (version 0.3), released in spring

³ See <http://www.gpo.gov/fdsys/pkg/FR-2013-01-09/pdf/2013-00170.pdf>

2012, calibrated to a 2000 base year, and validated against both year 2000 and year 2005 observed conditions with the most up to date highway and transit networks. In conjunction with *Travel Model One*, MTC will also use the ARB's latest model for determining motor vehicle emissions (EMFAC2011-SG).

The MTC travel demand model requires various inputs – demographic assumptions, pricing assumptions, travel behavior assumptions and highway and transit network assumptions. This conformity analysis uses the latest socio-economic/land use forecast data from the Association of Bay Area Government's (ABAG's) *Jobs/Housing Connection*⁴ and the latest validated version of *Travel Model One*.

A separate process was employed to develop socio-economic/land use data for the PM_{2.5} "baseline year" of 2008 and PM_{2.5} attainment year of 2014. The standard Transportation Analysis Zone (TAZ)-level data set provided to MTC by ABAG includes forecasted data in 5-year increments. The calculation of data for the interim years 2008 and 2014 in the proposed Plan Bay Area requires a multi-stop process. First, regional control totals for each attribute for each of the years 2008 and 2014 are calculated using a straight line extrapolation between the two adjacent 5-year increments. Next each TAZ's share of the regional total is calculated by extrapolation of the two adjacent 5-year increments. Finally, individual TAZ totals are calculated by multiplying the interim year TAZ share of the regional total by the regional control total.

In addition, pricing assumptions applied in the travel demand model include projected parking prices, gasoline and non-gasoline auto operating costs, fuel economy, bridge tolls, transit fares, and express lanes. Travel behavior assumptions include trip peaking factors, vehicle occupancy factors, and estimates of interregional commuters. Highway and transit networks were updated for each analysis year to reflect investments in the proposed Plan Bay Area (see Appendix A) and 2013 TIP (see Appendix B).

Regional VMT and engine starts (which are needed for emission calculations) are forecasted using a combination of output from MTC's travel demand forecasting model and base year (2000) VMT information provided by the ARB. For conformity purposes, MTC agreed to follow ARB's protocol for estimating VMT.

Refer to **Appendix C** for detailed travel modeling assumptions used in this conformity analysis.

Analysis Years

The analysis years for the budget and baseline year tests are to be a year within five years from the date the analysis is done, the last year of the RTP and intermediate years as necessary so that analysis years are not more than 10 years apart. For this conformity analysis,

⁴ <http://onebayarea.org/related-materials/Document-Archive.html>

the analysis years are 2015, 2020, 2030 and 2035 for the 1997 and 2008 ozone and PM_{2.5} standards. The attainment year for the 1997 ozone standard is the year 2007 and the attainment year for the 2008 ozone standard is 2015. The attainment year for the 2006 PM_{2.5} standard is 2014. For CO, the analysis years are 2015, 2018, 2020, 2030 and 2040. Travel forecast data for year 2018 were interpolated between 2015 and 2020. MTC has prepared separate travel forecasts for the Bay Area for each of these years. These travel forecasts are then applied to calculate motor vehicle emissions.

Consultation Process

MTC has consulted on the preparation of this conformity analysis and other conformity related issues with the Bay Area's Air Quality Conformity Task Force. The Conformity Task Force is composed of representatives of U.S. EPA, ARB, FHWA, FTA, Caltrans, MTC, BAAQMD, ABAG, the nine county Congestion Management Agencies, and Bay Area transit operators. The Conformity Task Force reviews the assumptions going into the analysis, consults on TCM implementation issues, and reviews the results of the conformity analysis. The task force meetings are open to the public. Topics covered in past meetings of the Air Quality Conformity Task Force include the following:

December 2012

- PM_{2.5} Project Conformity Interagency Consultations
- Transportation Air Quality Conformity Redetermination

January 2013

- PM_{2.5} Project Conformity Interagency Consultations
- Transportation Air Quality Conformity Analysis for Transportation 2035 and 2011 TIP (Redetermination)
- Plan Bay Area Modeling Tools (with presentations)

February 2013

- PM_{2.5} Project Conformity Interagency Consultations

March 2013

- Draft Transportation Air Quality Conformity Analysis for Plan Bay Area/2013 TIP

April 2013

- PM_{2.5} Project Conformity Interagency Consultations
- Draft Transportation Air Quality Conformity Analysis for Plan Bay Area/2013 TIP

May 2013

- PM_{2.5} Project Conformity Interagency Consultations

Comparison of Motor Vehicle Emissions to Budgets

As explained earlier, motor vehicle emissions budgets are established in the SIP for VOCs, NO_x and carbon monoxide (CO). To make a positive conformity finding, the regional motor vehicle emissions must be equal to or less than these budgets. The results of the vehicle activity forecasts and motor vehicle emission calculations are shown below for each separate analysis year.

Ozone Motor Vehicle Emission Budgets

For VOC and NO_x, the motor vehicle emission budget also reflects anticipated emission reductions from five Transportation Control Measures (TCMs) incorporated in the 2001 Ozone Attainment Plan (Table 1).

**TABLE 1
VOC AND NO_x EMISSIONS BUDGETS FROM 2001 OZONE ATTAINMENT PLAN (TONS/DAY)**

VOC	
2006 On Road Motor Vehicle Emissions	168.5
2006 Mobile Source Control Measure Benefits	(4.0)
2006 TCM Benefits	(0.5)
2006 Emissions Budget	164.0
 NO_x	
2006 On Road Motor Vehicle Emissions	271.0
2006 TCM Benefits	(0.7)
2006 Emissions Budget	270.3

**TABLE 2
VEHICLE ACTIVITY FORECASTS**

	2015	2020	2030	2040
VEHICLES IN USE	4,740,063	4,900,323	5,168,834	5,463,106
Daily VMT (1000s)	170,152	176,429	185,830	196,911
Daily Engine Starts	30,140,124	32,631,760	32,631,760	34,443,678

Carbon Monoxide Maintenance Plan Budget

The budget for carbon monoxide is derived from the 2004 Carbon Monoxide Maintenance Plan. The emission budget for the Bay Area is 1,850 tons per day. This budget applies to all subsequent analysis years as required by federal conformity regulation, including: any interim year conformity analyses, the 2018 horizon year, and years beyond 2018.

Comparison of Estimated Regional Motor Vehicle Emissions to the Ozone Precursor and CO Budgets

The motor vehicle activity forecasts for Plan Bay Area and the 2013 TIP for the various horizon years are converted to motor vehicle emission estimates by MTC using EMFAC2011.

Table 3A and 3B compares the results of the various analyses with the applicable budgets. The analyses indicate that the motor vehicle emissions are substantially below the budget, due in large part to the effects of cleaner vehicles in the California fleet and the enhanced Smog Check program now in effect in the Bay Area and reflected in the EMFAC model. With respect to the new Maintenance Plan motor vehicle emission budget for CO, Table 3B shows that calculated motor vehicle emissions will be well below the new budget of 1,850 tons per day in 2018 as well.

The estimated effectiveness of the various Transportation Control Measures, given their current implementation status is shown in Table 4. TCMs A through E are fully implemented. They have achieved the required cumulative total emission reductions of 0.5 tons per day of VOC and 0.7 tons per day of NO_x by 2006.

**TABLE 3A
EMISSIONS BUDGET COMPARISONS FOR OZONE PRECUSORS
(TONS/DAY)***

Year	VOC Budget**	On-Road Motor Vehicles VOC	TCMs***	Net Emissions
2015	164.0	55.56	(0.3)	55.26
2020	164.0	40.81	(0.3)	40.51
2030	164.0	31.67	(0.3)	31.37
2040	164.0	30.24	(0.3)	29.94

Year	NO_x Budget	On-Road Motor Vehicles NO_x	TCMs***	Net Emissions
2015	270.3	110.50	(0.5)	110.00
2020	270.3	73.80	(0.5)	73.30
2030	270.3	48.91	(0.5)	48.41
2040	270.3	47.81	(0.5)	47.31

* Emissions for summertime conditions

**2001 Ozone Attainment Plan

***The transit services for TCM A Regional Express Bus Program were modeled. The emission benefits from TCM A are therefore included in the On-Road Motor Vehicles VOC and NO_x emission inventories for 2006 and beyond.

**TABLE 3B
EMISSIONS BUDGET COMPARISONS FOR CARBON MONOXIDE
(TONS/DAY)***

Year	2004 CO Budget**	Estimated CO
2015	1,850	526.93
2018	1,850	421.99***
2020	1,850	352.02
2030	1,850	248.56
2040	1,850	240.98

*Emissions for wintertime conditions

**2004 Revision to the California State Implementation Plan for Carbon Monoxide, Updated Maintenance Plan for 10 Federal Planning Areas

***Estimated CO emissions for 2018 are extrapolated from the 2015 and 2020 analysis years.

**TABLE 4
EMISSIONS REDUCTIONS FOR TRANSPORTATION CONTROL MEASURES (TCMS) A – E IN
STATE IMPLEMENTATION PLAN THROUGH DECEMBER 2006 (TONS PER DAY)**

TCM	VOC Emission Reductions through December 2006	NOx Emission Reductions through December 2006
TCM A Regional Express Bus Program	0.20	0.20
TCM B Bicycle/Pedestrian Program	0.04	0.03
TCM C Transportation for Livable Communities	0.08	0.12
TCM D Expansion of Freeway Service Patrol	0.10	0.25
TCM E Transit Access to Airports	0.09	0.13
Total Reductions	0.5	0.7

Baseline Year Emissions Test for PM_{2.5}

For the Baseline Year test, emissions for both directly emitted PM_{2.5} and NO_x (as the precursor to PM_{2.5} emissions) were compared to the analysis years of 2015, 2020, 2030 and 2040. The analysis used inputs for the winter season, during which the Bay Area experiences its highest levels of PM_{2.5} concentrations.

The motor vehicle activity forecasts for Plan Bay Area and the 2013 TIP for the planned transportation system scenarios across the various horizon years, the PM_{2.5} baseline year (2008) and the PM_{2.5} attainment year (2014) are shown in Table 5. These forecasts are converted to motor vehicle emission estimates by MTC using EMFAC2011.

Table 6 presents the results of the Baseline Year test for the PM_{2.5} emissions and the NO_x precursor. The analyses indicate that the motor vehicle emissions are lower in the analysis years than in the Baseline Year. This is due in large part to the transportation investments included in the Plan and Program (such as transit services, express lanes, freeway operational

improvements, roadway improvements, etc.) and its responsiveness to growth in population and associated travel demand over the next 28 years.

**TABLE 5
VEHICLE ACTIVITY FORECASTS FOR THE PM_{2.5} BASELINE YEAR TEST**

	2008 Baseline Year	2014 Attainment Year	2015	2020	2030	2040
Vehicles In Use	4,596,718	4,710,130	4,740,063	4,900,323	5,168,834	5,463,106
Daily VMT (1000s)	166,041	168,861	170,152	176,429	185,830	196,911
Engine Starts	29,321,651	29,964,074	30,140,124	31,121,589	32,631,760	34,443,678

**TABLE 6
EMISSIONS COMPARISON FOR THE PM_{2.5} BASELINE YEAR TEST ***

	2008 Baseline Year	2014 Attainment Year	2015	2020	2030	2040
PM_{2.5}	7.63	5.51	5.25	5.03	5.30	5.64
NO_x	217.85	136.04	123.71	82.44	54.38	52.91

*Emissions for wintertime only

IV. TRANSPORTATION CONTROL MEASURES

History of Transportation Control Measures

Transportation control measures (TCMs) are strategies to reduce vehicle emissions. They include such strategies as improved transit service and transit coordination, ridesharing services and new carpool lanes, signal timing, freeway incident management, increased gas taxes and bridge tolls to encourage use of alternative modes, etc. The original set of TCMs plus the five most recent TCMs (A-E) have been fully implemented. The TCMs were added over successive revisions to the SIP (see Table 7). For more information on TCMs 1-28, which are completed, see the *Transportation Air Quality Conformity Analysis for the 2001 Regional Transportation Plan and FY 2001 Transportation Improvement Program Amendment 01-32 (February 2002)*. This report can be found in the MTC/ABAG Library.

- Twelve (12) ozone measures were originally listed in the 1982 Bay Area Air Quality Plan.
- In response to a 1990 lawsuit in the federal District Court, sixteen (16) additional TCMs were subsequently adopted by MTC in February 1990 as contingency measures to bring the region back on the “Reasonable Further Progress” (RFP) line. The Federal District order issued on May 11, 1992, found that these contingency TCMs were sufficient to bring the region back on the RFP track anticipated in the SIP. These measures became part of the SIP when U.S. EPA approved the 1994 Ozone Maintenance Plan.

- Two (2) transportation control measures from the 1982 Bay Area Air Quality Plan apply to Carbon Monoxide control strategies, for which the region is in attainment with the federal standard, and primarily targeted downtown San Jose (which had the most significant CO problem at that time.) MTC also adopted a set of TCM enhancements in November 1991 to eliminate a shortfall in regional carbon monoxide emissions identified in the District Court's April 19, 1991 order. Carbon monoxide standards have been achieved primarily through the use of oxygenated/reformulated fuels in cars and with improvements in the Smog Check program.
- As part of EPA's partial approval/partial disapproval of the 1999 Ozone Attainment Plan, four (4) TCMs were deleted from the ozone plan (but two of these remain in the Carbon Monoxide Maintenance Plan).
- Five (5) new Transportation Control Measures were adopted as part of the new 2001 1-Hour Ozone Attainment Plan and were fully funded in the 2001 TIP and 2001 Regional Transportation Plan.

With respect to TCM 2 from the 1982 SIP, there was a protracted debate, leading to a citizens lawsuit in federal court, about the obligations associated with this TCM. On April 6, 2004 MTC prevailed in the U.S. Court of Appeals for the Ninth Circuit which concluded that TCM 2 does not impose any additional enforceable obligation on MTC to increase ridership on public transit ridership by 15% over 1982-83 levels by November 2006 (Bayview Hunters Point Community Advocates v. Metropolitan Transportation Com'n, (2004 WL 728247, 4 Cal. Daily Op. Serv. 2919, 2004 Daily Journal D.A.R. 4209, 9th Cir.(Cal.), Apr 06, 2004)). Thus TCM 2 has been resolved, and there are no further implementation issues to address in this TCM.

TABLE 7
Transportation Control Measures (TCMs) in the State Implementation Plan

<i>TCM</i>	<i>Description</i>
<i>Original TCMs from 1982 Bay Area Air Quality Plan</i>	
TCM 1	Reaffirm Commitment to 28 percent Transit Ridership Increase Between 1978 and 1983
TCM 2	Support Post-1983 Improvements in the Operators' Five-Year Plans and, After Consultation with the Operators, Adopt Ridership Increase Target for the Period 1983 through 1987
TCM 3	Seek to Expand and Improve Public Transit Beyond Committed Levels
TCM 4	High Occupancy Vehicle (HOV) Lanes and Ramp Metering
TCM 5	Support RIDES Efforts
TCM 6*	Continue Efforts to Obtain Funding to Support Long Range Transit Improvements
TCM 7	Preferential Parking
TCM 8	Shared Use Park and Ride Lots
TCM 9	Expand Commute Alternatives Program
TCM 10	Information Program for Local Governments
TCM 11**	Gasoline Conservation Awareness Program (GasCAP)
TCM 12**	Santa Clara County Commuter Transportation Program
<i>Contingency Plan TCMs Adopted by MTC in February 1990 (MTC Resolution 2131)</i>	
TCM 13	Increase Bridge Tolls to \$1.00 on All Bridges
TCM 14	Bay Bridge Surcharge of \$1.00
TCM 15	Increase State Gas Tax by 9 Cents
TCM 16*	Implement MTC Resolution 1876, Revised — New Rail Starts
TCM 17	Continue Post-Earthquake Transit Services
TCM 18	Sacramento-Bay Area Amtrak Service
TCM 19	Upgrade Caltrain Service
TCM 20	Regional HOV System Plan
TCM 21	Regional Transit Coordination
TCM 22	Expand Regional Transit Connection Ticket Distribution
TCM 23	Employer Audits
TCM 24	Expand Signal Timing Program to New Cities
TCM 25	Maintain Existing Signal Timing Programs
TCM 26	Incident Management on Bay Area Freeways
TCM 27	Update MTC Guidance on Development of Local TSM Programs
TCM 28	Local Transportation Systems Management (TSM) Initiatives
<i>New TCMs in 2001 Ozone Attainment Plan</i>	
TCM A	Regional Express Bus Program
TCM B	Bicycle/Pedestrian Program
TCM C	Transportation for Livable Communities
TCM D	Expansion of Freeway Service Patrol
TCM E	Transit Access to Airports

*Deleted by EPA action from ozone plan

**Deleted by EPA action from ozone plan, but retained in Carbon Monoxide Maintenance Plan.

Source: Bay Area Air Quality Management District, Metropolitan Transportation Commission, 2001.

Status of Transportation Control Measures

TCMs A-E were approved into the SIP as part of EPA's Finding of Attainment for the San Francisco Bay Area (April 2004). The conformity analysis must demonstrate that TCMs are being implemented on schedule (40 CFR 93.113). TCMs A-E have specific implementation steps which are used to determine progress in advancing these TCMs (see Table 8). TCMs A-E are now fully implemented.

**TABLE 8
IMPLEMENTATION STATUS OF FEDERAL TRANSPORTATION CONTROL MEASURES FOR OZONE (TCMS A – E)**

#	TCM	Description	Ozone Attainment Plan Implementation Schedule	Implementation Status
A	Regional Express Bus Program	Program includes purchase of approximately 90 low emission buses to operate new or enhanced express bus services. Buses will meet all applicable ARB standards, and will include particulate traps or filters. MTC will approve \$40 million in funding to various transit operators for bus acquisition. Program assumes transit operators can sustain service for a five year period. Actual emission reductions will be determined based on routes selected by MTC.	FY 2003. Complete once \$40 million in funding pursuant to Government Code Section 14556.40 is approved by the California Transportation Commission and obligated by bus operators	\$40 million for this program was allocated by the CTC in August 2001. The participating transit operators have ordered and received a total of 94 buses. All buses are currently in operations. TCM A is fully implemented.
B	Bicycle / Pedestrian Program	Fund high priority projects in countywide plans consistent with TDA funding availability. MTC would fund only projects that are exempt from CEQA, have no significant environmental impacts, or adequately mitigate any adverse environmental impacts. Actual emission reductions will be determined based on the projects funded.	FY 2004 – 2006. Complete once \$15 million in TDA Article 3 is allocated by MTC.	MTC allocated over \$20 million in TDA Article 3 funds during FY2004, FY2005, and FY2006. TCM B is fully implemented.

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Plan Bay Area and 2013 Transportation Improvement Program*

#	TCM	Description	Ozone Attainment Plan Implementation Schedule	Implementation Status
C	Transportation for Livable Communities (TLC)	Program provides planning grants, technical assistance, and capital grants to help cities and nonprofit agencies link transportation projects with community plans. MTC would fund only projects that are exempt from CEQA, have no significant environmental impacts, or adequately mitigate any adverse environmental impacts. Actual emission reductions will be based on the projects funded.	FY 2004 – 2006. Complete once \$27 million in TLC grant funding is approved by MTC	In December 2003, the Commission reaffirmed its commitment of \$27 million annually over 25 years for the TLC program as part of Phase 1 of the Transportation 2030 Plan. MTC and the county Congestion Management Agencies (CMAs) have approved over \$27 million in TLC grant funding by FY 2006. In November 2004, MTC approved \$500,000 for regional TLC Community Design Planning Program, and in December 2004, MTC approved \$18.4 million in TLC funding for the regional TLC Capital program. As of December 2006, CMAs in Alameda, Marin and Sonoma counties approved an additional \$12.4 million in their county-level TLC Capital programs for a regional total of \$31.2 million. TCM C is fully implemented.
D	Additional Freeway Service Patrol	Operation of 55 lane miles of new roving tow truck patrols beyond routes which existed in 2000. TCM commitment would be satisfied by any combination for routes adding 55 miles. Tow trucks used in service are new vehicles meeting all applicable ARB standards.	FY 2001. Complete by maintaining increase in FSP mileage through December 2006	FSP continues to maintain the operation of the 55 lane miles of new roving tow truck coverage. This level of service was maintained through 2006. FSP continues to expand its service areas. TCM D is fully implemented.
E	Transit Access to Airports	Take credit for emission reductions from air passengers who use BART to SFO, as these reductions are not included in the Baseline.	BART – SFO service to start in FY 2003. Complete by maintaining service through December 2006	Service began June 2003. Service adjustments have been made since start of revenue service. The BART to SFO service has been maintained through 2006 and is continued. TCM E is fully implemented.

V. RESPONSE TO PUBLIC COMMENTS

Based on the two-year update schedule mandated by Caltrans, the Draft 2013 TIP and accompanying Transportation-Air Quality Conformity Analysis were released for public review and comment on June 22, 2012, with a public hearing held on July 11, 2012.

Several commenters noted the timing mismatch between the scheduled adoption of the 2013 TIP and the region's RTP, and Sustainable Communities Strategy (SCS) Plan Bay Area. In September 2012, MTC postponed the final adoption of the new TIP to more closely align with development and adoption of Plan Bay Area. Plan Bay Area is currently slated for adoption in July 2013. Therefore, MTC is currently developing the six-year 2013 TIP (FY2012-13 through FY2017-18), which includes both a financial constraint analysis and an air quality conformity analysis.

MTC's Programming and Allocations Committee released the Draft Conformity Analysis for a 30-day public review period from March 29, 2013 to May 3, 2013. Nine public hearings were held throughout the region on Plan Bay Area, including the Draft Conformity Analysis of the Plan and the 2013 TIP between April 8, 2013 and May 2, 2013.

MTC received one comment on the Draft Conformity Analysis during the comment period. However, upon review, this comment was not related to the Draft Conformity Analysis and will be addressed as part of the Draft Plan Bay Area Environmental Impact Report comment process (Appendix E).

Several changes were made since the Draft Conformity Analysis was released on March 29, 2013; a description of these changes is indicated in the memo addressed to the Air Quality Conformity Task Force Memo dated June 25, 2013 (Appendix G). These changes do not result in any changes to the conformity findings.

VI. Conformity Findings

Based on the analysis, the following conformity findings are made:

- This conformity assessment was conducted consistent with U.S. EPA's transportation conformity regulations and with the Bay Area Air Quality Conformity Protocol adopted by MTC as Resolution No. 4076.
- Plan Bay Area and the 2013 Transportation Improvement Program provide for implementation of TCMs pursuant to the following federal regulation:
 - (1) *An examination of the specific steps and funding source(s) needed to fully implement each TCM indicates that TCMs which are eligible for funding under title 23 U.S.C. or the Federal Transit Laws are on or ahead of the schedule established in the applicable implementation plan, or, if such TCMs are behind the schedule established in the applicable implementation plan, the MPO and DOT have determined that past obstacles to implementation of the TCMs have been identified and have been or are being overcome, and that all State and local agencies with influence over approvals or funding for TCMs are given maximum priority to approval or funding to TCMs over other projects within their control, including projects in locations outside the non-attainment or maintenance area.*
 - (2) *If TCMs in the applicable implementation plan have previously been programmed for Federal funding but the funds have not been obligated and the TCMs are behind the schedule in the implementation plan, then the TIP cannot be found to conform if the funds intended for those TCMs are reallocated to projects in the TIP other than TCMs, or if there are no other TCMs in the TIP, if the funds are reallocated to projects in the TIP other than projects which are eligible for Federal funding intended for air quality improvements projects, e.g., the Congestion Mitigation and Air Quality Improvement Program.*
 - (3) *Nothing in the TIP may interfere with the implementation of any TCM in the applicable implementation plan. (40 CFR Part 93.113(c)).*
- For the two ground-level ozone precursors (VOC and NO_x), motor vehicle emissions in Plan Bay Area and the 2013 Transportation Improvement Program are lower than the applicable motor vehicle emission budgets for the 1997 and the 2008 national 8-hour ozone standards.
- For carbon monoxide, motor vehicle emissions in Plan Bay Area and the 2013 Transportation Improvement Program are lower than the transportation conformity budget in the SIP.

- For PM_{2.5} and NO_x, the Baseline Year test shows that the motor vehicle emissions are lower under the Build scenario for the various analysis years when compared to the baseline year emissions scenario.

Appendix A
List of Projects in Plan Bay Area

Final List of Plan Bay Area Transportation Projects/Programs by County

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County	RTPID	Investment Type	Project	Complete and Operational By:			2013 TIP	Regionally Significant
				2020	2030	2040		
Bay Area Region/Multi-County	21011	New Commitment	Transportation for Livable Communities (TLC) Program - Priority Development Area (PDA) Planning Grants: provide planning funds to support transit-oriented development in PDAs			Y	Y	
Bay Area Region/Multi-County	21012	Committed	Golden Gate Bridge Seismic Retrofit	Y			Y	
Bay Area Region/Multi-County	21013	New Commitment	State-Owned Toll Bridge Rehabilitation/Replacement/Retrofit			Y	Y	
Bay Area Region/Multi-County	21017	New Commitment	Small transit operators in Alameda, Contra Costa, Marin, Napa, Solano and Sonoma counties - transit operating and capital improvement program			Y	Y	
Bay Area Region/Multi-County	21320	Committed	Golden Gate Bridge Moveable Median Barrier: installation of a moveable median barrier on the Golden Gate Bridge to provide a physical separation between opposing directions of traffic			Y	Y	
Bay Area Region/Multi-County	21342	Committed	Implement Transbay Transit Center/Caltrain Downtown Extension (Phase 1 - Transbay Transit Center)	Y			Y	
Bay Area Region/Multi-County	21627	New Commitment	Caltrain Service Frequency Improvements (6-Train Service during Peak Hours), Electrification (San Francisco to Tamien), and Communications-Based Overlay Signal System (CBOSS) and Positive Train Control System (PTC)	Y			Y	Y
Bay Area Region/Multi-County	22001	Committed	Implement Sonoma-Marín Area Rail Transit District (SMART) Commuter Rail and Multi-Use Pathway Project (Initial Operating Segment)			Y	Y	Y
Bay Area Region/Multi-County	22002	Committed	Extend High Occupancy Vehicle (HOV) lane on northbound I-880 from existing terminus at Bay Bridge approach to the Maritime on-ramp to provide HOV access from Maritime to Bay Bridge toll plaza			Y		Y
Bay Area Region/Multi-County	22006	Committed	Improve ferry facilities/equipment including the Downtown Ferry Terminal and procuring additional spare ferry vessels			Y	Y	
Bay Area Region/Multi-County	22042	N/A	Widen I-680 northbound for express lanes from Route 237 to Route 84 (includes ramp metering and auxiliary lanes; included under MTC Regional Express Lane Network RTPID #240741)	Y			Y	Y
Bay Area Region/Multi-County	22241	Committed	Fund Regional Measure 2 studies (Water Emergency Transportation Authority environmental studies, I-680/Pleasant Hill BART Connector Study)			Y	Y	
Bay Area Region/Multi-County	22243	Committed	Fund Regional Measure 2 Express Bus North improvements (includes park-and-ride lots and rolling stock)			Y	Y	
Bay Area Region/Multi-County	22244	Committed	Fund City CarShare			Y		
Bay Area Region/Multi-County	22245	Committed	Fund Safe Routes to Transit			Y	Y	
Bay Area Region/Multi-County	22423	New Commitment	Lifeline Transportation Program: fund programs and services that address transportation gaps specific to low-income communities			Y	Y	
Bay Area Region/Multi-County	22425	New Commitment	Planning funds for the Metropolitan Transportation Commission, Association of Bay Area Governments, Bay Conservation and Development Commission, and nine county congestion management agencies			Y	Y	
Bay Area Region/Multi-County	22481	New Commitment	Caltrain - transit operating and capital improvement program (including replacement, rehabilitation and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets); station improvements (e.g., platforms) are included			Y	Y	
Bay Area Region/Multi-County	22511	Committed	Provide ferry service between Berkeley/Albany and San Francisco			Y	Y	

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				2020	2030	2040		
Bay Area Region/Multi-County	22636	Committed	Implement BART transbay tube earthquake safety improvements (Phase 1)			Y	Y	
Bay Area Region/Multi-County	94089	Committed	Implement Presidio Parkway Project			Y	Y	
Bay Area Region/Multi-County	94152	Committed	Widen Route 12 (Jameson Canyon) from 2 lanes to 4 lanes from I-80 in Solano County to Route 29 in Napa County (Phase 1)			Y	Y	
Bay Area Region/Multi-County	94525	New Commitment	BART - transit operating and capital improvement program (including replacement, rehabilitation and minor enhancements, equipment, fixed facilities and other capital assets)			Y	Y	
Bay Area Region/Multi-County	94526	New Commitment	AC Transit - transit operating and capital improvement program (including replacement, rehabilitation and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)			Y	Y	
Bay Area Region/Multi-County	94527	New Commitment	Livermore Amador Valley Transit Authority (LAVTA) - transit operating and capital improvement program (including replacement, rehabilitation and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)			Y	Y	
Bay Area Region/Multi-County	94558	Committed	Central Contra Costa Transit Authority (CCCTA) - transit operating and capital improvement program (including replacement, rehabilitation and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)			Y	Y	Y
Bay Area Region/Multi-County	94572	New Commitment	Golden Gate Transit - transit operating and capital improvement program (including replacement, rehabilitation and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)			Y	Y	
Bay Area Region/Multi-County	94610	Committed	Valley Transportation Authority (VTA) - transit operating and capital improvement program (including replacement, rehabilitation and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)			Y	Y	
Bay Area Region/Multi-County	94636	New Commitment	San Francisco Municipal Transportation Agency (SFMTA) - transit operating and capital improvement program (including replacement, rehabilitation and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)			Y	Y	
Bay Area Region/Multi-County	94666	New Commitment	SamTrans - transit operating and capital improvement program (including replacement, rehabilitation and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)			Y	Y	
Bay Area Region/Multi-County	94683	Committed	SolTrans - transit operating and capital improvement program (including replacement, rehabilitation and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)			Y	Y	
Bay Area Region/Multi-County	230088	N/A	Extend I-880 northbound express lanes from north of Hacienda Avenue to Hegenberger Road (included under MTC Regional Express Lane Network RTPID #240741)		Y			Y
Bay Area Region/Multi-County	230221	Committed	Implement I-80 Integrated Corridor Mobility (ICM) project operations and management			Y	Y	
Bay Area Region/Multi-County	230222	Committed	Implement San Pablo Avenue SMART Corridors operations and management			Y		
Bay Area Region/Multi-County	230290	New Commitment	Implement Transbay Transit Center/Caltrain Downtown Extension (Phase 2 - Caltrain Downtown Extension)	Y			Y	Y

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				2020	2030	2040		
Bay Area Region/Multi-County	230336	Committed	Implement recommendations from MTC's Transit Connectivity Plan			Y		
Bay Area Region/Multi-County	230419	New Commitment	Implement the Freeway Performance Initiative (FPI), which includes freeway ITS infrastructure, arterial management, incident management, emergency preparedness, traveler information/511, and operations and maintenance of ITS infrastructure			Y	Y	
Bay Area Region/Multi-County	230550	New Commitment	Climate Policy Initiatives: fund initiatives that reduce greenhouse gas emissions from cars and light duty trucks		Y		Y	
Bay Area Region/Multi-County	230581	Committed	San Francisco Ferry Berthing Improvements Program (Phase 1): improvements to existing ferry terminals and construction of new terminals to accommodate increases in ferry ridership	Y			Y	
Bay Area Region/Multi-County	230612	Committed	Conduct environmental and design studies related to implementing new ferry services in Antioch and Martinez			Y	Y	
Bay Area Region/Multi-County	230627	Committed	Implement upgrades to Route 12 (Jameson Canyon) between Napa and Solano Counties (includes grade realignment and full safety barrier)			Y		
Bay Area Region/Multi-County	230656	N/A	Convert I-80 HOV lanes to express lanes from Route 4 to Bay Bridge bypass lane in each direction (included under MTC Regional Express Lane Network RTPID #240741)		Y			Y
Bay Area Region/Multi-County	230657	N/A	Convert I-80 HOV lanes to express lanes from Carquinez Bridge to Route 4 in each direction (included under MTC Regional Express Lane Network RTPID #240741)		Y			Y
Bay Area Region/Multi-County	230658	N/A	Widen I-80 in each direction for express lanes from Route 37 to Carquinez Bridge (included under MTC Regional Express Lane Network RTPID #240741)		Y			Y
Bay Area Region/Multi-County	230659	N/A	Widen I-80 in each direction for express lanes from Red Top Road to Route 37 (included under MTC Regional Express Lane Network RTPID #240741)			Y		Y
Bay Area Region/Multi-County	230660	N/A	Convert I-80 HOV lanes to express lanes from Red Top Road to Air Base Parkway in each direction (included under MTC Regional Express Lane Network RTPID #240741)	Y			Y	Y
Bay Area Region/Multi-County	230666	N/A	Widen I-580 for eastbound and westbound express lanes from Greenville Road to San Joaquin County line (included under MTC Regional Express Lane Network RTPID #240741)			Y		Y
Bay Area Region/Multi-County	230668	N/A	Convert I-880 HOV lanes to express lanes between Hengenberger Road and Route 237 southbound, and Hacienda Drive to 237 northbound (included under MTC Regional Express Lane Network RTPID #240741)		Y		Y	Y
Bay Area Region/Multi-County	230672	N/A	Convert Route 92 westbound HOV lanes to express lanes from Hesperian Boulevard to San Mateo-Hayward Bridge toll plaza (included under MTC Regional Express Lane Network RTPID #240741)		Y			
Bay Area Region/Multi-County	230673	N/A	Convert Route 84 westbound HOV lanes to express lanes from I-880 to Dumbarton Bridge toll plaza (included under MTC Regional Express Lane Network RTPID #240741)		Y			
Bay Area Region/Multi-County	230684	N/A	Widen I-580/I-680 interchange in each direction for express lanes (included under MTC Regional Express Lane Network RTPID #240741)			Y		Y
Bay Area Region/Multi-County	230685	N/A	Express Lanes on I-680: Widen I-680 northbound for express lane from Rudgear to North Main; Convert HOV lanes to express lanes between Benicia Bridge and Alcosta Boulevard in each direction (included under MTC Regional Express Lane Network RTPID #240741)	Y				Y
Bay Area Region/Multi-County	230686	N/A	Widen I-680 in each direction for express lanes between Martinez Bridge to I-80 (included under MTC Regional Express Lane Network RTPID #240741)			Y		Y
Bay Area Region/Multi-County	230687	N/A	Widen I-680/I-80 interchange in each direction for express lanes (included under MTC Regional Express Lane Network RTPID #240741)			Y		Y

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County	RTPID	Investment Type	Project	Complete and Operational By:			2013 TIP	Regionally Significant
				2020	2030	2040		
Bay Area Region/Multi-County	230712	Committed	Golden Gate Bridge Suicide Barrier - project development			Y	Y	
Bay Area Region/Multi-County	230716	Committed	Implement Senior and Disabled Transportation Programs, including the New Freedom program			Y	Y	
Bay Area Region/Multi-County	240019	Committed	Implement station improvements along the Caltrain corridor associated with planned transit-oriented development (includes parking, bus, shuttle and bicycle and pedestrian access improvements)		Y			
Bay Area Region/Multi-County	240031	Committed	Implement system-wide access improvements at Caltrain stations associated with increased service (includes parking, bus, shuttle and bicycle and pedestrian access improvements)		Y			
Bay Area Region/Multi-County	240048	Committed	Caltrain South Terminal Track Capacity Expansion, Phase II and III - project development	Y			Y	
Bay Area Region/Multi-County	240059	N/A	Widen I-680 northbound for express lane from Route 84 to Alcosta Boulevard (included under MTC Regional Express Lane Network RTPID #240741)	Y				Y
Bay Area Region/Multi-County	240061	N/A	Widen I-680 southbound for express lane from Alcosta Boulevard to Route 84 (included under MTC Regional Express Lane Network RTPID #240741)	Y				Y
Bay Area Region/Multi-County	240140	Committed	Implement Caltrain at-grade crossing improvements	Y				
Bay Area Region/Multi-County	240581	N/A	Widen I-80 in each direction for express lanes from Air Base Parkway to I-505 (included under MTC Regional Express Lane Network RTPID #240741)	Y			Y	Y
Bay Area Region/Multi-County	240583	N/A	Widen I-80 in each direction for express lanes from I-505 to Yolo County Line (included under MTC Regional Express Lane Network RTPID #240741)		Y			Y
Bay Area Region/Multi-County	240587	N/A	Widen I-680 northbound for express lanes from Marina Vista Avenue to North Main Street (included under MTC Regional Express Lane Network RTPID #240741)		Y			Y
Bay Area Region/Multi-County	240588	N/A	Widen I-680 southbound for express lanes from Marina Vista Avenue to Livorna Road (included under MTC Regional Express Lane Network RTPID #240741)		Y			Y
Bay Area Region/Multi-County	240727	Committed	Implement transportation improvements serving the Golden Gate National Recreation Area			Y	Y	
Bay Area Region/Multi-County	240731	New Commitment	Priority Conservation Area (PCA) Program: provides funding to preserve open space and conservation areas			Y		
Bay Area Region/Multi-County	240732	N/A	Regional Express Lane Network Grant Funding (included under MTC Regional Express Lane Network RTPID #240741)			Y		
Bay Area Region/Multi-County	240733	N/A	Regional Express Lane Network Reserve: net revenue from the Network will be held in reserve (included under MTC Regional Express Lane Network RTPID #240741)			Y		
Bay Area Region/Multi-County	240734	N/A	Regional Express Lane Network Operations and Maintenance, Rehabilitation, and Financing Cost (included under MTC Regional Express Lane Network RTPID #240741)			Y		
Bay Area Region/Multi-County	240735	New Commitment	Transit Performance Initiative: fund supportive infrastructure to achieve performance improvements in major transit corridors			Y		
Bay Area Region/Multi-County	240736	New Commitment	Expand and enhance the SMART commuter rail system (Phase II) by constructing a one-station extension from San Rafael to Larkspur, constructing a one-station extension from North Santa Rosa to Windsor, implementing capacity improvements along the Initial Operating Segment (Sonoma County only), and completing the multi-use pathway from Larkspur to Cloverdale.			Y		Y
Bay Area Region/Multi-County	240741	New Commitment	MTC Regional Express Lane Network			Y	Y	Y

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Bay Area Region/Multi-County	240744	New Commitment	One Bay Area Grant (OBAG) - net of funds not assigned to county priorities			Y	Y	
Bay Area Region/Multi-County	240745	Committed	Maintain and preserve the investment in the State Highway System (SHS) and its supporting infrastructure (SHOPP)			Y	Y	
Bay Area Region/Multi-County	240746	Committed	Highway Safety Improvement Program (HSIP)			Y	Y	
Bay Area Region/Multi-County	240747	Committed	Safe Routes to Schools			Y	Y	
Bay Area Region/Multi-County	240748	Committed	Maintain and preserve local bridges.			Y	Y	
Bay Area Region/Multi-County	240749	Committed	Section 130 State Rail Program			Y	Y	
Bay Area Region/Multi-County	240751	New Commitment	Clipper capital replacement costs for all operators are included and a portion of Clipper's operating costs			Y		
Alameda	21093	Committed	Implement Route 92/Clawiter Road/Whitesell Street interchange improvements and local intersection improvements			Y		
Alameda	21100	New Commitment	Modify I-580/Vasco Road interchange, includes widening I-580 overcrossing to provide 8 lanes and bike lanes/shoulders, constructing auxiliary lanes on I-580 between Vasco and First Street, widening Vasco Road to 8 lanes between Northfront Road and Las Positas Road		Y			Y
Alameda	21103	New Commitment	Construct grade separation structure on Central Avenue at Union Pacific Railroad crossing	Y			Y	
Alameda	21114	Committed	Construct grade separations on Washington Boulevard/Paseo Padre Parkway at the Union Pacific railroad tracks and proposed BART extension			Y		
Alameda	21116	Committed	Widen I-580 for HOV and auxiliary lanes eastbound from Hacienda Road to Greenville Road and westbound from Greenville Road to Foothill Road			Y	Y	
Alameda	21123	New Commitment	Improve infrastructure at Union City Intermodal Station			Y	Y	
Alameda	21126	New Commitment	Construct Route 84 westbound HOV on-ramp from Newark Boulevard			Y		Y
Alameda	21131	Committed	Build a BART Oakland Airport Connector between Coliseum BART station and Oakland International Airport			Y	Y	Y
Alameda	21132	Committed	Extend BART from Fremont to Warm Springs			Y	Y	Y
Alameda	21144	New Commitment	Reconfigure I-80/Gilman interchange, involves dual roundabout at interchange and bicycle/pedestrian improvements	Y			Y	
Alameda	21451	Committed	Construct additional turn- and bus-loading lanes on Hesperian Boulevard and East 14th Street			Y	Y	
Alameda	21472	Committed	Improve I-680/Bernal Avenue interchange			Y	Y	
Alameda	21473	Committed	Construct a 4-lane arterial connecting Dublin Boulevard and North Canyons Parkway			Y		
Alameda	21475	New Commitment	Reconstruct I-580/First Street interchange			Y		
Alameda	21477	New Commitment	Reconstruct I-580/Greenville road interchange			Y		
Alameda	21484	New Commitment	Widen Kato Road from Warren Avenue to Milmont Drive	Y			Y	Y
Alameda	21489	New Commitment	Improve I-580/San Ramon Road/Foothill Road interchange, includes eliminating eastbound diagonal off-ramp and eastbound loop off-ramp and constructing new signalized intersection at off-ramp			Y	Y	
Alameda	22009	New Commitment	Expand Capitol Corridor intercity rail service from Oakland to San Jose - project development		Y		Y	
Alameda	22013	Committed	Construct I-580 eastbound truck climbing lane at the Altamont Summit			Y		

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Alameda	22062	New Commitment	Construct Irvington BART Station in Fremont			Y		Y
Alameda	22063	Committed	Improve Route 238 corridor near Foothill Boulevard/I-580 by removing parking during peak periods and spot widening			Y	Y	
Alameda	22082	New Commitment	Implement Outer Harbor Intermodal Terminals project (includes 7th Street grade separation and roadway improvements)			Y	Y	
Alameda	22100	Committed	Replace overcrossing structure at I-880/Davis Street interchange and add additional travel lanes on Davis Street (includes ramp, intersection and signal improvements)			Y	Y	
Alameda	22455	New Commitment	Implement AC Transit East Bay Bus Rapid Transit (BRT)			Y	Y	Y
Alameda	22509	Committed	Provide ferry service between Alameda/Oakland and San Francisco, and between harbor Bay and San Francisco			Y	Y	
Alameda	22664	New Commitment	Convert the I-580 westbound HOV lane to an express lane from Greenville Road to San Ramon Road/Foothill Road			Y	Y	Y
Alameda	22670	Committed	Construct HOV lane for southbound I-880 from Hegenberger Road to Marina Boulevard (includes reconstructing bridges at Davis Street and Marina Boulevard)			Y		
Alameda	22760	New Commitment	Construct Outer Harbor Intermodal Terminal (OHIT) on former Oakland Army Base at 7th Street/Maritime Street (includes expanded intermodal terminal for the Port, warehouses, and truck parking lot)			Y	Y	
Alameda	22769	New Commitment	Improve northbound I-880 interchange at 23rd and 29th Avenue, involves improving on- and off-ramp geometrics, modifying local streets, and landscaping/soundwalls	Y			Y	
Alameda	22776	New Commitment	Widen Route 84 from 2 lanes to 4 lanes from north of Pigeon Pass to Stanley Boulevard and from 2lanes to 6 lanes from Stanley Boulevard to Jack London Boulevard			Y	Y	Y
Alameda	22779	New Commitment	Improve Route 262/I-880 interchange (Phase 2), which involves grade separation at Warren Avenue/Union Pacific Rail Road			Y		Y
Alameda	22780	New Commitment	Implement AC Transit Grand-MacArthur Bus Rapid Transit (BRT)	Y				Y
Alameda	22990	Committed	Widen Route 262 from I-880 to Warm Springs Boulevard (includes reconstructing Route 262/I-880 and Route 262/Kato Road interchanges) and reconstruct Union Pacific Railroad underpasses			Y		
Alameda	94012	Committed	Implement the Union City BART station transit-oriented development project, including construction of pedestrian grade separations under the BART and Union Pacific Railroad tracks and reconfiguring existing station to provide multimodal loop road (Phase 1)			Y	Y	
Alameda	94506	New Commitment	Construct an east-west connector between I-880 and Route 238/Mission Boulevard (includes improvements to roadways and intersections along Decoto Road, Fremont Boulevard, Paseo Padre Parkway, Alvarado-Niles Road and Route 238/Mission Boulevard)			Y	Y	Y
Alameda	98207	New Commitment	Construct Bus Rapid Transit facility from Alameda Naval Station to 12th Street BART station, improve freeway weaving at I-880/I-980 interchange, construct new on-ramp at Market Street/6th Street and off-ramp at Martin Luther King Way/5th Street, improve operations at Posey and Webster Tubes, construct park and ride on Mariner Square Drive near Posey Tube entrance, add Intelligent Transportation Systems (ITS) elements on Webster Street, Ralph Appezatto Memorial Parkway, 6th Street, 5th Street, Broadway, Harrison Street, and 7th Street (Phase 1)	Y				Y
Alameda	230052	Committed	Construct auxiliary lanes on I-880 near Winton Avenue in Hayward			Y	Y	
Alameda	230054	Committed	Construct auxiliary lanes on I-880 between Whipple Road and Industrial Parkway West	Y			Y	
Alameda	230066	Committed	Improve I-880/Marina Boulevard interchange (includes on-and off-ramp improvements, overcrossing modification and street improvements)			Y	Y	

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Alameda	230083	Committed	Tri-Valley Transit Access: acquire right-of-way along I-580 from Hacienda Drive to the Greenville Road interchange to accommodate rail transit			Y	Y	
Alameda	230091	Committed	Install traffic monitoring systems, signal priority and coordination, ramp metering, and HOV bypass lanes in the I-880, I-238 and I-580 corridors	Y			Y	
Alameda	230101	New Commitment	Implement Union City Passenger Rail Station and Dumbarton Rail Segment G improvement; and Union City BART Phase 2/Passenger Rail Station			Y		Y
Alameda	230103	New Commitment	Construct grade separation over Decoto Road in the Decoto neighborhood	Y				
Alameda	230110	New Commitment	Improvement Route 262 Mission Boulevard cross connector, includes widen Mission Boulevard to 3 lanes in each direction throughout I-680 interchange, extend westbound right turn lane from Warm Springs to Mohave, extend westbound left turn lanes at Warm Springs, rebuild northbound and southbound I-680 on and off ramps			Y		Y
Alameda	230114	New Commitment	Widen Auto Mall Parkway from 4-lanes to 6-lanes between I-680 and I-880			Y		Y
Alameda	230132	New Commitment	Improve I-580/Isabel/Route 84 interchange, includes providing 6-lanes over I-580 at Isabel/Route 84 interchange and 4-lanes over I-580 at Portola flyover		Y			Y
Alameda	230157	Committed	Construct a 2-lane gap closure on Las Positas Road from Arroyo Vista to west of Vasco Road			Y		
Alameda	230170	New Commitment	Improve 42nd Avenue and High Street, includes extending and aligning 42nd Avenue with Alameda Avenue to create road parallel to High Street, widening High Street between Oakport Street and Coliseum Way, realigning E. 8th Street near Alameda Avenue, and modifying traffic signals and other intersection improvements			Y	Y	
Alameda	230171	Committed	Improve Route 24/Caldecott Tunnel including bicycle and transit access and soundwall improvements	Y				
Alameda	240003	New Commitment	Construct I-80 bicycle-pedestrian bridge between 65th Street and Frontage Road			Y		
Alameda	240014	New Commitment	Construct WETA operations and maintenance facility in Alameda			Y	Y	
Alameda	240015	Committed	Construct a new interchange at Route 92/Whitesell Street and extend Whitesell Street to Clawiter Road (includes new on-ramp from southbound Clawiter Road to Route 92 westbound on a bridge over the Route 92 westbound off ramp to Whitesell Street)			Y		
Alameda	240018	New Commitment	Dumbarton Rail: Implement commuter service between Peninsula and East Bay (includes implementation of Phase 1 service as determined by on-going environmental work, railroad right-of-way acquisition, and environmental only for rail improvements)			Y	Y	Y
Alameda	240024	New Commitment	Implement Oakland Army Base infrastructure improvements (includes reconstructing Maritime Street, realigning Burma Road and Wake Avenue)			Y	Y	
Alameda	240025	Committed	Reconstruct interchange at I-880/Industrial Parkway to provide a northbound off-ramp and a southbound HOV bypass lane on the southbound loop off-ramp (includes reconstruction of bridge over I-880)			Y	Y	
Alameda	240037	New Commitment	Reconstruct I-880/West Winton Avenue interchange, involves reconfiguring eastbound to southbound on ramp and new connection to Southland Mall Drive	Y				
Alameda	240038	New Commitment	Widen Dougherty Road from 4-lanes to 6-lanes between Sierra Lane and North City Limit			Y	Y	Y
Alameda	240047	New Commitment	Reconstruct I-880/A Street interchange, includes widening of A Street from 5 lanes to 6 lanes underneath overpass, adding additional freeway lane in each direction, modifying intersection and signal			Y		
Alameda	240050	Committed	Convert I-580 eastbound HOV lane to express lanes from Hacienda Road to Greenville Road			Y	Y	
Alameda	240051	New Commitment	Widen Union City Boulevard from 2-lanes to 3-lanes between Whipple Road and Industrial Parkway			Y		Y

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Alameda	240052	New Commitment	Improve I-880/Whipple Road interchange, includes northbound off-ramp, surface street improvements and realignment between Union City and Hayward city limits	Y				
Alameda	240055	New Commitment	Construct underpass on Tennyson Road between Whitman Avenue and Huntwood Avenue			Y		
Alameda	240062	New Commitment	Construct improvements for the Route 84/I-680 interchange, widen Route 84 from Pigeon Pass to I-680, and construct auxiliary lanes on I-680 between Andrade and Route 84	Y				Y
Alameda	240065	Committed	Widen Route 92/Industrial Boulevard Interchange (includes striping improvements on Industrial Boulevard to accommodate the existing lane)			Y		
Alameda	240076	Committed	Construct auxiliary lanes on I-580 eastbound between Isabel Avenue and North Livermore Avenue, and North Livermore Avenue and First Street (includes widening the Arroyo Las Positas Bridge at two locations and providing additional improvements to accommodate future express lanes)			Y	Y	
Alameda	240077	New Commitment	Implement Rapid Bus Service from Alameda Point to Fruitvale BART station	Y				
Alameda	240094	Committed	Implement Crow Canyon Road Safety Improvements Project (includes roadway realignment, shoulder widening, retaining wall systems, and guardrail modifications along Crow Canyon Road between E. Castro Valley Blvd. and the Alameda / Contra Costa county line)			Y	Y	
Alameda	240100	New Commitment	Replace Park Street Bridge between Park Street in Alameda and 29th Avenue in Oakland			Y		
Alameda	240101	New Commitment	Replace Fruitvale Bridge between Tilden Way in Alameda and Fruitvale Avenue in Oakland (includes widening for travel lanes)			Y	Y	
Alameda	240139	New Commitment	Widen the Stoneridge Drive overcrossing at I-680	Y				Y
Alameda	240175	New Commitment	Construct second bridge on Bernal Bridge for bicycle and pedestrian access	Y				
Alameda	240179	New Commitment	Construct Downtown Berkeley Transit Center	Y				
Alameda	240180	New Commitment	Implement BART Metro/Bay Fair connection			Y		Y
Alameda	240196	New Commitment	Extend BART from the Dublin/Pleasanton Station to Livermore - project development (funds for study, construction reserve)			Y	Y	
Alameda	240197	Committed	Implement Berkeley Pedestrian Master Plan	Y				
Alameda	240200	Committed	Extend Stoneridge Drive from Trevor Parkway to El Charro Road and construct six traffic signals			Y		
Alameda	240202	New Commitment	Improve Route 13/Ashby Avenue corridor with traffic, bicycle, and pedestrian safety measures	Y				
Alameda	240206	Committed	Implement Berkeley Bicycle Plan	Y				
Alameda	240207	New Commitment	Extend Bay Trail by 1.3 miles from West Frontage Road to Berkeley Marina	Y				
Alameda	240208	New Commitment	Improve highway-rail grade crossings at four crossings in Fremont			Y		
Alameda	240226	New Commitment	Construct access improvements to Berkeley Ferry Terminal		Y			
Alameda	240227	New Commitment	Extend Bay Trail in Oakland, including bicycle/pedestrian bridge over Lake Merritt Channel and bicycle/pedestrian access around Oakland Estuary			Y	Y	
Alameda	240250	New Commitment	Widen Dublin Boulevard from 4-lanes to 6-lanes between Sierra Court and Dublin Court			Y	Y	Y
Alameda	240254	New Commitment	Widen Greenville Road from 2-lanes to 4-lanes between I-580 and Patterson Pass Road	Y				Y
Alameda	240261	New Commitment	Extend and widen Scarlett Drive from Dougherty Road to Dublin Boulevard and relocate Iron Horse Trail along Scarlett Drive in Dublin			Y		
Alameda	240263	New Commitment	Modify Route 84/Peralta Boulevard (includes widening Peralta Boulevard from 1-lane to 2-lanes and a bike lane in each direction between Fremont Boulevard Mowry Avenue, and widening Mowry Avenue from 1-lane to 2-lanes and a bike lane in each direction between Thane Street and Mission Boulevard)	Y				Y

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Alameda	240264	New Commitment	Widen Fremont Boulevard to 6-lanes and 2-bike lanes from Grimmer Boulevard to I-880	Y				Y
Alameda	240272	New Commitment	Widen Thornton Avenue from 2-lanes to 4-lanes between Gateway Boulevard and Hickory Street			Y		Y
Alameda	240274	Committed	Union Pacific Railroad (UPRR) Capital Access Fee to operate Altamont Commuter Express (ACE) trains			Y		
Alameda	240281	Committed	Construct bicycle and pedestrian facilities from Fremont BART Station to Fremont Midown	Y				
Alameda	240295	Committed	Install security cameras at the Alameda and San Joaquin County ACE stations			Y		
Alameda	240297	N/A	Interoperable Communications Equipment for ACE			Y		
Alameda	240304	New Commitment	Extend platforms at ACE Stations in Alameda County and San Joaquin County			Y		
Alameda	240318	New Commitment	Reconstruct the Ashby Avenue interchange on I-80	Y				
Alameda	240324	New Commitment	Retrofit Miller Sweeney Bridge between Tilden Way and Fruitvale Avenue, includes bike lanes, median and sidewalks			Y		
Alameda	240347	New Commitment	Construct new segments and close existing gaps along Iron Horse Trail, East Bay Greenway, and Bay Trail		Y		Y	
Alameda	240350	New Commitment	Implement pedestrian safety improvements on Marin Avenue			Y		
Alameda	240372	New Commitment	Implement College Avenue/Broadway Corridor (Route 51) Improvements - Transit Priority Measures	Y			Y	
Alameda	240381	New Commitment	Implement Alameda County's Bicycle and Pedestrian program (includes pedestrian infrastructure, support facilities, maintenance, and education/promotion programs)			Y	Y	
Alameda	240382	New Commitment	Implement Alameda County's Transit Enhancements, Expansion, Safety and Operations and Maintenance Program, including Paratransit			Y	Y	
Alameda	240386	New Commitment	Local streets and roads operations and maintenance			Y	Y	
Alameda	240388	New Commitment	Implement highway and freeway safety improvements (includes interchange improvements, ramp metering, and soundwalls)			Y	Y	
Alameda	240389	New Commitment	Implement Alameda County's Bridge Improvements Program			Y	Y	
Alameda	240391	New Commitment	Support TODs/PDAs through multi-modal improvements and CEQA mitigation			Y	Y	
Alameda	240392	New Commitment	Implement promotion/outreach/education/planning studies about taking transit, biking, walking, and multi-modal access (includes Safe Routes to School program)			Y		
Alameda	240393	New Commitment	Implements Alameda County's Transportation Demand Management (TDM) and Parking Management program (includes Guaranteed Ride Home, Safe Routes to School, Safe Routes to Transit, Travel Choice, Travel Training, Walk/Bike Promotions, and parking cash out)			Y	Y	
Alameda	240394	New Commitment	Implement Alameda County's Goods Movement Program (includes improvements for goods movement by truck and coordinated with rail and air)			Y	Y	
Alameda	240395	New Commitment	Improve Priority Development Areas (PDAs) with non-transportation infrastructure (includes sewer and storm water upgrades)			Y		
Alameda	240396	New Commitment	Implement Alameda County's Environmental Mitigation Program			Y		
Alameda	240397	New Commitment	Implement Alameda County's Transportation Technology and Revenue Enhancement Program			Y		
Alameda	240562	Committed	Upgrade Clawiter Road/Route 92 interchange (includes new ramps and an over-crossing for the Whitesell Street extension and ramp intersection signalization)	Y			Y	Y
Alameda	240683	Committed	Expand Alamo Canal Trail from Dublin to Pleasanton			Y	Y	
Alameda	240716	New Commitment	Construct bicycle and pedestrian bridge on Tennyson Road from Nuestro Parquecito to South Hayward BART station			Y		
Alameda	240717	New Commitment	Rehabilitate Solano Avenue (includes resurfacing and beautification)			Y		

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Alameda	240718	New Commitment	Implement streetscape improvements on San Pablo Avenue (includes medians and rain gardens)			Y		
Alameda	240726	New Commitment	Implement project development phases for transportation projects in Alameda County, includes wide-range of highway, arterial, transit, and bicycle/pedestrian improvements			Y	Y	
Contra Costa	21134	New Commitment	Construct enhancements of the San Pablo Rapid service, including real-time passenger information, queue jump lanes, buses and on-board equipment, and passenger amenities	Y				Y
Contra Costa	21205	New Commitment	Improve I-680/Route 4 interchange (includes connecting northbound I-680 to westbound State Route 4, connecting eastbound State Route 4 to southbound I-680, and widening SR4 between Morello and SR242)	Y			Y	Y
Contra Costa	21206	Committed	Implement landscaping for Caldecott Tunnel 4th Bore	Y				
Contra Costa	21208	New Commitment	Implement improvements to Richmond Parkway Transit Center			Y	Y	
Contra Costa	21210	Committed	Construct Capitol Corridor train station in Hercules			Y	Y	Y
Contra Costa	21211	Committed	Extend BART/East Contra Costa Rail (eBART) eastward from the Pittsburg/Bay Point BART station into eastern Contra Costa County			Y	Y	Y
Contra Costa	21214	Committed	Widen Wilbur Avenue over Burlington Northern Santa Fe Railroad from 2 lanes to 4 lanes			Y	Y	
Contra Costa	21225	New Commitment	Regional and local pedestrian and bicycle improvements, including overcrossing locations to be determined			Y	Y	
Contra Costa	22122	New Commitment	Provide ferry service from Richmond to San Francisco			Y	Y	Y
Contra Costa	22350	New Commitment	Improve I-680/Route 4 interchange Phases 4 and 5 (includes connecting southbound I-680 to eastbound State Route 4, connecting westbound State Route 4 to northbound I-680, and constructing HOV flyover ramps from westbound State Route 4 to I-680 southbound from I-680 northbound to eastbound State Route 4)	Y				Y
Contra Costa	22351	N/A	Construct an HOV lane on I-680 northbound between North Main Street and Route 242 (See Bay Area Region/Multi-County Project #240587)	Y			Y	
Contra Costa	22352	New Commitment	Construct Direct Access Ramps along I-680 in the vicinity of Norris Canyon Road	Y			Y	Y
Contra Costa	22353	New Commitment	Construct an HOV lane on I-680 southbound between North Main Street and Livorna (See Bay Area Region/Multi-County Project #240588)	Y			Y	
Contra Costa	22355	New Commitment	Modify I-80/Central Avenue interchange, includes connecting Pierce Street to San Mateo Street and relocating traffic signal to San Mateo/Central Avenue intersection	Y			Y	
Contra Costa	22360	New Commitment	Reconstruct I-80/San Pablo Dam Road interchange, includes relocating of westbound El Portal on-ramp to the full interchange northwards, providing access to McBryde Avenue through a new connector road from San Pablo Dam Road interchange, and replacing Riverside Avenue pedestrian overcrossing	Y			Y	
Contra Costa	22388	New Commitment	Construct on- and off-ramp for State Route 242 at Clayton Road	Y			Y	Y
Contra Costa	22390	New Commitment	Reconstruct State Route 4/Willow Pass Road ramps in Concord	Y			Y	
Contra Costa	22400	New Commitment	Conduct environmental and design studies to create a new alignment for SR239 and develop corridor improvements from Brentwood to Tracy - project development			Y	Y	
Contra Costa	22402	Committed	Implement the San Ramon School Bus Program, and continue the Lamorinda School Bus Program			Y	Y	
Contra Costa	22602	New Commitment	Construct auxiliary lane on I-680 in both directions between Sycamore Valley Road in Danville to Crow Canyon Road in San Ramon			Y	Y	Y
Contra Costa	22604	New Commitment	Improve safety and operations of Vasco Road from Brentwood to Alameda County line - Phase 2 (includes potential realignment)			Y		
Contra Costa	22607	Committed	Widen and extend major streets, and improve interchanges in east Contra Costa County			Y	Y	

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Contra Costa	22609	Committed	Widen and extend major streets, and improve interchanges in central Contra Costa County		Y		Y	
Contra Costa	22610	Committed	Widen and extend major streets, and improve interchanges in west Contra Costa County			Y	Y	
Contra Costa	22611	Committed	Implement a low-income student bus pass program in west Contra Costa County			Y		
Contra Costa	22613	Committed	Widen and extend major streets, and improve interchanges in southwest Contra Costa County (includes widening Camino Tassajara to 4 lanes between Danville and Windemere Parkway, and to 6 lanes from Windemere Parkway to Alameda County line)			Y		Y
Contra Costa	22614	New Commitment	Construct Martinez Intermodal Station (Phase 3), which includes additional 425 spaces and auto/pedestrian bridge			Y	Y	
Contra Costa	22637	Committed	Construct BART crossover at Pleasant Hill BART station			Y		
Contra Costa	94046	Committed	Improve interchanges and parallel arterials to Route 4			Y		
Contra Costa	94048	Committed	Improve interchanges and parallel arterials to I-80	Y				
Contra Costa	94532	Committed	Implement the Gateway Lamorinda Traffic Program (includes carpool lot in Lafayette, structural and safety improvements on Moraga Road, intersection realignments, turn lanes, pedestrian accommodation and signal coordination)			Y		
Contra Costa	98115	Committed	Widen Ygnacio Valley/Kirker Pass Roads from 4 lanes to 6 lanes from Michigan Boulevard to Cowell Road	Y			Y	
Contra Costa	98126	Committed	Improve interchanges and arterials parallel to I-680 and Route 24			Y		
Contra Costa	98133	Committed	Widen Pacheco Boulevard from 2 lanes to 4 lanes between Blum Road to Arthur Road		Y		Y	Y
Contra Costa	98134	Committed	Widen Dougherty Road to 6 lanes from Red Willow to Contra Costa County line			Y	Y	
Contra Costa	98194	Committed	Extend Commerce Avenue to Waterworld Parkway, including construction of vehicular bridge over Pine Creek, installation of trails and a pedestrian bridge connecting Willow Pass Road to Concord Avenue/Route 242 interchange			Y	Y	
Contra Costa	98196	New Commitment	Construct an eastbound auxiliary lane on Route 24 between Gateway Boulevard and Brookwood Road/Moraga Way		Y			Y
Contra Costa	98198	New Commitment	Improve safety and operations on Vasco Road in Contra Costa and Alameda counties	Y			Y	
Contra Costa	98222	Committed	Construct freeway-to-freeway direct connectors between Route 4 Bypass and Route 160	Y			Y	
Contra Costa	98999	Committed	Widen Route 4 from Somersville Road to Route 160 including improvements to interchanges			Y	Y	
Contra Costa	230084	Committed	Construct a railroad grade separation at the Richmond Waterfront on the Marina Bay Parkway			Y	Y	
Contra Costa	230123	New Commitment	Expand exist WestCAT maintenance facility to store additiional transit vehicles			Y		
Contra Costa	230127	New Commitment	Construct new WestCat satellite maintenance/administration facility		Y			
Contra Costa	230129	Committed	Expand WestCAT service, including purchase of vehicles			Y		
Contra Costa	230131	New Commitment	Provide expanded express bus service to Pinole and Hercules Ferry			Y		
Contra Costa	230185	New Commitment	Establish Express Bus Service and eBART support network			Y	Y	
Contra Costa	230196	New Commitment	Transit Preferential Measures (TPM)s to improve bus speed and passenger safety, includes signal priority, passenger amenities, improved bus loading areas, and rider information	Y				
Contra Costa	230202	Committed	Widen Route 4 Bypass from 2 to 4 Lanes from Laurel Road to Sand Creek Road	Y			Y	
Contra Costa	230203	Committed	Construct Route 4 Bypass interchange at Sand Creek Road	Y			Y	
Contra Costa	230205	Committed	Widen Route 4 Bypass from 2 to 4 lanes from Sand Creek Road to Balfour Road	Y			Y	
Contra Costa	230206	Committed	Construct Route 4 Bypass interchange at Balfour Road (Phase 1)			Y	Y	
Contra Costa	230212	Committed	Improve Clayton Road/Treat Boulevard intersection and increase capacity (includes upgrading traffic signal and geometric improvements)			Y	Y	

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Contra Costa	230216	New Commitment	Construct a two-lane bridge over Walnut Creek connecting Waterworld Parkway with Meridan Park Boulevard		Y		Y	
Contra Costa	230218	New Commitment	Conduct planning, engineering, environmental studies, and construct transportation improvements at the El Cerrito Del Norte BART station's Transit Oriented Development (TOD) project	Y			Y	
Contra Costa	230232	New Commitment	Improve State Route 4/Phillips Lane interchange to provide diamond configuration connecting Route 4 to an extension of Phillips Lane from Oakley Road	Y			Y	
Contra Costa	230233	New Commitment	Extend James Donlon Boulevard to Kirker Pass Road by constructing a new 2-lane expressway	Y			Y	Y
Contra Costa	230236	Committed	Widen Pittsburg-Antioch Highway from 2 lanes to 4 lanes	Y			Y	
Contra Costa	230237	New Commitment	Extend West Leland Road and construct a new 4-lane arterial road with raised median, bike lanes and sidewalks from San Marco Boulevard to Willow Pass Road	Y			Y	Y
Contra Costa	230238	Committed	Widen California Avenue from 2 lanes to 4 lanes with 2 left-turn lanes	Y			Y	
Contra Costa	230239	Committed	Widen and improve Buskirk Avenue between Monument Boulevard and Hookston Road to provide 2 through lanes in each direction (includes road realignment, new traffic signals and bicycle/pedestrian streetscape improvements)			Y	Y	
Contra Costa	230240	New Commitment	Improve Contra Costa Boulevard from Boyd Road and 2nd Avenue, includes intersection geometry modificatins, new traffic signals, bike lane, sidewalks, bus shelters and landscaping	Y				
Contra Costa	230247	New Commitment	Widen Lone Tree Way to 6-lanes from O'Hara Avenue to Brentwood Boulevard	Y				Y
Contra Costa	230249	New Commitment	Construct grade separation underpass at Lone Tree Way and Union Pacific Railroad			Y	Y	
Contra Costa	230250	Committed	Widen Brentwood Boulevard from 2 lanes to 4 lanes between marsh Creek and Delta Road			Y	Y	
Contra Costa	230253	Committed	Rplace the old 2-lane Fitzuren Road with a new 4-lane divided arterial (includes shoulders, bicycle lanes, a park-and-ride lot and sidewalks)	Y			Y	
Contra Costa	230274	Committed	Widen Main Street to 6 lanes from Route 160 to Big Break Road	Y			Y	
Contra Costa	230288	Committed	Widen Empire Avenue from 2-lanes to 4-lanes between Lone Tree Way and Union Pacific Railroad right-of-way/Antioch city limits	Y			Y	
Contra Costa	230289	New Commitment	Create Main Street Downtown Bypass by constructing new roadway between Vintage Parkway and 2nd Street	Y			Y	Y
Contra Costa	230291	New Commitment	Construct northbound truck climbing lane from Clearbrook Drive in Concord to crest of Kirker Pass Road, includes 12-foot dedicated truck climbing lane, bike lane and 8-foot paved shoulder	Y			Y	
Contra Costa	230293	Committed	Provide transportation improvements on the east side of the Richmond BART station to accommodate redevelopment for a transit village			Y		
Contra Costa	230306	New Commitment	Improve safety on Alhambra Avenue by adding second southbound lane from Walnut Avenue to south side of State Route 4, includes signal modifications			Y		
Contra Costa	230307	New Commitment	Widen Camino Tassajara Road from 2 lanes to 4 lanes from Windemere Parkway to County line, includes 8-foot paved shoulders and bike lanes in both directions	Y			Y	Y
Contra Costa	230308	New Commitment	Realign and improve safety and operations on Alhambra Valley Road			Y		
Contra Costa	230309	New Commitment	Provide rolling stock, infrastructure and information-technology for bus-rapit transit service in select corridors in Contra Costa County			Y		Y
Contra Costa	230318	New Commitment	Extend North Richmond truck route from Market Avenue to Parr Boulevard, involves two lanes, shoulders on both sides and sidewalk on west side		Y		Y	

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Contra Costa	230321	New Commitment	Construct Hercules Intermodal Station (Phase 2, 3 and 4), includes improvements to railroad tracks, construction of a platform and pedestrian bridge to platform, building station structure and plaza, building Ferry Station building, extending John Muir Parkway to 2-lanes in each direction, providing trail connections and adding 226 surface parking spaces	Y			Y	
Contra Costa	230397	New Commitment	Improve infrastructure to support WestCat service area, includes park and ride lots, signal prioritization, queue jump lanes and freeway drop ramps	Y				
Contra Costa	230505	Committed	East Side Improvements at the Richmond Intermodal Station			Y		
Contra Costa	230535	Committed	Realign Curves along Marsh Creek Road to improve safety and operations	Y				
Contra Costa	230538	Committed	Widen Bailey Road lanes and shoulders		Y			
Contra Costa	230542	Committed	Close a bicycle/pedestrian gap at San Pablo Avenue bridge in Pinole by upgrading the existing bridge or constructing a new dedicated bicycle/pedestrian bridge			Y		
Contra Costa	230596	Committed	Construct a six bay transit hub on Pacheco Boulevard (includes park-and-ride spaces, landscaping, lighting and passenger amenities on Blum Road at the I-680/Route 4 interchange)			Y	Y	
Contra Costa	230597	Committed	Implement I-80 Integrated Corridor Mobility Project (includes the installation/upgrade of corridor management elements along the I-80 corridor (Phase 1) and along parallel and connecting arterials (Phase 2) to allow sharing of real-time traveler information among public agencies and the public)			Y		
Contra Costa	230613	New Commitment	Provide ferry service between Hercules and San Francisco			Y		Y
Contra Costa	230631	Committed	Double the existing rail track between Oakley and Port Chicago			Y		
Contra Costa	230693	New Commitment	Local streets and roads operations and maintenance			Y	Y	
Contra Costa	240074	New Commitment	Improve BART Station capacity, including additional vertical circulation and faregates, platform widening, trainscreens and doors and pad area expansion (initial phase)			Y		
Contra Costa	240167	New Commitment	Widen Brentwood Boulevard from 2 lanes to 4 lanes from Lone Tree Way and the north city limit, includes bike lanes, median islands, curb gutter, sidewalk, street lights and landscaping			Y	Y	Y
Contra Costa	240333	N/A	Replace CCTA existing diesel trolley fleet with electric trolleys and necessary infrastructure			Y		
Contra Costa	240355	New Commitment	Add an eastbound mixed-flow lane on Route 4 from the lane drop 1,500 feet west of Port Chicago Highway to east of Willow Pass Road (west) on-ramp	Y				Y
Contra Costa	240364	Committed	Implement paratransit programs			Y		
Contra Costa	240365	Committed	Implement Transportation for Livable Communities/streetscape projects			Y	Y	
Contra Costa	240367	Committed	Implement Contra Costa County's Safe Routes to Schools program			Y	Y	
Contra Costa	240457	New Commitment	Construct improvements at the Walnut Creek BART transit-oriented development, includes additional parking station access, capacity, safety and operational improvements		Y		Y	
Contra Costa	240459	New Commitment	Construct bicycle/pedestrian overcrossings for Route 4 Bypass			Y		
Contra Costa	240584	New Commitment	Add a westbound mixed-flow lane from east of Willow Pass Road (West) to the lane-add west of Willow Pass Road (West)	Y				Y
Contra Costa	240624	Committed	Implement I-80 Integrated Corridor Mobility (ICM) Project Operations and Management - Local Portion - Maintenance			Y		
Contra Costa	240625	New Commitment	Construct eBART station in the Route 4 median at Railroad Avenue	Y				
Contra Costa	240629	New Commitment	Widen Bolinger Canyon Road from Alcosta to San Ramon Valley Boulevard			Y	Y	Y
Contra Costa	240637	New Commitment	Enhance streetscape on 23rd Street in Richmond to encourage bicycle and pedestrian use	Y				

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Contra Costa	240640	New Commitment	Make landside improvements for Richmond ferry service, includes expanded parking			Y		
Contra Costa	240641	New Commitment	Construct eastbound HOV lane on I-80 from Cummings Skyway to Carquinez Bridge (See Bay Area Region/Multi-County Project #230657)		Y			
Contra Costa	240649	New Commitment	Add 450 space parking structure to serve Hercules Rail Station and the Ferry Terminal		Y			
Contra Costa	240656	New Commitment	Widen bridge at Church Lane over San Pablo Creek	Y				
Contra Costa	240706	New Commitment	Purchase rolling stock for enhanced AC Transit service			Y		
Contra Costa	240707	New Commitment	Implement Computer Aided Dispatch Upgrades for AC Transit			Y		
Contra Costa	240708	New Commitment	Close gaps and develop three major trails in Alameda County, includes Iron Horse, Bay Trail, and East Bay Greenway Project)	Y				
Contra Costa	240725	New Commitment	Rehabilitate transit vehicles			Y		
Contra Costa	240738	Committed	Martinez Rail Corridor improvements			Y	Y	
Marin	21306	New Commitment	Improve interchange at U.S. 101/Lucas Valley Road - project development	Y				
Marin	21325	New Commitment	Improve U.S. 101 Greenbrae/Twin Cities Corridor (includes modifying access ramps, new bus stops, improving transit stops and facilities, and adding pedestrian/bicycle facilities)	Y			Y	
Marin	98154	Committed	Implement Marin Sonoma Narrows Phase 1 (Marin County)	Y			Y	
Marin	98179	New Commitment	Improve U.S. 101/Tiburon Boulevard interchange - project development	Y				
Marin	230105	New Commitment	Replace Pacific Way Bridge			Y	Y	
Marin	230252	New Commitment	Improve local transit frequencies and service spans in Marin County			Y	Y	
Marin	230422	New Commitment	Install traffic signal and modify roadway at the intersection of Anderson Drive/East Sir Francis Drake Boulevard			Y		
Marin	240005	New Commitment	Implement local air quality and climate protection strategies countywide			Y		
Marin	240034	New Commitment	Construct Golden Gate Multi-modal transfer facility at Larkspur Ferry Terminal			Y	Y	
Marin	240039	New Commitment	Widen Novato Boulevard between Diablo Avenue and Grant Avenue			Y	Y	Y
Marin	240041	New Commitment	Improve Downtown Novato Transit Facility			Y		
Marin	240043	New Commitment	Expand Marin Transit's Automated Vehicle Location (AVL) and real time system			Y		
Marin	240044	New Commitment	Construct multi-modal transit hubs/green mobility hubs			Y		
Marin	240045	New Commitment	Enhance facilities for Muir Woods Shuttle and West Marin Stagecoach			Y		
Marin	240078	New Commitment	Implement new technologies to manage transit systems			Y		
Marin	240456	New Commitment	Improve the intersection at Sir Francis Drake Boulevard/Red Hill Avenue/Center Boulevard (known as "The Hub") - project development			Y		
Marin	240552	New Commitment	Construct multi-use pathway connecting Calpark tunnel and the Ferry Teriminal in Larkspur			Y	Y	
Marin	240644	New Commitment	Implement senior mobility program countywide (includes free transit passes for seniors, safe routes, subsidized rides and volunteer ride program)			Y		
Marin	240660	New Commitment	Improve local arterials parallel to U.S. 101 and I-580			Y		
Marin	240662	New Commitment	Implementation of Station Area Plans in anticipation of SMART			Y		
Marin	240678	New Commitment	Implement bicycle and pedestrian improvements countywide including Safe Routes to School elements			Y	Y	
Marin	240691	New Commitment	Implement Marin Sonoma Narrows HOV Lane and corridor improvements Phase 2 (Marin County)			Y		Y
Marin	240712	New Commitment	Implement regional planning policies			Y		
Marin	240713	New Commitment	Evaluate multi-modal options including trolley, Ross Valley to San Rafael			Y		
Marin	240714	New Commitment	Local streets and roads operations and maintenance			Y	Y	
Marin	240715	New Commitment	Implement One Bay Area Grant Pilot Priority Conservation Area improvements			Y		
Marin	240723	New Commitment	Transit operations and maintenance			Y	Y	

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Marin	240724	New Commitment	Transit Capital			Y		
Marin	240729	New Commitment	U.S. 101 Gap Closure - San Rafael			Y	Y	
Napa	22417	New Commitment	Implement Napa County's Safe Routes to School program	Y			Y	
Napa	22744	New Commitment	Improve traffic signalization countywide	Y				
Napa	22746	New Commitment	Construct round-a-bouts between California Blvd and Freeway Drive on First Street	Y				
Napa	94073	New Commitment	Construct new southbound Route 221 to southbound Route 29 flyover, including auxiliary lane to Route 12/Route 29			Y		
Napa	94075	New Commitment	Construct interchange at intersection of Route 12/Route 29/Airport Road	Y			Y	
Napa	230378	New Commitment	Construct curb cuts and accessibility improvements in St. Helena	Y				
Napa	230381	New Commitment	Improve signalization along Main Street from Sulpher Springs to Mills Lane in St. Helena	Y				
Napa	230392	New Commitment	Extend Devlin Road from Airport Boulevard to Green Island Road	Y				
Napa	230508	New Commitment	Construct corridor improvements in Yountville			Y		
Napa	230510	New Commitment	Construct Madison Ave. bypass to Route 29 in Yountville		Y			Y
Napa	230518	New Commitment	Improve intersection at Petrified Forest Road/Route 128	Y				
Napa	230695	New Commitment	Local streets and roads operations and maintenance			Y	Y	
Napa	240057	New Commitment	Construct corridor improvements along Route 29			Y		
Napa	240082	New Commitment	Reconfigure northbound Route 29 off-ramp at Lincoln Avenue			Y		
Napa	240083	New Commitment	Construct a bicycle and pedestrian undercrossing along Napa Creek	Y				
Napa	240085	New Commitment	Construct intersection improvements at Silverado Trail/Third Street/Coombsville Road/East Avenue	Y				
Napa	240123	New Commitment	Rehabilitate Green Island Road	Y				
Napa	240136	New Commitment	Widen intersection at Napa Junction Road/Route 29	Y				
Napa	240152	N/A	Implement lighted crosswalks at five intersections in St. Helena	Y				
Napa	240612	New Commitment	Build out countywide primary bicycle network			Y	Y	
Napa	240617	New Commitment	Create new road and transit configuration on Route 29 through American Canyon with connectivity to the Vallejo Ferry, including BRT, potential HOV, and other roadway innovations	Y				
San Francisco	21510	Committed	Extend the Third Street light Rail line from north of King Street to Clay Street in Chinatown via a new Central Subway, including the purchase of light-rail vehicles	Y			Y	Y
San Francisco	21549	New Commitment	Implement Bayview Transportation Improvements	Y			Y	
San Francisco	22415	New Commitment	Extend historic streetcar service from Fort Mason from Fisherman's Wharf and along the Embarcadero to the 4th and King Caltrain Station			Y	Y	Y
San Francisco	22512	Committed	Provide capital improvements to support ferry service between Treasure Island to San Francisco	Y			Y	Y
San Francisco	98593	New Commitment	Implement Sfgo Integrated Transportation Management System		Y		Y	
San Francisco	230161	New Commitment	Implement Bus Rapid Transit (BRT) on Van Ness Avenue from Mission Street to Lombard Street	Y			Y	Y
San Francisco	230164	New Commitment	Implement Bus Rapid Transit (BRT) on Geary Boulevard from Market Street to 33rd Avenue	Y			Y	Y
San Francisco	230490	New Commitment	Re-build and widen Harney Way to 8-lanes		Y		Y	Y
San Francisco	230555	Committed	Reconstruct ramps on the east side of the San Francisco-Oakland Bay Bridge's Yerba Buena Island tunnel	Y			Y	
San Francisco	240147	New Commitment	Implement Southeast Waterfront Transportation Improvements - Phase 1		Y		Y	Y
San Francisco	240155	New Commitment	Implement Better Market Street - Transportation Elements	Y			Y	Y
San Francisco	240158	New Commitment	Implement EN TRIPS Circulation & Streetscape Improvement Projects - Phase 1 Transportation Improvements without Transit Effectiveness Project Recommended	Y				

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San Francisco	240163	New Commitment	Implement Hunters Point Shipyard and Candlestick Point Local Roads Phase 1		Y		Y	
San Francisco	240171	New Commitment	Implement San Francisco's Transit Effectiveness Project (TEP)	Y			Y	Y
San Francisco	240182	New Commitment	Implement BART Metro Program in San Francisco			Y		Y
San Francisco	240259	New Commitment	Construct Mission Bay Loop			Y		
San Francisco	240309	New Commitment	Expand SFMTA transit fleet	Y			Y	
San Francisco	240328	New Commitment	Implement Geneva Transit Preferential Streets (TPS) improvements on Geneva Avenue from Ocean Avenue to Prague (includes BRT on Geneva Avenue from Prague to U.S. 101 interchange)	Y			Y	Y
San Francisco	240334	New Commitment	Construct Southern Intermodal Terminal and extend MUNI T-Line from Bayshore/Sunnydale to Caltrain Bayshore Station		Y			Y
San Francisco	240344	New Commitment	Expand Sfpark	Y			Y	
San Francisco	240349	New Commitment	Widen I-280/Mariposa off-ramp			Y		Y
San Francisco	240358	New Commitment	Implement Mission Bay New Roadway Network	Y			Y	
San Francisco	240370	New Commitment	Implement HOPE SF Street Grid Phase 1		Y		Y	
San Francisco	240399	Committed	Implement Parkmerced Street Network (includes a new street network, traffic calming, pedestrian improvements, biking improvements, streetscape improvements, and transit/shuttle stops)			Y	Y	
San Francisco	240400	Committed	Implement Treasure Island/Yerba Buena Island Street Network (includes a new street network, traffic calming, pedestrian improvements, biking improvements, streetscape improvements, and transit/shuttle stops)			Y	Y	
San Francisco	240415	New Commitment	Establish new ferry terminal at Mission Bay 16th Street			Y		
San Francisco	240471	New Commitment	Implement transit enhancements (including ADA compliance, directional signage, real-time arrival information, mobility and access improvements, passenger shelters, bus bulbs, informational kiosks, and other passenger amenities)			Y	Y	
San Francisco	240474	New Commitment	Implement San Francisco's Local Air Quality and Climate Protection strategies			Y		
San Francisco	240476	New Commitment	Plan for and expand parking management measures (includes demand based/variable pricing system for auto parking and parking cash out)			Y	Y	
San Francisco	240483	New Commitment	Enhance highways in San Francisco (includes signs and landscaping)			Y		
San Francisco	240486	New Commitment	Expand bicycle and pedestrian facilities			Y	Y	
San Francisco	240487	Committed	Rehabilitate Fort Mason and Presidio Ferry Piers	Y				
San Francisco	240488	New Commitment	Enhance bicycle and pedestrian facilities			Y	Y	
San Francisco	240490	New Commitment	Local streets and roads operations and maintenance			Y	Y	
San Francisco	240493	New Commitment	Implement safety improvements on local roads			Y	Y	
San Francisco	240523	New Commitment	Implement HOV Lanes on U.S. 101 in San Francisco - Planning, Preliminary Engineering, and Environmental			Y	Y	
San Francisco	240525	New Commitment	Construct HOV Ramp on I-280 and 6th Street - Planning, Preliminary Engineering, and Environmental			Y	Y	
San Francisco	240526	New Commitment	Transit Performance Initiative: Implement improvements to improve transit efficiency and performance at key intersections or choke points	Y			Y	Y
San Francisco	240533	New Commitment	Rehabilitate bicycle and pedestrian facilities			Y	Y	
San Francisco	240534	New Commitment	Rehabilitate local bridges			Y	Y	
San Francisco	240536	New Commitment	Implement Transit Management Systems in San Francisco (includes fare management, transit GPS tracking systems)			Y	Y	
San Francisco	240537	New Commitment	Install transit safety and security improvements			Y		
San Francisco	240541	New Commitment	Maintain transit operations			Y	Y	

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San Francisco	240542	New Commitment	Manage freeways and expressways in San Francisco (includes non-ITS elements, performance monitoring, and corridor studies)			Y		
San Francisco	240543	New Commitment	Modify local road intersections (includes safety upgrades, signalization, and realignment)			Y	Y	
San Francisco	240544	New Commitment	Implement San Francisco's Lifeline Transportation program			Y		
San Francisco	240545	Committed	Extend light rail corridor into Parkmerced development project, add three new light rail stations and facilities, and add tail track and operator support facilities		Y		Y	Y
San Francisco	240546	Committed	Construct Treasure Island Bus Terminal Facility	Y			Y	
San Francisco	240551	New Commitment	Implement Road Diets for Bike Plan (includes conversion of traffic lanes for bicycle network improvements)			Y		
San Francisco	240557	New Commitment	Oakdale Caltrain Station - Planning, Preliminary Engineering, and Environmental	Y			Y	Y
San Francisco	240666	New Commitment	Conduct local planning studies and outreach			Y		
San Francisco	240681	New Commitment	Implement Transportation Demand Management (TDM) measures			Y	Y	
San Francisco	240728	New Commitment	Implement San Francisco congestion pricing programs (includes Treasure Island Congestion Pricing and cordon pricing)			Y	Y	
San Francisco	240730	Committed	San Francisco Pricing Program: Mobility Improvements (includes transit-capital and maintenance improvements)			Y	Y	
San Mateo	21602	New Commitment	Reconstruct U.S. 101/Broadway interchange	Y			Y	
San Mateo	21603	New Commitment	Improve U.S. 101/Woodside Road interchange		Y		Y	
San Mateo	21604	New Commitment	Add northbound and southbound modified auxiliary lanes on U.S. 101 from Oyster Point to San Francisco County line	Y			Y	Y
San Mateo	21606	New Commitment	Reconstruct U.S. 101/Willow Road interchange	Y			Y	
San Mateo	21607	Committed	Modify University Avenue overcrossing of U.S. 101 to improve operational efficiency and safety (includes widening of overcrossing, constructing new southbound off-ramp and auxiliary lane, and adding bicycle lanes)			Y	Y	
San Mateo	21608	Committed	Construct auxiliary lanes (one in each direction) on U.S. 101 from Marsh Road to Embarcadero Road	Y			Y	
San Mateo	21609	New Commitment	Improve local access at I-280/I-380 from Sneath Lane and San Bruno Avenue to I-380			Y		
San Mateo	21612	New Commitment	Improve access to and from the west side of Dumbarton Bridge on Route 84 connecting to U.S. 101, includes flyovers, interchange improvements, and conversion of Willow Road between Route 84 and U.S. 101 to expressway		Y		Y	Y
San Mateo	21613	New Commitment	Widen Route 92 between San Mateo-Hayward Bridge to I-280, includes uphill passing lane from U.S. 101 to I-280		Y		Y	Y
San Mateo	21615	New Commitment	Modify and reconstruct I-280/Route 1 interchange in northbound and southbound directions, including braided ramps		Y		Y	
San Mateo	21624	New Commitment	Implement incentive program to support transit-oriented development			Y		
San Mateo	21892	New Commitment	Widen Woodside Road from 4-lanes to 6-lanes from El Camino to Broadway, includes adding shoulders			Y	Y	Y
San Mateo	21893	New Commitment	Widen Route 92 between Half Moon Bay city limits and Pilarcitos Creek alignment, includes widening of travel lanes and shoulders			Y	Y	
San Mateo	22120	New Commitment	Provide ferry service from Redwood City to San Francisco			Y	Y	Y
San Mateo	22226	New Commitment	Create intermodal transit center at the Caltrain Bayshore Station, includes cross platform transfers with 3rd Street light-rail at Caltrain Bayshore station and bus rapid transit and bus connections	Y				Y
San Mateo	22227	New Commitment	Construct a 6-lane arterial from Geneva Avenue/Bayshore Boulevard intersection to U.S. 101/Candlestick Point interchange	Y				Y

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San Mateo	22229	Committed	Reconstruct U.S. 101/Sierra Point Parkway interchange (includes extension of Lagoon Way to U.S. 101)		Y			Y
San Mateo	22230	New Commitment	Add auxiliary lane in each direction on I-280 between Westborough and Hickey Boulevard		Y			Y
San Mateo	22232	Committed	Construct streetscape improvements on Mission Street (Route 82) from John Daly Boulevard to San Pedro Road			Y		
San Mateo	22261	New Commitment	Replace San Pedro Creek Bridge on Route 1			Y	Y	
San Mateo	22268	New Commitment	Provide connecting shuttle service between Caltrain stations and major activity centers			Y		Y
San Mateo	22271	New Commitment	Widen Skyline Boulevard (Route 35) to 4-lane roadway from I-280 to Sneath Lane		Y			Y
San Mateo	22274	New Commitment	Install an Intelligent Transportation System (ITS) and a Traffic Operation System countywide			Y	Y	
San Mateo	22279	New Commitment	Construct new interchange at U.S. 101/Produce Avenue			Y	Y	
San Mateo	22282	New Commitment	Improve operations at U.S. 101 near Route 92		Y		Y	
San Mateo	22726	Committed	Implement ferry service between South San Francisco and Alameda/Oakland			Y		Y
San Mateo	22751	New Commitment	Improve safety on Route 1, including adding protected left and right turn lanes at Route 1, adding through lanes on Route 1 at signalized intersections, and constructing new pedestrian/bicycle path			Y	Y	
San Mateo	22756	New Commitment	Reconstruct U.S. 101/Candlestick Point interchange to full all-directional interchange	Y			Y	
San Mateo	94644	New Commitment	Construct a westbound slow vehicle lane on Route 92 between Route 35 and I-280		Y		Y	Y
San Mateo	98204	New Commitment	Construct Route 1 (Calera Parkway) northbound and southbound lanes from Fassler Avenue to Westport Drive in Pacifica	Y			Y	Y
San Mateo	230417	Committed	Modify U.S. 101/Holly Street interchange (includes widening eastbound to northbound loop to 2 lanes and eliminating northbound to westbound loop)	Y			Y	
San Mateo	230428	Committed	Extend Blomquist Street over Redwood Creek to East Bayshore and Bair Island Road			Y	Y	
San Mateo	230430	New Commitment	Implement bicycle/pedestrian enhancements in San Mateo County			Y	Y	
San Mateo	230434	New Commitment	Implement local circulation improvements and traffic management programs countywide			Y		
San Mateo	230592	Committed	Improve streetscape and traffic calming along Bay Road, and construct new northern access connection between Demeter Street and University Avenue			Y	Y	
San Mateo	230697	New Commitment	Local streets and roads operations and maintenance			Y	Y	
San Mateo	230704	Committed	Make Route 92 operational improvements to Chess Drive on- and off-ramps			Y	Y	
San Mateo	240026	New Commitment	Add new rolling stock and infrastructure to support SamTrans bus rapid transit along El Camino Real from Palo Alto to Daly City	Y				
San Mateo	240027	Committed	Implement supporting infrastructure and Automated Transit Signal Priority to support SamTrans express rapid bus service along El Camino Real from Palo Alto to Daly City			Y		Y
San Mateo	240028	New Commitment	Make incremental increase in SamTrans paratransit service			Y		
San Mateo	240060	New Commitment	Modify existing lanes on U.S. 101 from Whipple to County line to accommodate HOV/T lane		Y			
San Mateo	240064	New Commitment	Implement grade separations at select locations in San Mateo County			Y	Y	
San Mateo	240067	Committed	Widen overcrossing at Manor Drive over Route 1 to improve safety (includes installing traffic signals at both end of the overcrossing and new on-ramp for northbound Route 1 at Milagra Drive)			Y		Y
San Mateo	240084	New Commitment	Implement San Mateo County's Safe Routes to Schools Program			Y		
San Mateo	240086	New Commitment	Implement San Mateo County's Transportation for Livable Communities Program			Y		
San Mateo	240087	New Commitment	Implement non-capacity Increasing local road Intersection modifications and channelization countywide			Y		

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San Mateo	240114	Committed	Implement operational and safety improvements on Route 1 between Half Moon Bay and Pacifica (includes acceleration lanes, deceleration lanes, turn lanes, bike lanes and enhanced crossings)			Y		
San Mateo	240115	Committed	Extend California Drive north to the intersection of Victoria Avenue and El Camino Real in Millbrae	Y				Y
San Mateo	240133	Committed	Widen Millbrae Avenue between Rollins Road and U.S. 101 southbound on-ramp and resurface intersection of Millbrae Avenue and Rollins Road	Y				
San Mateo	240142	Committed	Implement intersection and signalization improvements at the Callan Boulevard/Serramonte Boulevard and Lake Merced Boulevard/Southgate Avenue intersections			Y		
San Mateo	240143	Committed	Construct new multi-purpose pedestrian/bicycle overcrossing across U.S. 101, north of and adjacent to existing Millbrae Avenue Bridge across U.S. 101	Y			Y	
San Mateo	240160	New Commitment	Construct southbound on- and off-ramps to U.S. 101 at Peninsula Avenue to add on and off ramps from southbound U.S. 101			Y		Y
San Mateo	240161	New Commitment	Provide overcrossing at I-280/John Daly Boulevard		Y			Y
San Mateo	240169	Committed	Implement adaptive signal system between I-280 and Santa Cruz Avenue			Y		
San Mateo	240174	Committed	Implement signal interconnect between signals on Willow Road from Middlefield Avenue to Bay Road			Y		Y
San Mateo	240176	Committed	Widen Triton Drive between Foster City Boulevard and Pilgrim Drive			Y	Y	
San Mateo	240346	New Commitment	Implement Redwood City Street Car			Y		
San Mateo	240511	New Commitment	Implement Transportation Environmental Enhancements countywide			Y	Y	
San Mateo	240590	New Commitment	Implement a complete streets design for Mission Street/El Camino Real as part of Grand Boulevard Initiative			Y		
Santa Clara	21702	New Commitment	Improve interchange at U.S. 101/Buena Vista Avenue		Y			
Santa Clara	21704	New Commitment	Improve I-280 downtown access between 3rd Street and 7th Street		Y			
Santa Clara	21714	New Commitment	Widen U.S. 101 from Monterey Street to Route 129 - project development			Y		Y
Santa Clara	21722	New Commitment	Improve interchange at U.S. 101 southbound Trimble Road/De la Cruz Boulevard/Central Expressway		Y		Y	
Santa Clara	21754	New Commitment	Implement Valley Transportation Authority (VTA) soundwall program			Y		
Santa Clara	21760	New Commitment	Double-track segments of the Caltrain line between San Jose and Gilroy		Y			
Santa Clara	21785	New Commitment	Widen interchange at U.S. 101/Blossom Hill Road	Y			Y	Y
Santa Clara	21786	New Commitment	Widen interchange at U.S. 101/Hellyer Avenue		Y			
Santa Clara	21787	Committed	Expand the Palo Alto Caltrain Station and Bus Transit Center		Y			
Santa Clara	21790	Committed	Provide Santa Clara Valley Transportation Authority's (VTA) share of funds for additional train sets, passenger facilities and service upgrades for the ACE service from San Joaquin and Alameda counties			Y		
Santa Clara	21922	New Commitment	Implement Mineta San Jose International Airport APM connector			Y	Y	Y
Santa Clara	22010	New Commitment	Construct second exit lane on I-280 to Foothill Expressway	Y				Y
Santa Clara	22118	New Commitment	Exten Hill Road from East Main Avenue to Peet Avenue		Y			Y
Santa Clara	22134	Committed	Construct a lane on southbound U.S. 101 using the existing median from south of Story Road to Yerba Buena Road; modify the U.S. 101/Tully road interchange to a partial cloverleaf			Y		
Santa Clara	22156	New Commitment	Improve connector ramp at Route 85 northbound to Route 237 eastbound (includes widening off-ramp from Route 85 to Route 237 eastbound, constructing auxiliary lane on Route 237 eastbound between Route 85 on-ramp to Middlefield Road; constructing off-ramp on Route 237 eastbound between Route 85 and Dana Street)	Y				Y

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Santa Clara	22164	New Commitment	Construct Route 237 westbound on-ramp from Middlefield Road to Route 237 westbound	Y				
Santa Clara	22175	New Commitment	Widen Almaden Expressway from Coleman Avenue to Blossom Hill Road		Y			Y
Santa Clara	22179	New Commitment	Widen Central Expressway from 4-lanes to 6-lanes between Lawrence Expressway and San Tomas Expressway		Y			Y
Santa Clara	22180	New Commitment	Construct auxiliary lanes on Central Expressway between Lawrence Expressway and Mary Avenue	Y			Y	
Santa Clara	22186	New Commitment	Widen San Tomas Expressway to 8-lanes between Route 82 to Williams Road		Y		Y	Y
Santa Clara	22246	Committed	Implement bicycle and pedestrian improvements on Blossom Hill Road			Y		
Santa Clara	22809	New Commitment	Realign intersection at DeWitt Avenue/Sunnyside Avenue	Y				
Santa Clara	22811	New Commitment	Improve railroad crossing at Church Avenue/Monterey Highway (includes adjusting grade)			Y		
Santa Clara	22814	New Commitment	Extend deceleration lane on Foothill Expressway	Y				
Santa Clara	22822	New Commitment	Implement expressway traffic information and advisory systems (includes installation of electronic information changeable message signs, advisory radio, cable TV feeds and web page to provide real time traffic information)	Y				
Santa Clara	22829	New Commitment	Improve intersection at Fitzgerald Avenue (includes construction of a left-turn lane to Fitzgerald Avenue and bike lanes and sidewalks)			Y		
Santa Clara	22839	N/A	Convert the HOV lane on Central Expressway between Sam Tomas and De La Cruz to a general purpose lane			Y		
Santa Clara	22843	New Commitment	Widen Lawrence Expressway from Moorpark Avenue/Bollinger Road to south of Calvert Drive		Y			Y
Santa Clara	22845	New Commitment	Construct auxiliary lane on southbound U.S. 101 from Ellis Street to eastbound Route 237	Y				Y
Santa Clara	22854	New Commitment	Improve interchange at Oregon-Page Mill/I-280			Y	Y	
Santa Clara	22873	New Commitment	Improve circulation on Foothill Expressway and widen Loyola Bridge	Y				
Santa Clara	22878	New Commitment	Realign Wildwood Avenue to connect with Lawrence Expressway (includes new traffic signal at Lawrence Expressway/Wildwood Avenue intersection)	Y				
Santa Clara	22883	New Commitment	Close median and right-in-and-out access on Lawrence Expressway at De Soto Avenue, Golden State Drive, Granada Avenue, Lillick Drive, Buckley Street, and St. Lawrence/Lawrence Station on-ramp	Y				
Santa Clara	22895	New Commitment	Implement operational interchange improvements at San Tomas Expressway/Route 17		Y			
Santa Clara	22910	New Commitment	Implement Intelligent Transportation System (ITS) facilities on the Santa Teresa Boulevard-Hale Avenue corridor between Day Road and Castro Valley Road	Y				
Santa Clara	22932	New Commitment	Add turn lane on Watsonville Road Center			Y		
Santa Clara	22944	Committed	Widen I-880 for HOV lanes in both directions from Route 237 in Milpitas to U.S. 101 in San Jose			Y		
Santa Clara	22956	New Commitment	Extend Capitol Expressway light rail to Eastridge Transit Center - Phase II	Y			Y	Y
Santa Clara	22965	New Commitment	Improve interchange at U.S. 101/Mabury Road/Taylor Street		Y		Y	
Santa Clara	22979	New Commitment	Improve interchange at U.S. 101/Zanker Road/Skyport Drive/Fourth Street		Y			
Santa Clara	98119	Committed	Extend high-rail transit from Winchester Station to Route 85 (Vasona Junction)	Y			Y	Y
Santa Clara	230200	New Commitment	Extend Autumn Parkway from Julian Street to San Carlos Street and implement improvements from St. John Street to Park Avenue	Y			Y	
Santa Clara	230201	New Commitment	Widen Coleman Avenue from 4-lanes to 6-lanes between I-880 and Taylor Street			Y	Y	Y
Santa Clara	230210	New Commitment	Rehabilitate San Tomas Expressway Box Culvert			Y	Y	
Santa Clara	230234	New Commitment	Realign Marcella Avenue		Y			

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Santa Clara	230235	New Commitment	Extend Center Avenue to Marcella Avenue (includes constructing a bridge over Llagas Creek)		Y			Y
Santa Clara	230242	New Commitment	Implement Capitol Expressway Traffic Operations System (TOS)	Y				
Santa Clara	230246	New Commitment	Improve intersection at Lawrence Expressway/Prospect Road (includes providing a second left turn lane from Prospect Road eastbound to Lawrence Expressway northbound and modify existing traffic signals)	Y				
Santa Clara	230251	New Commitment	Implement Expressway TOS infrastructure improvements		Y			
Santa Clara	230255	New Commitment	Implement signal improvements on Santa Teresa Boulevard and San Martin Avenue	Y				
Santa Clara	230262	New Commitment	Improve interchange at Montague Expressway/U.S. 101			Y	Y	
Santa Clara	230265	New Commitment	Improve grade intersection at Montague Expressway/Mission College Boulevard		Y			
Santa Clara	230266	New Commitment	Implement traffic signal improvements on Santa Teresa Boulevard and Tilton Avenue	Y				
Santa Clara	230267	Committed	Widen Montague Expressway to 8-lanes for HOV lanes between Lick Mill and Trade Zone boulevards and on Guadalupe River Bridge and Penitencia Creek Road			Y		
Santa Clara	230269	Committed	Construct a new interchange at Trimble Road and Montague Expressway			Y		
Santa Clara	230273	New Commitment	Widen Montague Expressway between Trade Zone and I-680	Y			Y	Y
Santa Clara	230284	Committed	Montague Expressway & McCarthy/O'Toole Interchange Improvements		Y			
Santa Clara	230286	New Commitment	Implement bicycle and pedestrian improvements on Lawrence Expressway/Doyle Road			Y		
Santa Clara	230292	New Commitment	Implement Expressway and Cross Street signal coordination	Y				
Santa Clara	230294	Committed	Widen and create new alignment for Route 152 (from Route 156 to U.S. 101)	Y			Y	Y
Santa Clara	230332	New Commitment	Construct grade separation at Rengstroff Avenue	Y				
Santa Clara	230356	Committed	Construct interchange at Lawrence Expressway and Arques Avenue		Y			
Santa Clara	230363	Committed	Construct interchange at I-880 and Montague Expressway (includes improvements to Montague Expressway)	Y			Y	
Santa Clara	230370	New Commitment	Improve interchange at I-680/Montague Expressway	Y				
Santa Clara	230385	New Commitment	Implement Palo Alto Street Smarts program			Y	Y	
Santa Clara	230407	New Commitment	Widen off-ramp at southbound Route 17/Hamilton Avenue	Y				Y
Santa Clara	230410	New Commitment	Construct auxiliary lane on southbound U.S. 101 from Great America Parkway to Lawrence Expressway	Y				Y
Santa Clara	230411	New Commitment	Construct auxiliary lane on eastbound Route 237 from Mathilda Avenue to Fair Oaks Avenue	Y				Y
Santa Clara	230425	New Commitment	Improve interchange at Route 87/Capitol Expressway/Narvaez Avenue	Y				
Santa Clara	230445	New Commitment	Implement capacity increasing improvements at the intersection of Great America Parkway/Mission College Boulevard	Y				
Santa Clara	230449	Committed	Extend Charcot Avenue over I-880 as a new 2-lane roadway with bicycle and pedestrian improvements to connect to North San Jose employment center	Y			Y	Y
Santa Clara	230452	New Commitment	Implement couplet conversion projects in downtown San Jose (includes converting one-way couplets to two-way, reducing lanes, and adding bike lanes along 10th Street/11th Street, Almaden Avenue/Vine Street, and 2nd Street/3rd Street)	Y				
Santa Clara	230456	Committed	Widen Zanker Road from 4-lanes to 6-lanes	Y				
Santa Clara	230457	New Commitment	Widen Oakland Road from 4-lanes to 6-lanes between U.S. 101 and Montague Expressway	Y				Y
Santa Clara	230466	New Commitment	Construct Caltrain grade separation at Branham Lane	Y			Y	
Santa Clara	230471	Committed	Widen intersections and improve sidewalks throughout the city of Sunnyvale	Y				
Santa Clara	230492	New Commitment	Improve interchange at U.S. 101/Old Oakland Road	Y				
Santa Clara	230531	Committed	Construct auxiliary lanes on U.S. 101 in Mountain View and Palo Alto, from Route 85 to Embarcadero Road			Y		

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Santa Clara	230532	Committed	Improve interchange at Route 237/North 1st Street	Y				
Santa Clara	230539	New Commitment	Implement Sunnyvale Downtown Specific Plan Transportation Improvements (includes intersection and streetscape enhancements, bikeways, signal improvements, and roadway reconfiguration)	Y				
Santa Clara	230574	Committed	Improve the Route 85/Cottle Road interchange	Y				
Santa Clara	230580	New Commitment	Improve interchange at Route 237/El Camino Real/Grant Road	Y				
Santa Clara	230637	New Commitment	Rehabilitate San Carlos Street Bridge	Y				
Santa Clara	230638	New Commitment	Construct Caltrain grade separation at Skyway	Y				
Santa Clara	230641	Committed	Implement bicycle and pedestrian improvements in North San Jose	Y				
Santa Clara	230642	New Commitment	Implement improvements on Bird Avenue pedestrian corridor	Y				
Santa Clara	230643	New Commitment	Implement improvements on Neiman Pedestrian Overcrossing	Y				
Santa Clara	230644	Committed	Implement miscellaneous intersection improvements in North San Jose	Y			Y	
Santa Clara	230645	Committed	Implement improvements to the North First Street Core Area grid	Y			Y	
Santa Clara	230705	Committed	Debt Service Payments			Y		
Santa Clara	240063	New Commitment	Improve Caltrain terminal at San Jose Diridon Station	Y				
Santa Clara	240117	Committed	Implement Rapid Transit improvements in the Santa Clara/Alum Rock route (includes dedicated guideways, signal prioritization, ticket vending machines, premium stations, real-time information, and specialized vehicles)			Y	Y	Y
Santa Clara	240118	New Commitment	Implement Stevens Creek Rapid Transit Project	Y			Y	
Santa Clara	240119	New Commitment	Implement El Camino Rapid Transit Project			Y	Y	Y
Santa Clara	240159	Committed	Implement King Road Rapid Transit Project	Y				Y
Santa Clara	240374	Committed	Extend BART to Berryessa (includes environmental, preliminary engineering, property acquisition and construction phases)	Y			Y	
Santa Clara	240375	New Commitment	Extend BART from Berryessa to San Jose/Santa Clara (Phase 2)		Y		Y	
Santa Clara	240376	New Commitment	Implement improvements on Hacienda Avenue between Winchester Boulevard and San Tomas Aquino Road			Y	Y	
Santa Clara	240377	New Commitment	Widen McClellan Road for bike lanes between Foothill Boulevard and Byrne Avenue			Y		
Santa Clara	240379	New Commitment	Extend Buena Vista Avenue from Santa Teresa Boulevard to Monterey Road			Y		Y
Santa Clara	240385	New Commitment	Construct 4-lane bridge across Uvas Creek to allow the extension of Tenth Street to Santa Teresa Boulevard (Glen Loma Development).			Y		
Santa Clara	240398	New Commitment	Widen Los Gatos Boulevard from Camino Del Cerro to Samaritan Drive			Y		Y
Santa Clara	240403	New Commitment	Widen Dixon Landing Road from 4-lanes to 6-lanes between North Milpitas Boulevard and I-880			Y		Y
Santa Clara	240404	New Commitment	Widen Calaveras Boulevard overpass from 4-lanes to 6-lanes	Y			Y	Y
Santa Clara	240405	New Commitment	Improve intersection at Dixon Landing Road/Milpitas Boulevard	Y				
Santa Clara	240408	New Commitment	Extend Butterfield Boulevard North (includes 4-lane arterial, bike lanes, sidewalks, lighting and signal modification)			Y		Y
Santa Clara	240411	New Commitment	Implement improvements on Santa Teresa Boulevard between Main Avenue and DeWitt Avenue	Y				
Santa Clara	240412	New Commitment	Extend Butterfield Boulevard South between Tennant Avenue and Watsonville Road (includes UPRR overpass structure, drainage channel, traffic signal upgrades, striping, median and landscaping, street lights, bike lanes and sidewalks)	Y				Y
Santa Clara	240414	New Commitment	Improve intersection at Miramonte Avenue/Park Drive			Y		
Santa Clara	240419	New Commitment	Upgrade Saratoga Signal System			Y		
Santa Clara	240425	New Commitment	Widen intersection at El Camino Real/Lafayette Street	Y				
Santa Clara	240427	New Commitment	Implement pedestrian safety improvements on Route 9	Y			Y	

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Santa Clara	240428	New Commitment	Implement Saratoga Signal Upgrade Project Phase II (includes providing traffic management system at Saratoga City Hall and communication equipment to all upgraded signals)	Y				
Santa Clara	240430	New Commitment	Implement streetscale improvements on Prospect Road between Saratoga Avenue and Saratoga-Sunnyvale Road			Y		
Santa Clara	240434	N/A	Implement sidewalk and pedestrian enhancements on Saratoga Avenue			Y		
Santa Clara	240436	New Commitment	Improve southbound U.S. 101 between San Antonio Road to Carlestown Road/Rengstorff Avenue			Y		
Santa Clara	240439	N/A	Route 85 express lanes between Route 87 and I-280: Convert HOV lane to express lane between U.S. 101 and I-280; Convert HOV lane and construct additional express lane between I-280 and Route 87; Convert HOV lane to express lane between Route 87 and southbound U.S. 101; Construct 1.1 mile auxiliary lane between South De Anza Boulevard northbound on-ramp and Stevens Creek Boulevard northbound off-ramp (included under VTA Express Lane Network RTPID #240742)			Y	Y	Y
Santa Clara	240441	New Commitment	Improve interchange at U.S. 101/Oregon Expressway/Embarcadero Road			Y		
Santa Clara	240443	New Commitment	Extend Mary Avenue north across Route 237 (includes reconfiguring the Mathilda Avenue/U.S. 101 interchange, re-routing Moffett Park Drive and modifying the Route 237 eastbound/Mathilda Avenue northbound flyover)	Y			Y	Y
Santa Clara	240463	N/A	Convert Route 237 HOV lanes to express lanes between North First Street and I-880 (included under VTA Express Lane Network RTPID #240742)			Y	Y	Y
Santa Clara	240464	N/A	Convert Route 87 HOV lanes to express lanes between Route 85 and U.S. 101 (included under VTA Express Lane Network RTPID #240742)	Y				Y
Santa Clara	240466	N/A	U.S. 101 express lanes between Whipple Avenue and Cochrane Road: Convert HOV lane to express lane between Whipple Avenue (in San Mateo County) and Santa Clara County line; Convert HOV lane into express lane and construct additional express lane between Santa Clara County line and Cochrane Road (included under VTA Express Lane Network RTPID #240742)	Y			Y	Y
Santa Clara	240468	New Commitment	Improve connector ramp at Route 237 westbound to Route 85 southbound (includes auxiliary lanes on Route 85 between El Camino Real and Route 87)			Y		Y
Santa Clara	240469	N/A	Implement express lanes on Route 17 between I-280 and Route 85 (included under VTA Express Lane Network RTPID #240742)		Y			Y
Santa Clara	240470	N/A	Install pedestrian countdown signals in Sunnyvale			Y		
Santa Clara	240473	New Commitment	Improve braided ramps on northbound I-280 between Foothill Expressway and Route 85			Y		
Santa Clara	240477	N/A	Implement express lanes on Route 237 between Mathilda Avenue to Route 85 (included under VTA Express Lane Network RTPID #240742)	Y			Y	Y
Santa Clara	240481	N/A	Convert Route 237 HOV lanes to express lanes between North First Street to Mathilda Avenue (included under VTA Express Lane Network RTPID #240742)			Y		Y
Santa Clara	240482	N/A	Implement express lanes on I-680 from Calaveras Boulevard to Montague Expressway (included under VTA Express Lane Network RTPID #240742)			Y		Y
Santa Clara	240484	N/A	Implement express lanes on I-880 between the Alameda County Line and U.S. 101 (included under VTA Express Lane Network RTPID #240742)	Y				Y
Santa Clara	240485	N/A	Implement express lanes on U.S. 101 between Cochrane Road and Masten Avenue (included under VTA Express Lane Network RTPID #240742)		Y			Y
Santa Clara	240491	N/A	Implement express lanes on U.S. 101 between Masten Avenue and 10th Street (included under VTA Express Lane Network RTPID #240742)		Y			Y

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Santa Clara	240492	N/A	Implement express lanes on U.S. 101 between 10th Street and Route 25 (included under VTA Express Lane Network RTPID #240742)		Y			Y
Santa Clara	240494	New Commitment	Implement System Operations and Management Program for Santa Clara County			Y	Y	
Santa Clara	240497	New Commitment	Implement San Jose Midtown bicycle and pedestrian enhancements	Y				
Santa Clara	240498	New Commitment	Widen Brokaw Bridge over Coyote Creek	Y				
Santa Clara	240506	New Commitment	Implement El Camino Real Regional Corridor improvements from Palo Alto Medical Foundation to Churchill Avenue	Y				
Santa Clara	240507	New Commitment	Improve Middlefield Road-Midtown Corridor (includes sidewalk enhancements, transit stop improvements, lighting improvements, and traffic signal improvements)	Y				
Santa Clara	240508	New Commitment	Implement the Community Design and Transportation (CDT) Program in Santa Clara County (includes streetscape improvements, bicycle and pedestrian access improvements, place-making improvements, and roadway and transit facility improvements)			Y	Y	
Santa Clara	240509	New Commitment	Develop projects and programs contained within VTA's Countywide Bicycle Plan, VTA's Bicycle Expenditure Program, and Local Bike Plans and programs.			Y		
Santa Clara	240512	Committed	Implement Guadalupe Express light rail improvements			Y		Y
Santa Clara	240513	N/A	Implement express lanes on I-280 between Leland Avenue and Magdalena Avenue (included under VTA Express Lane Network RTPID #240742)		Y			Y
Santa Clara	240514	N/A	Implement express lanes on I-280 between US 101 and Leland Avenue (included under VTA Express Lane Network RTPID #240742)		Y			Y
Santa Clara	240515	N/A	Implement express lanes on I-280 between southbound El Monte Road and Magdalena Avenue (included under VTA Express Lane Network RTPID #240742)		Y			Y
Santa Clara	240516	N/A	Implement express lanes on I-680 between Montague Expressway and US 101 (included under VTA Express Lane Network RTPID #240742)		Y			Y
Santa Clara	240517	N/A	Implement express lanes on I-880 between U.S. 101 and I-280 (included under VTA Express Lane Network RTPID #240742)		Y			Y
Santa Clara	240518	Committed	Implement Tasman Express Long T (includes double-tracking of a single-tracked light rail segment on the Mountain View line to facilitate the extra line of service)			Y		
Santa Clara	240519	Committed	Implement North First Street light rail speed Improvements			Y		Y
Santa Clara	240532	New Commitment	Improve interchanges on Route 152 at Frazier Lake Road, Bloomfield Road, Watsonville Road, and Ferguson Road	Y				
Santa Clara	240554	New Commitment	Improve interchanges at Route 237/Mathilda Avenue and U.S. 101/Mathilda Avenue	Y				
Santa Clara	240570	New Commitment	Widen offramp at Trimble Road on Route 87	Y				Y
Santa Clara	240591	Committed	Implement Capitol Expressway Light Rail Extension - Phase I (includes sidewalk, landscape and street lights on both sides of the expressway from Capitol Avenue to Tully Road)			Y		
Santa Clara	240603	Committed	Implement North San Jose Transit Improvements			Y		
Santa Clara	240611	New Commitment	Improve interchange at Route 85/El Camino Real	Y				
Santa Clara	240636	New Commitment	Construct 2-lane or 4-lane connection between Almaden Expressway and Winfield Boulevard (Chynoweth Ave. or Thornwood bridge will include construction of a new connector, bike lanes and sidewalks)	Y				
Santa Clara	240671	New Commitment	Improve interchange at I-280/Senter Road		Y			
Santa Clara	240710	New Commitment	Implement Lawrence Expressway/I-280 interchange project			Y		
Santa Clara	240740	Committed	Local streets and roads operations and maintenance			Y	Y	
Santa Clara	240742	Committed	VTA Express Lane Network			Y	Y	Y

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Solano	21341	Committed	Construct new Fairfield/Vacaville multimodal train station for Capitol Corridor intercity rail service (Phases 1, 2 and 3)			Y	Y	Y
Solano	22629	Committed	Construct new Vallejo Baylink Ferry Terminal (includes additional parking, upgrade of bus transfer facilities and pedestrian access improvements)			Y	Y	
Solano	22632	Committed	Widen American Canyon Road overpass at I-80			Y		
Solano	22634	Committed	Construct an adjacent 200-space, at-grade parking lot at the Vacaville Intermodal Station (Phase 1)			Y		
Solano	22794	New Commitment	Improve Curtola Transit Center, includes 420 space parking structure and transit plaza on existing park and ride lot, auto/carpool pick-up and circulation improvements			Y	Y	
Solano	22795	New Commitment	Improve Fairfield Transportation Center, includes 1,000 additional parking spaces	Y				
Solano	22985	Committed	Implement transit hub in the Benicia Industrial Park			Y	Y	Y
Solano	94151	New Commitment	Construct 4-lane Jepson Parkway from Route 12 to Leisure Town Road at I-80			Y	Y	Y
Solano	98212	New Commitment	Expand bicycle and pedestrian facilities			Y	Y	
Solano	230311	Committed	Widen and improve Peterson Road with the addition of a truck-stacking lane			Y		
Solano	230313	New Commitment	Improve interchanges and widen roadways serving Solano County Fairgrounds, including Redwood Parkway			Y		
Solano	230322	Committed	Rebuild and relocate eastbound Cordelia Truck Scales Facility (includes a new 4-lane bridge across Suisun Creek and new ramps at eastbound Route 12 and eastbound I-80)			Y	Y	
Solano	230326	New Commitment	Improve I-80/I-680/Route 12 Interchange (Phase 1), includes widen I-80 and I-680 and improve direct freeway to freeway connections			Y	Y	Y
Solano	230468	New Commitment	Provide auxiliary lanes on I-80 in eastbound and westbound directions from I-680 to Airbase Parkway, add eastbound mixed-flow lane from Route 12 East to Airbase Parkway, and remove I-80/auto Mall hook ramps and C-D slip ramp	Y				Y
Solano	230558	New Commitment	Provide Lifeline transit service countywide			Y		
Solano	230590	Committed	Widen Railroad Avenue on Mare Island to 4-lanes from G Street to Route 37	Y				
Solano	230635	New Commitment	Improve Vacaville Intermodal Station (Phase 2), includes parking garage			Y	Y	
Solano	240210	Committed	Implement I-505/Vaca Valley Parkway interchange improvements (includes widening southbound off-ramp at Vaca Valley Parkway, widening Vaca Valley Parkway to provide protected left turn pockets, and signalization of the southbound ramp intersection)			Y	Y	
Solano	240213	Committed	Implement I-80/Lagoon Valley Road interchange improvements (includes widening existing overcrossing from 2 to 4 lanes, widening the westbound ramp and intersection, widening and realigning the eastbound ramps, and signalization of both eastbound and westbound ramp intersections)			Y		
Solano	240313	Committed	Benicia Intermodal Facilities Project: Construct transit intermodal stations at Military West and West 14th, and Military West and First Street			Y	Y	
Solano	240556	New Commitment	Enhance bicycle and pedestrian facilities			Y		
Solano	240558	New Commitment	Rehabilitate bicycle and pedestrian facilities			Y		
Solano	240559	New Commitment	Improve ADA access at existing intercity transit centers			Y		
Solano	240572	New Commitment	Enhance transit information services (includes adding GPS devices and tracking hardware and software to all buses, and display media to bus stations)			Y		
Solano	240573	New Commitment	Install security cameras and monitoring equipment at Solano transit stations			Y		
Solano	240575	New Commitment	Rehabilitate major transit centers in Solano County			Y		
Solano	240576	New Commitment	Replace existing transit fleet			Y		
Solano	240578	New Commitment	Transit maintenance			Y		
Solano	240593	New Commitment	Implement safety improvements to state highways in Solano County			Y		

Final List of Plan Bay Area Transportation Projects/Programs by County

Appendix A

County	RTPID	Investment Type	Project	Complete and Operational By:			2013 TIP	Regionally Significant
				2020	2030	2040		
Solano	240594	N/A	Implement enhancements on highways in Solano County (includes landscaping, soundwalls, gateways, multi-modal enhancements, and hardscaping)			Y	Y	
Solano	240595	New Commitment	Modify interchanges to improve operations, safety, multi-modal access, and improve signal timing			Y	Y	
Solano	240596	New Commitment	Conduct corridor studies of Solano highways and freeways and install non-ITS performance measures			Y	Y	
Solano	240599	New Commitment	Rehabilitate local bridges			Y		
Solano	240600	New Commitment	Local streets and roads operations and maintenance			Y	Y	
Solano	240601	New Commitment	Implement Solano County's local air quality and climate protection strategies			Y		
Solano	240602	New Commitment	Implement ridesharing measures (includes ridematching, vanpool services, and commute trip planning/consulting)			Y	Y	
Solano	240604	New Commitment	Implement local parking management programs			Y		
Solano	240605	New Commitment	Implement Solano County's Safe Routes to School program			Y	Y	
Solano	240606	New Commitment	Implement Solano County's Safe Routes to Transit program			Y		
Solano	240608	New Commitment	Provide transit service to seniors and individuals with disabilities (separate from Lifeline)			Y		
Solano	240609	New Commitment	Rehabilitate transit guideways (includes docking facilities and channel maintenance for WETA ferries)			Y		
Solano	240610	N/A	Local transportation planning and public outreach efforts			Y		
Solano	240719	New Commitment	Transit Operations Support			Y		
Solano	240720	New Commitment	Local Road Safety			Y	Y	
Solano	240721	New Commitment	Maintain state highways in Solano County			Y		
Solano	240722	New Commitment	Implement Solano County's regional air quality and climate protection strategies			Y		
Solano	240739	Committed	Dredge Channel to Port of Stockton			Y		
Sonoma	21070	Committed	Realign Route 116 (Stage Gulch Road) along Champlin Creek to improve safety, adding shoulders to accommodate pedestrians and bicyclists			Y		
Sonoma	21902	Committed	Widen U.S. 101 for HOV lanes from Pepper Road to Rohnert Park Expressway (Central Phase A)			Y	Y	
Sonoma	22190	New Commitment	Improve channelization and traffic signalization at Route 116/Route 121 intersection (includes Arnold Drive improvements)	Y				
Sonoma	22191	Committed	US 101 North Project - Phase B- Airport Boulevard interchange improvements and Airport Boulevard			Y	Y	
Sonoma	22195	Committed	Improve U.S. 101/Old Redwood Highway interchange (includes modifying/replacing existing 2-lane interchange to at least a 5-lane interchange and improving ramps)			Y	Y	
Sonoma	22197	New Commitment	Improve local circulation at various locations in Town of Penngrove (includes improvements to Main Street, Petaluma Hill Road, Adobe Road, Old Redwood Highway and U.S. 101/Railroad Avenue)		Y			
Sonoma	22204	New Commitment	Widen Fulton Road from 2-lanes to 4-lanes from Guerneville Road and Piner Road		Y			Y
Sonoma	22207	New Commitment	Extend Farmers Lane from Bellevue Avenue to Bennett Valley Road as a 3-lane or 4-lane arterial (includes a bicycle lane and sidewalk)	Y				Y
Sonoma	22438	New Commitment	Improve Bodega Highway west of Sebastopol (includes straightening curves near Occidental and adding turn pockets)	Y				
Sonoma	22490	New Commitment	Convert bridges in Sonoma County from 1-lane to 2-lane	Y			Y	
Sonoma	22655	Committed	Widen U.S. 101 for HOV lanes (one in each direction) from Rohnert Park Expressway to Santa Rosa Avenue (includes interchange improvements and ramp metering)			Y	Y	

Final List of Plan Bay Area Transportation Projects/Programs by County

Appendix A

County	RTPID	Investment Type	Project	Complete and Operational By:			2013 TIP	Regionally Significant
				2020	2030	2040		
Sonoma	22656	Committed	Improve U.S. 101/East Washington Street interchange (includes new northbound on-ramp and improvements to southbound on-ramp)			Y	Y	
Sonoma	94691	New Commitment	Install traffic signal system on Route 121 and improve channelization at 8th Street	Y				
Sonoma	98147	New Commitment	Implement Marin Sonoma Narrows Phase 2 (Sonoma County)	Y				Y
Sonoma	98183	Committed	Implement landscaping along the HOV lanes on U.S. 101 between Steele Lane and Windsor River Road			Y	Y	
Sonoma	230341	Committed	Improve channelization and traffic signalization on Mirabel Road and Route 116			Y		
Sonoma	230368	New Commitment	Construct Suburban Center intersection improvements at Route 12 (Farmers Lane) and 4th Street			Y		
Sonoma	230700	New Commitment	Local streets and roads operations and maintenance			Y	Y	
Sonoma	240359	Committed	Widen Rohnert Park Expressway from 2-lanes to 4-lanes between Snyder Lane and Petaluma Hill Road (includes new bike lanes in both directions, curb and gutter, sidewalk, landscaped median, and traffic signal devices/improvements at Petaluma Hill Road)			Y		
Sonoma	240360	New Commitment	Widen Snyder Lane from 2-lanes to 4-lanes between southside of "G" section and Southwest Boulevard	Y				Y
Sonoma	240366	Committed	Widen of Golf Course Drive West (formerly Wilfred Avenue) from 2-lanes to 4-lanes between the 1999 City Limits west of Redwood Drive to the Urban Growth Boundary (includes four travel lanes, a bike lane on both sides, sidewalks, landscaping, and traffic signals at Redwood Drive, Labath Avenue, and Dowdell Avenue)	Y				
Sonoma	240524	New Commitment	Construct an interchange with bicycle and pedestrian enhancements at Route 12/Fulton Road			Y		
Sonoma	240529	New Commitment	Improve interchange at Hearn Avenue/U.S. 101	Y			Y	
Sonoma	240547	New Commitment	Construct bicycle and pedestrian crossing at U.S. 101 and Copeland Creek		Y			
Sonoma	240561	New Commitment	Implement Sonoma County's Safe Routes to School program			Y		
Sonoma	240650	New Commitment	Enhance bus service frequencies in Sonoma County			Y		
Sonoma	240651	New Commitment	Implement bicycle and pedestrian improvements countywide			Y	Y	
Sonoma	240667	New Commitment	Implement Windsor River Road/Windsor Road/NWPRR Intersection improvements. Re-configure intersection and improve railroad, vehicle, pedestrian interface.	Y				
Sonoma	240668	New Commitment	Widen Airport Boulevard from 2-lanes to 5-lanes between Ordiance Road and Aviation Boulevard	Y				Y
Sonoma	240672	Committed	Implement Marin Sonoma Narrows Phase 1 (Sonoma County)			Y	Y	
Sonoma	240709	New Commitment	Implement Sonoma County's Climate Initiatives program		Y		Y	
Sonoma	240737	New Commitment	Conduct environmental studies and preliminary design for the proposed SMART commuter rail extension from Windsor to Cloverdale (Phase III)			Y		

Appendix B
List of Projects in the 2013 Transportation Improvement Program

Final List of 2013 TIP Projects by County

Appendix B

County	TIP ID	RTP ID	Sponsor	Project	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Regionally Non-Exempt Projects								
Regional	MTC050027	22511	WETA	Ferry Service - Berkeley/Albany	WETA: Berkeley/Albany: Provide ferry service from Berkeley/Albany to San Francisco.	2013 TIP Development - Update the funding plan to delay the CON phases to FY13, FY14, and FY15, remove \$2.5M in FY11 Prop 1B funds, add \$12.5M in FY12 Prop 1B funds, and add \$20.45M in FY19	NON-EXEMPT	2040
Regional	MTC050029	230581	WETA	SF Ferry Terminal/Berthing Facilities	WETA: San Francisco: At the Ferry Terminal; Construct additional ferry docking/berthing facilities to improve ferry access and support WETA berthing/maintenance operational needs.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram all CON funds to FY14	NON-EXEMPT	2020
Regional	REG070003	22509	WETA	Treasure Island Ferry Service	Treasurer Island: Implement new ferry transit service between Treasure Island and San Francisco/East Bay locations.	2013 TIP Development - Update RTP ID and update funding plan to reprogram CON phase funds to FY13	NON-EXEMPT	2040
Regional	REG090003	230419	MTC	Freeway Performance Initiative (FPI)	Regionwide: Design, implement and maintain ramp metering, Traffic Operation Systems (TOS), and other Freeway Performance Initiative (FPI) projects on major congested freeways throughout the region.	2013 TIP Development - Update RTP ID and update the funding plan	NON-EXEMPT	2040
Regional	REG110001	21017	WETA	Maintenance Barge and Emergency Floats and Ramps	WETA: System maintenance and operational needs; This project will support the purchase/construction of floats and ramps and will provide core support infrastructure for existing and future regional ferry service.	2013 TIP Development - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2040
Regional	REG130004	240741	MTC	Regional Express Lane Network	Region-wide: Convert existing HOV lanes to express lanes and widen to add new express lanes on freeway segments that constitute early phases of the Regional Express Lane Network	2013 TIP Development - Amend in a new non-exempt multi-phase project totaling \$196M	NON-EXEMPT	2040
Alameda	ALA010014	22042	Caltrans	I-680 Sunol Grade NB HOV Lane	Rt. 680: Sunol Grade from Milpitas to Rt. 84; Construct North Bound HOV lanes.	2013 TIP Development - Update RTP ID and funding plan to remove XTRAN funds and add in \$16M in RTP-LRP funds in FY19	NON-EXEMPT	2020
Alameda	ALA050002	21451	San Leandro	SR 185- E. 14th St/ Hesperian Blvd/150th Ave	San Leandro: 150th/E. 14th/Hesperian; construct NB left turn Ln from Hesperian to E.14th, EB left turn Ln from E.14th to 150th Av & SB Ln from Hesperian to 150th and other traffic circulation improvements.	2013 TIP Development - Update RTP ID	NON-EXEMPT	2040
Alameda	ALA050006	230083	ACTC	I-580 (TriValley) Right of Way Preservation	I-580 Corridor (Tri-Valley): Preserve ROW along I-580 from Hacienda to Greenville for future transit in the median.	2013 TIP Development - Update RTP ID and change the fund source for \$5M in CON funds from Other Local to Sales Tax. Retain in the TIP for informational purposes as the project is ongoing	NON-EXEMPT	2040
Alameda	ALA050014	22776	ACTC	SR 84 Expressway Widening	In Livermore: Widen Route 84 from Jack London Blvd. to Pigeon Pass.	2013 TIP Development - Update funding plan to change the fund source of \$37.03M in Other Local funds to RIP funds per 2012 STIP and reprogram to FY17, toll credits are used in lieu of match.	NON-EXEMPT	2040
Alameda	ALA050015	21132	BART	BART - Warm Springs Extension	Fremont: Fremont BART station to Warm Springs; Extend BART service to the Southern end of Alameda County including new station at Irvington.	2013 TIP Development - Updated funding plan	NON-EXEMPT	2040
Alameda	ALA050017	22455	AC Transit	Enhanced Bus - Telegraph/Intl/East 14th	AC Transit: Along the Telegraph/Intl Ave /E. 14th Corridor; System includes preliminary engineering, bus Stop & station improvements, bus procurement and other street enhancements to implement bus rapid system.	2013 TIP Development - Updated funding plan to reflect RM2 allocations and clarify the number of buses referenced in the Expanded Project Description	NON-EXEMPT	2040
Alameda	ALA050019	22769	ACTC	I-880 North Safety Improvements	Oakland: I-880 between 23rd Ave to 29th Ave; Reconfigure Interchange, including new ramps.	2013 TIP Development -Update funding plan to total project cost to \$97.912M million	NON-EXEMPT	2020
Alameda	ALA070014	22100	San Leandro	I-880/SR 112 Overcrossing Replacement	San Leandro: at the I-880/SR 112 (Davis St.); Replace overcrossing and widening roadway including interchange landscaping and bridge architectural features.	2013 TIP Development - Update RTP ID and project scope to include landscaping and update the funding plan to add \$400K in FY10 PE STIP funds and \$539K in FY15 CON HPP funds transferred from	NON-EXEMPT	2040

*Projects with conformity analysis years 2040 reference programmatic projects or project with a completion date after 2030 in Plan Bay Area.

Final List of 2013 TIP Projects by County

Appendix B

County	TIP ID	RTP ID	Sponsor	Project	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Alameda	ALA070018	21116	ACTC	I-580 (TriValley) Corridor - WB HOV & Connectors	I-580 (TriValley) Corridor: WB HOV lane on I580 from east of Greenville Rd to Foothill Rd, HOV direct connectors from WB I580 to SB I680 and NB I680 to EB I580, WB Aux Lanes between Airway Blvd and Tassajara Rd, and EB and WB Aux Lanes at I580/Vasco I/C	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reflect the latest RM2 programming information; Update the scope to include EB/WB Aux lanes at	NON-EXEMPT	2040
Alameda	ALA070020	240050	ACTC	I-580 (TriValley) Corridor - EB HOV/HOT Lanes	I-580 (TriValley) Corridor: From east of Greenville Road to Hacienda Dr.; Construct Eastbound HOV/HOT lanes (includes auxiliary lanes). Sub-project of TIP ID ALA050006.	2013 TIP Development -Update funding plan to total project cost to \$180.79M million to reflect RM2 allocations and update the expanded description to show that project references multiple RTP IDs	NON-EXEMPT	2040
Alameda	ALA070021	94527	LAVTA	LAVTA Bus Rapid Transit (BRT) System Ph. 1 & 2	LAVTA: Provide Rapid bus services to the cities of Livermore, Dublin, Pleasanton and Eastern Alameda County.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	NON-EXEMPT	2040
Alameda	ALA070042	230668	ACTC	I-880 SB HOV Lanes - Marina Blvd to Hegenberger	I-880 Corridor: From Marina Blvd in San Leandro to Hegenberger in Oakland; Construct new SB HOV lanes and reconstruction of interchanges at Marina Blvd and Davis St. and soundwall construction.	2013 TIP Development - Update RTP ID, scope to include reconstruction of interchanges at Marina Blvd and change the fund source of FY13 and FY14 Other Local funds to Sales Tax Measure funds	NON-EXEMPT	2030
Alameda	ALA090004	22664	ACTC	I-580 HOT Corridor Project	I-580 Westbound: Convert the HOV lanes to HOT Lanes.Convert the I-580 westbound HOV lane to an express lane from Greenville Road to San Ramon Road/Foothill Road	2013 TIP Development - Update program year for earmark funding to 2014 and update local funds and decrease total project cost to match the RTP. Scope of the project updated to match RTP scope	NON-EXEMPT	2040
Alameda	ALA090010	21472	Pleasanton	I-680/Bernal Avenue interchange improvements	Pleasanton: I-680 /Bernal Avenue Interchange improvements. Phased project with reconfiguration of SB ramp, widening of NB ramp	2013 TIP Development - Update the project description and expanded description to reflect a reduced scope and update the funding plan to reflect the latest programming information with a \$12M	NON-EXEMPT	2040
Alameda	ALA090012	230066	San Leandro	I-880/Marina Blvd Interchange and Overcrossing Rep	San Leandro: I-880/ Marina Blvd. Replace overcrossing and widening roadway plus ramp interchange reconfiguration, intersection improvements including interchange landscaping and bridge architectural features.	2013 TIP Development - Update RTP ID	NON-EXEMPT	2040
Alameda	ALA090013	21489	Pleasanton	I-580 / Foothill Road interchange improvements	Pleasanton: I-580/ Foothill Road. Reconfiguration of EB ramps including bike/pedestrian-related improvements	2013 TIP Development - Update the funding plan to reprogram all funds from FY11 to FY13, remove \$50K in PE Other Local funds and change the fund source for \$3.3M in CON funds from Other Local to	NON-EXEMPT	2040
Alameda	ALA090015	21123	Union City	Union City Intermodal Station Infrastructure	Union City: Expand Union City BART Station to Complete Pedestrian Connection and Rail Station	2013 TIP Development - Updated funding plan to remove \$14M in Other Local funds and this project is also identified by TIP ID ALA990015	NON-EXEMPT	2040
Alameda	ALA090016	240562	Hayward	Rt 92/Clawiter/Whitesell Interchange Improvements	Hayward: Rt 92/Clawiter Rd. Upgrade existing Clawiter interchange. Add ramps and overcrossing for Whitesell St. extension. Signalize ramp intersections.	2013 TIP Development - Update RTP-ID and funding plan to reprogram RTP-LRP funds from FY16 to FY19 and \$2.8M in FY12 CON Other Local funds to \$1.9M in FY16 CON Other Local funds	NON-EXEMPT	2020
Alameda	ALA090018	240394	ACTC	Truck Parking Facilities in North County (Phase I)	Alameda County: Provide safe parking facilities in north part of Alameda County.	2013 TIP Development - Update the funding plan to remove \$3M in RTP-LRP funds and reprogram \$1M in Other Local from FY12 PE to FY13 PE, \$500K in Other Local from FY12 PE to FY15 ROW, and \$500k	NON-EXEMPT	2040
Alameda	ALA090019	230091	ACTC	Corridor Mobility Program & Adaptive Ramp Metering	Central Alameda County: I-880/ I-238/ I-580. Install monitoring and signalization I-880, I-238 and I-580.	2013 TIP Development - Update the funding plan to increase total project cost to \$47M and reprogram PE phase to FY15, and CON phase to FY17 and FY18. The project is phased.	NON-EXEMPT	2020

*Projects with conformity analysis years 2040 reference programmatic projects or project with a completion date after 2030 in Plan Bay Area.

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Appendix B

County	TIP ID	RTP ID	Sponsor	Project	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Alameda	ALA090020	230054	Hayward	I-880 Auxiliary lanes at Industrial Parkway	Hayward: Construct auxiliary lanes on I-880. NB between Industrial Pkwy and Alameda Creek and SB between Industrial Pkwy and Whipple Rd	2013 TIP Development - Update the funding plan and funding amounts to reprogram Other Local PE funds from FY10 to FY16, Other Local ROW funds from FY11 to FY16, and Other Local CON funds from	NON-EXEMPT	2020
Alameda	ALA090021	230052	Hayward	I-880 NB and SB Auxiliary lanes	Hayward: NB and SB I-880 between West A and Winton. NB I-880 between A St and Paseo Grande.	2013 TIP Development - Update the funding plan to delay PE to FY17, ROW to FY19 and CON to FY20; Reduce PE by \$1.8M and reduce ROW by \$1.3M and CON by \$10.6M	NON-EXEMPT	2040
Alameda	ALA090022	240389	Alameda County	Estuary Bridges Seismic Retrofit and Repairs	Oakland: Seismic retrofit and repairs of 3 Oakland Estuary bridges	2013 TIP Development - Update RTP-ID and funding plan to replace RTP-LRP funding with Other Local funds and LBSRA funds in place of \$2M in FY11 Other Local funds	NON-EXEMPT	2040
Alameda	ALA090025	240076	ACTC	I-580 WB Auxiliary Lane, First to Isabel	I-580 (TriValley) Corridor: westbound auxilliary lanes between First Ave and Isabel Ave along I-580 in the Tri-Valley. This project is a sub-project of, and is being implemented with, TIP ID ALA070018.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	NON-EXEMPT	2040
Alameda	ALA090026	22760	Port of Oakland	Outer Harbor Intermodal Terminals (OHIT)	In Oakland: OHIT, a proposed intermodal rail complex, will be located on the former Oakland Army Base and adjacent land. This listing only includes segments implemented by the Port of Oakland. For City of Oakland segments, see ALA110046.	2013 TIP Development - Update RTP ID and scope to reflect the implementation by the Port of Oakland. SEGMENTS 1 (TC03A), 2 (TC03B), and 6 (TC03E).The funding plan reflects the TCIF allocations and it	NON-EXEMPT	2040
Alameda	ALA090027	22082	Port of Oakland	7th Street Grade Separation and Roadway Improvemen	In Oakland:the 7th Street Grade Separation will separate truck traffic on 7th St from rail movements between expanded rail facilities at the Port and the rail mainline north of 7th St and existing rail facilities to the south. Multiple phases.	2013 TIP Development - Update RTP ID and funding plan to reduce Other Local funds to \$2M in FY18 and add in \$108M as RTP-LRP funds in FY19. It is a phased project	NON-EXEMPT	2040
Alameda	ALA110001	240014	WETA	Central Bay Operations and Maintenance Facility	WETA: Construct a central bay operations and maintenance facility.	2013 TIP Development - Update RTP ID and update funding plan: 1) change FY09 Prop 1B funds from \$10.55m to \$3.5m, 2) add \$2.5m in FY12 5309 Bus & Bus Facility funds, and 3) add \$5.5m in FY13	NON-EXEMPT	2040
Alameda	ALA110002	240025	ACTC	I-880/Industrial Parkway West Interchange	At I-880/Industrial Parkway West , reconstruct interchange, add on/off-ramp lanes, widen ramp lanes, provide HOV bypass lanes and routine accommodation for bicyclists and pedestrians.	2013 TIP Development - Update the funding plan to delay PE to FY13, ROW to FY18, and CON to FY19. The CON phase funds have been updated to RTP-LRP and increased by \$10M and the PE phase has	NON-EXEMPT	2040
Alameda	ALA110003	240374	BART	Hayward Shop and Yard Expansion	Expansion of the Hayward Shop and Yard to accommodate additional rail vehicles for storage, maintenance and repair.	2013 TIP Development - Update the funding plan to reprogram \$70M in CON Sales-Tax funds from FY12 to FY13 and add in \$40M in Prop 1A funds and \$7M in FY12 BART allocations	NON-EXEMPT	2020
Alameda	ALA110036	94012	Union City	Union City BART East Plaza Enhancements	In Union City: Union City Intermodal Station: Construction of the East Plaza and loop road within the emerging transit-oriented Station District adjacent to the Union City Intermodal Station.	2013 TIP Development - Update RTP ID, exemption code to non exempt, and retain in the TIP for informational purposes as the project is ongoing	NON-EXEMPT	2040
Alameda	ALA110045	240746	Fremont	Walnut Argonaut Lane Reduction & Roundabout	In the City of Fremont: On Walnut Avenue and Argonaut Way narrow the roadway from four lanes to two lanes. At the intersection of Walnut/Argonaut/Parkhurst Drive construct new roundabout.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	Non-Exempt NRS - NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA110046	240024	Oakland	Oakland Army Base Infrastructure Improvements	In Oakland: the Oakland Army Base and the West Oakland Redevelopment Areas; Implementing Army Base Infrastructure Master Plan and completing West Oakland Specific Plan. Includes TCIF OHIT impl. by City of Oakland. For Port, see ALA090026	2013 TIP Development - Update scope to include the infrastructure improvements and amend the funding plan to reflect a total project cost of \$215.28M. The air quality exemption has been updated to	NON-EXEMPT	2040

*Projects with conformity analysis years 2040 reference programmatic projects or project with a completion date after 2030 in Plan Bay Area.

Final List of 2013 TIP Projects by County

Appendix B

County	TIP ID	RTP ID	Sponsor	Project	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Alameda	ALA110104	240024	MTC	SFOBB Gateway Park	SFOBB Gateway Park in Alameda County, in Oakland at the Oakland Touchdown of the new East Span of the Bay Bridge	2013 TIP Development - Update the funding plan to reprogram RTP-LRP funds from FY17 to FY19	NON-EXEMPT	2040
Alameda	ALA130001	21484	Fremont	Widen Kato Rd from Warren Avenue to Milmont Drive	In Fremont: Widen Kato Road from Warren Avenue to Milmont Drive. Widen Kato Road to four lanes and install bike lanes on both sides of the roadway and modify traffic signal at Kato Rd/Milmont Ave.	2013 TIP Development - Amend in a new non-exempt project totaling \$12.69M	NON-EXEMPT	2020
Alameda	ALA130005	240038	Dublin	Dougherty Road widening	Project is located in Dublin. It will widen the existing Dougherty Road from Sierra Lane to North City Limit from 4 lanes to 6 lanes to address congestion and delays.	2013 TIP Development - Amend in a locally funded new non-exempt multi-phase project totaling \$18.86M	NON-EXEMPT	2040
Alameda	ALA130006	240250	Dublin	Dublin Boulevard widening	The project will widen Dublin Boulevard from 4 lanes to 6 lanes between Sierra Court and Dublin Court in the City of Dublin.	2013 TIP Development - Amend in a locally funded new non-exempt multi-phase project totaling \$4.2M	NON-EXEMPT	2040
Alameda	ALA977007	22063	Hayward	Route 238 Corridor Improvement	Hayward; On Foothill and Mission Boulevards (existing Route 238) from Industrial Parkway to Route 580; Construct Route 238 Corridor Improvement Project.	2013 TIP Development - Retain this project in the TIP for informational purposes as it is ongoing and to update funding.	NON-EXEMPT	2040
Alameda	ALA978004	94506	ACTC	East-West Connector in Fremont & Union City	In Fremont & Union City: From I-880 to Route 238; Construct new 4-lane roadway and widen existing roadways.	2013 TIP Development - Update RTP ID and funding plan to add \$18.9M in FY10 CON local funds, remove \$1M in FY14 CON Local, and add \$5M in FY15 CON Local funds	NON-EXEMPT	2040
Alameda	ALA978027	240745	Caltrans	I-880/SR 262 I/C and HOV lanes	I880 corridor: I-880 btw Santa Clara Co. line & Alvarado-Niles; Construct 2 HOV lanes, reconstruct I-880/Warren Ave/SR 262 I/C	2013 TIP Development - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2040
Alameda	ALA990015	21123	Union City	Union City Intermodal Station Infrastructure	Union City: Expand Union City BART Station to Complete Pedestrian Connection and Rail Station	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	NON-EXEMPT	2040
Alameda	ALA991081	230170	Oakland	42nd Ave. & High St. I-880 Access Improv.	Oakland: Widening and re-alignment of local streets in the vicinity of the I-880/42nd & High interchange. Includes modified traffic signals and intersection improvements.	2013 TIP Development - Update RTP-ID and funding plan to change RTP-LRP funds to Other Local funds	NON-EXEMPT	2040
Alameda	BRT990002	21131	BART	BART Oakland Airport Connector	The Oakland Airport Connector Project will provide a 3.2 mile Automated Guideway Technology (AGT) system to link the BART Coliseum station to the Oakland International Airport on exclusive right-of-way.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram \$105.7M in Local funds from FY11 to FY13 and reduce FY12 Other Local by \$300K	NON-EXEMPT	2040
Alameda	SCL991077	240742	Caltrans	I-680 Sunol Grade SouthBound HOV Lanes - SCL Final	Sunol Grade: From Rte. 84 in ALA to Rte. 237 in SCL.; Final project phase construction of HOV lane, shoulders and other project clean up. Santa Clara portion. More funding in ALA991083, ALA991084 and SCL991077.	2013 TIP Development - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2040
Contra Costa	CC-010002	240745	Caltrans	SR 24 - Caldecott Tunnel 4th Bore	Orinda/Oakland: Caldecott Tunnel SR 24; Develop and construct a 2-lane bore north of the existing tunnels. The scope is inclusive of Caltrans EAs: 294901, 294911, 29421, 29431 and 29494	2013 TIP Development - Update RTP ID and update the funding plan	NON-EXEMPT	2040
Contra Costa	CC-010023	21205	CCTA	I-680 / SR 4 I/C Reconstruction - Phases 1-5	At I-680/SR4: Reconstruct I-680/SR4 I/C, provide 2 lane direct connector from NB 680 to WB SR4 w/slip ramps at Pacheco Blvd, 2 lane direct EB SR4 to SB I-680, and widen SR4 in the vicinity of the I/C by one lane/ direction. Env Doc covers all phases.	2013 TIP Development: Updated funding plan to reflect schedule delay and increase total project cost to \$425.326M	NON-EXEMPT	2020
Contra Costa	CC-030001	21208	AC Transit	Richmond Prkwy Transit Center Parking	Richmond: Adjacent to I-80 at the Richmond Parkway Transit Center; Provide up to 800 parking spaces, improve transit facilities and improve bicycle/ped. access. (OLD TIP ID - CC-010028).	2013 TIP Development: Update RTP ID and the funding plan to reduce \$11.7M in FY14 CON Other Local funds and update RM2 funds	NON-EXEMPT	2040
Contra Costa	CC-030002	21210	Hercules	Hercules Intercity Rail Station - Phase 1	Rail Station Site & Access: Construct platform, realign tracks, construct necessary infrastructure like: creek realignment, utility relocation, retaining walls, transit loop & related bridges.	2013 TIP Development. Updated funding plan and transferred STIP TE Funding to TIP ID CC-090065 Hercules (Bio-Rad) Bay Trail.	NON-EXEMPT	2040

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Contra Costa	CC-030003	240365	BART	Richmond BART Parking Structure	Richmond: Richmond BART station; Construct six (6) level parking structure and an additional 120 long-term parking spaces.	2013 TIP Development - Retain in the TIP for informational purposes as the project is nearing completion.	NON-EXEMPT	2040
Contra Costa	CC-030004	22614	Martinez	Martinez Intermodal Station Parking Expansion	Expand parking at the Martinez Intermodal Station from 175 spaces to 600 spaces. Project includes adding a pedestrian and a vehicular bridge to access the parking lot.	2013 TIP Development: Updated funding plan to change the fund source RTP-LRP funds to Other Local and Sales Tax and total project cost of \$20M	NON-EXEMPT	2040
Contra Costa	CC-030005	22602	CCTA	I-680 Auxiliary Lanes	Danville: I-680 between Crow Canyon Road and Sycamore Valley Rd.; Construct Auxiliary Lanes in both directions.	2013 TIP Development - Update RTP ID	NON-EXEMPT	2040
Contra Costa	CC-030028	98999	CCTA	SR 4 East Widening from Somersville to SR 160	Expand SR4 from Somersville to SR160; Expand Hwy from 4 to 8 lanes including a wide median for transit from Somersville to Hillcrest and from 4 to 6 lanes from Hillcrest to SR 160. Project includes construction of 6 interchanges & under/over crossings.	2013 TIP Update: Revised funding amounts based on latest project estimate and CTC actions deprogramming CMIA and STIP funds.	NON-EXEMPT	2040
Contra Costa	CC-050025	21211	BART	E-BART - East Contra Costa Rail Extension	Pittsburg/Antioch: East Contra Costa County; Extend Rail Service from the Pittsburg/Bay Point Station into eastern Contra Costa County	2013 TIP Development - update funding plan with no net cost change	NON-EXEMPT	2040
Contra Costa	CC-050028	22353	CCTA	I-680 SB HOV Lane Gap Closure	Construct a HOV lane from North Main Street to Livorna in the southbound direction.	2013 TIP Development - Update funding plan to add in \$51M in RTP-LRP and \$29 M Sales Tax in FY19 for CONS. Toll credits used in lieu of match for RIP funds	NON-EXEMPT	2020
Contra Costa	CC-050030	98198	CC County	Contra Costa County Vasco Road Safety Improvements	Contra Costa County: Vasco Road from Walnut Blvd to the Alameda/Contra Costa County line: widen road and place concrete median barrier for 2.5 miles. Phase 1 completed a 1 mile widening segment. Phase 2 will extend median barrier for 1.5 miles.	2013 TIP Development - update funding and RTP funds to 2019, Update RTP reference and clarify scope of project and phases	NON-EXEMPT	2020
Contra Costa	CC-070004	22607	Antioch	Somersville Road Widening	Antioch: On Somersville Road between James Donlon Blvd and CCWD canal south of Buchanan Rd; Widen divided roadway.	2013 TIP Development - Update funding plan.	NON-EXEMPT	2040
Contra Costa	CC-070005	22607	Antioch	Hillcrest Ave Extension	Antioch: On Hillcrest Avenue between Prewett Ranch Rd and San Creek Road; Construct new 4 lane divided extension.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram ENV to FY13, PSE to FY16, and CON to FY19 and change the source of funds for \$2M in	NON-EXEMPT	2040
Contra Costa	CC-070006	22607	Antioch	Sand Creek Road Extension	Antioch: On Sand Creek Road between Hillcrest and Deer Valley Road; Construct new 2 lane extension.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram ENV to FY13, PSE to FY16, and CON to FY19 and change the source of funds for \$2M in	NON-EXEMPT	2040
Contra Costa	CC-070007	230288	Antioch	Antioch - Empire Road Widening	Antioch: On Empire Avenue between Lone Tree Way and UPRR/Antioch City limits; Widen from 2 to 4 lanes.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram ENV to FY13, PSE to FY16, and CON to FY17	NON-EXEMPT	2020
Contra Costa	CC-070008	22607	Antioch	Laurel Road Extension	Antioch: On Laurel Road between Hillcrest and SR4 Bypass; Construct new 4 lane divided extension.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram ENV and PSE to FY13, ROW to FY15 and CON to FY19	NON-EXEMPT	2040
Contra Costa	CC-070009	22607	Antioch	Slatten Ranch Road Extension - Lone Tree to Laurel	Antioch: On Slatten Ranch Road between Lone Tree Way and Laurel Road; Construct new 4 lane road.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram ENV and PSE to FY13 and CON to FY15	NON-EXEMPT	2040
Contra Costa	CC-070010	22607	Antioch	Antioch - Wild Horse Road Extension	Antioch: On Wild Horse Road between Hillcrest and SR4 Bypass; Construct new 2 lane arterial.	2013 TIP Development - Update funding plan.	NON-EXEMPT	2040
Contra Costa	CC-070011	230250	Brentwood	SR4/Brentwood Boulevard Widening - North (Phase I)	Brentwood: Widen SR4/Brentwood Boulevard from 2 to 4 lanes; Phase I: From Marsh Creek to Delta, including widening of bridge over Marsh Creek. traffic signal modifications, and utilities undergrounding.	2013 TIP Development - Update funding plan and scope (to match RTP scope)	NON-EXEMPT	2040

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Contra Costa	CC-070012	22607	Brentwood	SR4 (Brentwood Boulevard) Widening (South)	Brentwood: On SR4 (Brentwood Blvd) between Chestnut Street to Fir Streets; Widen from 2 to 4 lanes in each direction.	2013 TIP Development - Update funding plan to reprogram CON phase funds to FY14	NON-EXEMPT	2040
Contra Costa	CC-070014	22607	Brentwood	Lone Tree Way Widening	Brentwood: On Lone Tree Way between O Hara Ave and SR4; Widen from 2 lanes to 4.	2013 TIP Development - Update funding plan to reprogram ROW phase and CON phase to FY19 as LRP funds.	NON-EXEMPT	2040
Contra Costa	CC-070015	22607	Brentwood	Central Blvd Widening (Phase II)	Brentwood. On Central Blvd btw Griffith Ln and the intersection of Central and Dainty Ave; Widen bridge and roadway from 2 to 4 lanes.	2013 TIP Development - Update funding plan to add in \$500K in FY15 ROW Other Local funds, \$100K in FY13 ENV Other Local funds and reprogram CON phase funds to FY22 in LRP funds.	NON-EXEMPT	2040
Contra Costa	CC-070018	98133	CC County	Pacheco Blvd Widening and Realignment	Martinez: On Pacheco Blvd between Blum Rd and Arthur Road; Widen roadway to 2 lanes in each direction and realign. Project will be constructed in phases.	2013 TIP Development - Update the funding plan to reprogram ENV, PSE and ROW phases to FY15, reprogram CON to FY20, reduce PSE Other Local by \$500K and add \$1.52M in CON RTP-LRP funds	NON-EXEMPT	2030
Contra Costa	CC-070022	22351	CCTA	I-680 NB HOV Lane Extension	Walnut Creek/Pleasant Hill/Concord: On I-680 between Main St and SR242; Extend Northbound HOV lanes.	2013 TIP development - Update project schedule and change the funding year for RTP-LRP funds from FY 2015 to FY2019 for both CON and ROW Phases and increase project cost by \$4M	NON-EXEMPT	2020
Contra Costa	CC-070025	22390	Concord	SR4/Willow Pass Interchange Improvements	Concord. SR4/Willow Pass Rd. interchange improvements to accommodate traffic generated by the development of the Naval Weapons Station.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram ENV to FY13, PSE to FY17 and ROW and CON to FY19 and change the fund source for \$3M	NON-EXEMPT	2020
Contra Costa	CC-070026	98194	Concord	Commerce Avenue Extension	Concord: Commerce Avenue over Pine Creek to Waterworld Parkway; Extend roadway.	2013 TIP Development - Update RTP ID	NON-EXEMPT	2040
Contra Costa	CC-070027	230216	Concord	Waterworld Parkway Extension and New Bridge	Concord: Waterworld Parkway between Commerce Avenue and Meridian Park Boulevard; Construct a two-lane bridge over Walnut Creek connecting both roadways.	2013 TIP Development: Update funding to reflect a project cost of \$7.748M. Shift CON phase to FY 19 with LRP funding.	NON-EXEMPT	2030
Contra Costa	CC-070028	22609	Concord	Panoramic Drive Extension	Concord: On Panoramic Drive from North Concord/Martinez BART Station to Willow Pass Road; Construct a two-lane roadway and Class I trail.	2013 TIP Development: Update funding plan to reflect delay in the project schedule and to reprogram CON phase to FY19	NON-EXEMPT	2030
Contra Costa	CC-070036	22352	San Ramon	I-680 Direct Access Ramps	San Ramon: I-680/Norris Canyon or Executive Parkway; Construct Carpool and bus on-and off-ramps; additionally reconstruct overcrossing and widen median	2013 TIP Development - Update funding plan to reflect delay in the project schedule and to reprogram ENV phase to FY13, PSE phase to FY15, a portion of ROW phase to FY17 and remainder of ROW and	NON-EXEMPT	2020
Contra Costa	CC-070038	22609	Martinez	I-680/Marina Vista I/C Improvements	Martinez: I-680/Marina Vista I/C; Improvements including realignment of off-ramp, increased deceleration/acceleration distance for existing NB/SB traffic plus Bike/Ped facilities.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram ENV to FY14, PSE to FY15, ROW and CON to FY19 and change the fund source for ENV and	NON-EXEMPT	2030
Contra Costa	CC-070041	230238	Pittsburg	California Avenue Widening	Pittsburg: On California Avenue between Loveridge Road and Railroad Avenue; Widening from 2 to 4 lanes.	2013 TIP Development: Update funding plan to reflect delay in the project schedule and to reprogram ROW and CONST phase to FY19	NON-EXEMPT	2020
Contra Costa	CC-070043	230237	Pittsburg	West Leland Extension, Phase II	Pittsburg: On Leland Road from San Marco Blvd. to Willow Pass Rd.; Extend roadway.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram ENV to FY13, PSE to FY14, and ROW and CON to FY19	NON-EXEMPT	2020
Contra Costa	CC-070044	230236	Pittsburg	Pittsburg-Antioch Highway Widening	Pittsburg: Pittsburg-Antioch Highway from Somersville Rd to Loveridge Rd; Widen from 2 to 4 lanes with turning lanes.	2013 TIP Development - Update funding plan and delay LRP funds to FY19 for Construction	NON-EXEMPT	2020
Contra Costa	CC-070045	230233	Pittsburg	James Donlon Extension (Buchanan Rd Bypass)	Pittsburg: James Donlon Blvd from Ventura Dr. to Kirker Pass Road; Construct 2 lane roadway.	2013 TIP Development: Update funding plan to change Other Local to LRP and delay to FY19	NON-EXEMPT	2020

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Contra Costa	CC-070047	22610	Richmond	Griffin Drive Railroad At-Grade Crossing	Richmond/San Pablo: RR crossings at Griffin and John Avenue; Replace grade separation & expand from 2 to 4 lanes with a protected ped/bike path & protected crossing/updated warning signs.	2013 TIP Development - Update RTP ID	NON-EXEMPT	2040
Contra Costa	CC-070048	230205	St. Rte. 4 BA	SR4 Bypass: Sand Creek to Balfour Rd	Brentwood: SR4 Bypass between Sand Creek Rd & Balfour Rd.; Widen from 2 lanes to 4 lanes.	2013 TIP Development: Update funding plan to remove RTP-LRP funds from the TIP and increase the Other Local funds in FY14 to \$10M	NON-EXEMPT	2020
Contra Costa	CC-070049	230202	CCTA	SR4 Bypass: Laurel Rd to Sand Creek	Brentwood: SR4 Bypass from Laurel Road to Sand Creek Road; Widen from 2 lanes to 4 lanes.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	NON-EXEMPT	2020
Contra Costa	CC-070050	22609	Walnut Creek	Pleasant Hill Geary Road Widening Phase 3	Walnut Creek: Improve Geary Road from Putnam Blvd to Pleasant Hill Rd.; Provide one lane in each direction, center two way left turn lane, bike lanes and sidewalks, and signal improvement at Pleasant Hill Road.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reflect delay and change the source for \$6.54M in CON from XGEN to Salestax; change implementing	NON-EXEMPT	2030
Contra Costa	CC-070051	22610	Hercules	SR4/Willow Avenue Ramps	Hercules: SR4/Willow Avenue Ramps; Relocate and realign ramps.	2013 TIP Development - update funding plan	NON-EXEMPT	2040
Contra Costa	CC-070053	230206	CCTA	SR4: Balfour Road Interchange	Brentwood: Balfour Road/SR4; Construct new interchange.	2013 TIP Update: Change funding plan to reprogram PE phase to FY13, ROW phase to FY13 and CON phase funds to FY14 and change the fund source from RTP-LRP funds to East Contra Costa Regional	NON-EXEMPT	2040
Contra Costa	CC-070054	98222	CCTA	SR4 /SR160 Interchange and Connectors	Oakley: SR 160 at SR 4; Construct direct connectors; SB160 to EB 4 and WB 4 to NB 160.	2013 TIP Development - Update RTP ID	NON-EXEMPT	2020
Contra Costa	CC-070057	230203	CCTA	SR4 Bypass: Sand Creek Interchange	Brentwood: Sand Creek Rd at SR4 Bypass; Construct interchange.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	NON-EXEMPT	2020
Contra Costa	CC-070062	22122	WETA	Richmond Ferry Service	WETA: Implement new ferry transit service between Richmond and San Francisco.	2013 TIP Development - Update funding plan to increase project cost to \$42,362,500	NON-EXEMPT	2040
Contra Costa	CC-070063	21225	EB Reg Park Dis	Atlas Road - New Bridge and Roadway Extension	Richmond. Point Pinole Regional Shoreline; Extend Atlas road and construct new 2 lane road bridge with a separated ped/bike trail across UPRR tracks.	2013 TIP Development - Retain in the TIP for informational purposes and to update funding as the project is ongoing with CON funds in FY12	NON-EXEMPT	2040
Contra Costa	CC-070065	230289	Oakley	SR4 Realignment in Oakley	Oakley: West of Vintage Parkway to Main ST/2nd St.; Realign and widen a half-mile from 2 to 4 lanes including traffic signals.	2013 TIP Development - update funding plan to reprogram PE phase to FY13, ROW phase to FY19 and CON phase funds to FY19	NON-EXEMPT	2020
Contra Costa	CC-070075	230291	CC County	Kirker Pass Road NB Truck Climbing Lanes	Unincorporated Contra Costa County: On Kirker Pass Road; Construct north truck climbing lanes to improve traffic flow.	2013 TIP Development-Decrease the project scope to only NB lanes; update the funding plan to decrease total cost from \$20M to \$10.2M, delay all phases and change the source for \$5.6M from Other	NON-EXEMPT	2020
Contra Costa	CC-070077	22607	Brentwood	John Muir Parkway Extension (Phase I)	Extend and widen to 1 lane + 1 bike lane per direction from Foothill Dr. extension to Ventura Dr. and extend Foothill Dr. to new John Muir Pkwy (1 lane + 1 bike lane per direction).	2013 TIP Development - Update RTP ID and funding plan to reprogram RTP-LRP funds to FY19	NON-EXEMPT	2040
Contra Costa	CC-070078	22607	Brentwood	John Muir Parkway Extension: Ph. II	Extend John Muir Parkway northerly from Briones Valley Rd to a logical termini on Concord Avenue (1 lane + 1 bike lane per direction).	2013 TIP Development - Update RTP ID and funding plan to reprogram RTP-LRP funds to FY19	NON-EXEMPT	2040
Contra Costa	CC-070079	22607	CC County	Byron Hwy Extension	Byron: On Byron Highway between Bethel Island and Delta Road. Construct bridge over Rock Slough and extend road as a 4-lane facility (2 lanes in each direction).	2013 TIP update. Delay project schedule and funding plan. Shift CON phase to FY20 with LRP funds.	NON-EXEMPT	2040
Contra Costa	CC-070081	22607	CC County	Byron Highway - Vasco Road Connection	Construct an east-west connection road between Byron Highway and Vasco Road.	2013 TIP Update. Update funding plans to reflect project delay. Shift CON funds from FY14 to FY22 with LRP funds.	NON-EXEMPT	2040

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Contra Costa	CC-070086	230321	Hercules	Refugio Bridge - Bike, Ped & Vehicle Connectivity	As an element of the Hercules Intermodal Transit Center, Refugio (aka Bayfront) Bridge will create a bike/ped link to the Hercules Intermodal Transit Center & addit. access from Bayfront Blvd & John Muir Pkwy.	2013 TIP Development. Update funding plan; project is an element of the Hercules Intermodal Transit Center	NON-EXEMPT	2020
Contra Costa	CC-090002	230239	Pleasant Hill	Pleasant Hill - Buskirk Avenue Widening	Widen Buskirk Avenue from Monument Boulevard to Hookston Road. Install new traffic signal at the intersection of Buskirk Avenue/Clarie Drive and Buskirk Avenue/southern entrance to Crossroads Shopping Center. Realign Buskirk Avenue and Hookston Road.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update funding plan to reprogram CON phase to FY13 and change the regional air quality description to non-exempt	NON-EXEMPT	2040
Contra Costa	CC-090003	230318	CC County	North Richmond Truck Route Extension	Complete preliminary engineering, environmental review and initiate right-of-way acquisition for extension of Soto Street (two lane facility) from Market Avenue to Parr Blvd. Construction is planned for FY2015 and is not currently funded.	2013 TIP Development - Update funding plan to reflect delay in the project schedule. Shift ROW and CON phases (with LRP funds) to FY20 and FY21 and reduce cost to \$19.92M	NON-EXEMPT	2030
Contra Costa	CC-090008	22610	Hercules	Central Hercules Arterial Improvements	Central Hercules: Arterial Improvements including roadway expansion and various other improvements for express bus and rail transit facilities. Project will increase capacity and improve context sensitivity.	2013 TIP Development - Update funding plan and delay RTP-LRP funds for all phases other than PE. The PE phase is programmed in FY18	NON-EXEMPT	2040
Contra Costa	CC-090009	230321	Hercules	Construct Phase 2 of Hercules Intermodal Station	Hercules: Construction of Hercules Intermodal Station Phase 2 - Station Building, Pedestrian Bridge to platform, Transit Loop and Related Bridges, Track and Signal work, Surface Parking. Project will be completed in Phases as funding become available.	2013 TIP Development - Update RTP ID and funding plan to reprogram RTP-LRP funds to FY19 and increase total project cost to \$47.39M	NON-EXEMPT	2020
Contra Costa	CC-090010	240738	Caltrans	Double rail track btw Oakley & Port Chicago	CC County: Double the existing rail track between Oakley and Port Chicago by constructing second main track, crossovers, and related track and signal work.	2013 TIP Development - Retain in the TIP for informational purposes as the project is on-going	NON-EXEMPT	2040
Contra Costa	CC-090011	230253	Antioch	Fitzuren Road Widening & Realignment	Replace the old 2-lane Fitzuren Road with a new 4-lane divided arterial including shoulders/bike lanes, park and ride, and sidewalks	2013 TIP Development: Update funding plan to bring LRP funds to FY19	NON-EXEMPT	2020
Contra Costa	CC-090013	230232	Antioch	Construct new interchange at Route 4/Phillips Lane	Antioch: Construct new interchange at the intersection of Route 4/Phillips Lane	2013 TIP Development - Update funding plan. Involves moving LRP funds to FY19.	NON-EXEMPT	2020
Contra Costa	CC-090015	230274	Oakley	Main Street Widening	In Oakley: Widen Main Street to 6 lanes from State Route 160 to Big Break Road	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram PE to FY13, ROW to FY13, and CON to FY17 and FY19; Update the description to reflect the	NON-EXEMPT	2020
Contra Costa	CC-090017	22610	Pinole	Widen Pinole Valley Road ramps at I-80	Pinole: Pinole Valley Road ramps at I-80: Widen to provide dedicated right turn lane on eastbound on-ramp and bus turnout/shelter on westbound on-ramp	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update funding plan to reprogram PE to FY13, ROW to FY14 and CON to FY15	NON-EXEMPT	2040
Contra Costa	CC-090019	240629	San Ramon	Bollinger Canyon Road Widening (Alcosta to SRVB)	Widen Bollinger Canyon Road between Alcosta Blvd and San Ramon Valley Blvd from six to eight lanes	2013 TIP Development	NON-EXEMPT	2040
Contra Costa	CC-090021	240167	Brentwood	Brentwood Blvd North Widening - Phases II & III	Widen Brentwood Boulevard from existing 2-lanes to 4-lanes; Phase II: between Sunset Rd and Lone Tree Way and Phase III: from Lone Tree Way to Delta Rd.	2013 TIP Development: Update funding plan to reprogram PE phase to FY13, ROW phase to FY19 and CON phase to FY20 in RTP-LRP funds.Reduced overall cost to match RTP amount	NON-EXEMPT	2040
Contra Costa	CC-090022	230307	CC County	Contra Costa Co. Camino Tassajara Widening	Realign and widen Camino Tassajara Road from 2-lanes to 4-lanes, including paved shoulders for Class II bike lanes in both directions from Windemere Parkway to the Alameda/Contra Costa County line.	2013 TIP Development - Update funding plan to delay project schedule. Shift ROW and CON phases to FY19 with LRP funds	NON-EXEMPT	2020

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Contra Costa	CC-090023	230212	Concord	Concord Clayton Road/Treat Blvd Intersection Imps.	Concord: Clayton Rd and Treat Blvd: Constructing geometric improvements and upgrade traffic signal to improve operational efficiency and increase capacity	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reduce PE by \$40K, reduce ROW by \$40K and reprogram CON to FY13; Clarify the project description	NON-EXEMPT	2040
Contra Costa	CC-090024	98134	CC County	Dougherty Road Widening	Dougherty Rd Widening from Bollinger Canyon Road (north) to Rancho Park Loop.	2013 TIP Update. Update funding plan shifting ROW and CON phases to FY19 and FY20 with LRP funds and reduce cost to \$33.6M.	NON-EXEMPT	2040
Contra Costa	CC-090026	98115	Concord	Ygnacio Valley/Kirker Pass Roads Widening	Concord: Ygnacio Valley / Kirker Pass Roads from Michigan Boulevard to Cowell Road: widen from 4 lanes to 6 lanes	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram CON to FY19; Reformat the project description with no change in project scope	NON-EXEMPT	2020
Contra Costa	CC-090032	240738	Caltrans	Richmond Rail Connector	Construct an at-grade rail connection between BNSF's Stockton Subdivision and UP's Martinez Subdivision north of Richmond, in San Pablo. It is a phased project	2013 TIP Development - Update RTP ID and update the funding plan	NON-EXEMPT	2040
Contra Costa	CC-090036	230185	ECCTA	Tri Delta Transit Park and Ride Lots	ECCTA: Brentwood; Purchase land for park-and-ride intermodal facility to support E-BART and Express bus networks.	2013 TIP Development & Update RTP-ID	NON-EXEMPT	2040
Contra Costa	CC-110001	230693	San Pablo	El Portal Drive Rehabilitation / Gateway Phases II	El Portal Drive from Road 20 to Gateway section, pavement resurfacing, streetscape and median reconstruction, intersection improvements, traffic signal interconnect, and elimination of an uncontrolled single lane feeder from Road 20 onto El Portal Drive.	2013 TIP Development: Update funding plan to reflect delay in the project schedule and to reprogram the PE phase to FY13, ROW phase to FY14 and CON phase to FY15	NON-EXEMPT	2040
Contra Costa	CC-110002	230612	WETA	Martinez Ferry Service	WETA: Martinez: Implement ferry transit service between Martinez and San Francisco.	2013 TIP Development - Retain in the TIP for informational purposes as the project is on-going	NON-EXEMPT	2040
Contra Costa	CC-110003	230612	WETA	Antioch Ferry Service	WETA: Antioch: Implement ferry transit service between Antioch and San Francisco. Keep project in the TIP for future use.	2013 TIP Development - Retain in the TIP for informational purposes as the project is on-going	NON-EXEMPT	2040
Contra Costa	CC-110081	240745	Caltrans	Oakley to Port Chicago, Track Seg. 3, Phase 2	Oakley to Port Chicago, Track Seg. 3, Phase 2	2013 TIP Development - Update RTP ID	NON-EXEMPT	2040
Contra Costa	CC-130002	21211	BART	eBART Railroad Avenue Station	Design and construction of station at Railroad Avenue for the eBART project	2013 TIP Development - Amend in a new non-exempt multi-phase project totaling \$18.5M	NON-EXEMPT	2040
Marin	MRN050001	21325	TAM	US 101 / Greenbrae Interchange Corridor Imps.	Marin: US 101 Greenbrae I/C Corridor Improvements: Sir Francis Drake To Tamalpais; Reconfigure interchange.	2013 TIP Development - Update RTP ID and update funding plan to increase total project cost to \$154.8M	NON-EXEMPT	2020
Marin	MRN050034	98154	TAM	US 101 HOV Lanes - Marin-Sonoma Narrows (Marin)	Marin and Sonoma Counties: From SR 37 in Novato to Old Redwood Highway in Petaluma; Convert expressway to freeway and widen to 6 lanes for HOV lanes.	2013 TIP Development - Update RTP ID and funding plan to reflect CMIA and IIP funds and reprogram RTP-LRP funds to FY19	NON-EXEMPT	2020
Marin	MRN070006	240039	Novato	Novato Boulevard Widening, Diablo to Grant	Novato: Novato Blvd between Diablo and Grant Ave.: Improvements to roadway including widening existing two/three lanes to four lanes and adding turn lanes, bike lanes, curbs, and sidewalks.	2013 TIP Development - Update RTP ID	NON-EXEMPT	2040
Marin	MRN110032	240714	San Anselmo	San Anselmo - Center Blvd Bridge Replace (27C0079)	San Anselmo: Center Blvd Bridge over San Anselmo Creek, at Sycamore Ave: Replace existing 2 lane bridge with 3 lane bridge	2013 TIP Development - Update RTP ID	Non-Exempt NRS - NON-EXEMPT - Not Regionally Significant Project	2040
Marin	MRN110035	240714	Marin County	Mountain View Rd Bridge Replacement - 27C0154	Marin County: On Mountain View Rd. over San Geronimo Creek (Bridge No. 27C0154) near the intersection with Sir Francis Drake Blvd: Replace existing one-lane bridge with a new two-lane bridge	2013 TIP Development - Update RTP ID	Non-Exempt NRS - NON-EXEMPT - Not Regionally Significant Project	2040
Marin	MRN130001	240034	GGBHTD	Larkspur Ferry Terminal Parking Garage	In Larkspur: The Golden Gate Bridge Highway and Transportation District (GGBH&TD) is proposing to construct a new three story parking structure to be located at its Larkspur Ferry Terminal (LFT)	2013 TIP Development - Amend in a new non-exempt project totaling \$4 M	NON-EXEMPT	2040

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Napa	NAP010008	94152	Caltrans	SR 12 (Jamieson Canyon Road) Widening	In Napa and Solano Counties: SR 12 between SR 29 and I-80 (Jamieson Canyon): Rehab roadway and expand from two to four lanes.	2013 TIP Development - Update RTP ID and update the funding plan	NON-EXEMPT	2040
Napa	NAP050009	21017	Napa Vine	Park & Ride Lots in Napa County	Napa County: American Canyon, and Calistoga/St. Helena/Yountville ; Construct Park and Ride Lots.	2013 TIP Development - update RTP ID and update funding plan to reduce RM2 funds by \$2.4M	NON-EXEMPT	2040
San Francisco	SF-010015	21342	TBJPA	Transbay Term/Caltrain Downtown Ext - Ph.1	San Francisco: Transbay Transit Center; Replacement and expansion of the terminal at the present site.	2013 TIP Development - Update funding plan to reprogram land sales proceeds from RTP-LRP funds to Other Local funds.	NON-EXEMPT	2020
San Francisco	SF-010037	21510	SFMTA	SF Muni Third St LRT Phase 2 - New Central Subway	San Francisco: North-south alignment under 4th St. to Market, then under Geary to Stockton & under Stockton to Clay St; Extend the Light Rail line project includes procurement of four LRVs.	2013 TIP Development - Update RTP ID and funding plan to change the fund source of RTP-LRP funds to 5309 New starts funds per the Full Funding Grant Agreement	NON-EXEMPT	2020
San Francisco	SF-010038	21549	SF DPW	Bayview Transportation Improvements	In San Francisco-Implement direct access routes from US 101 to the Hunters Point Shipyard along Cesar Chavez Street to Illinois Street, Cargo Way and Jennings St and along Cesar Chavez Street to Evans Avenue.	2013 TIP Development - Update scope, RTP ID and funding plan to decrease total project cost to \$37.17M	NON-EXEMPT	2020
San Francisco	SF-050002	230290	TBJPA	Transbay Terminal/Caltrain Downtown Ext: Ph. 2	San Francisco: Transbay Terminal; Extend Caltrain commuter rail service from Fourth/Townsend to Transbay Transit Center.	2013 TIP Development - Update funding plan to add \$1,957,000,000 in RTP-LRP funds in FY19 to show full project funding	NON-EXEMPT	2020
San Francisco	SF-050043	240681	MTC	City CarShare Pilot Program	City and County of San Francisco; Expand car sharing services to serve low and moderate-income neighborhoods (Project is Con Phase Only).	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	Non-Exempt NRS - NON-EXEMPT - Not Regionally Significant Project	2040
San Francisco	SF-070003	22415	SFMTA	Historic Streetcar Extension to Fort Mason	San Francisco: From Fisherman's Wharf through National Park Service lands in Aquatic Park to Fort Mason; Extend the E-line or the current F-line service.	2013 TIP Development - Update RTP ID	NON-EXEMPT	2040
San Francisco	SF-070004	230164	SF County TA	Geary Bus Rapid Transit	Muni: On Geary Boulevard; Design and implement a rail-ready BRT project.	2013 TIP Development -Revised schedule to reflect 2019 completion, updated project description, escalated cost based on schedule change to \$183.7M, updated contacts	NON-EXEMPT	2020
San Francisco	SF-070005	230161	SF County TA	Van Ness Avenue Bus Rapid Transit	Muni: On Van Ness Avenue from Mission to Lombard; Design and implement a BRT project.	2013 TIP Development - Updated the funding plan to reprogram funds among phases and program years and update the delivery milestones.	NON-EXEMPT	2020
San Francisco	SF-070014	240488	Port of SF	Pier 70 Shoreline Open Space Improvements	San Francisco: Port of San Francisco Pier 70; Implement Shoreline Open Space improvements including a historic preservation 22nd Street connection. Port Project listed for informational purposes only.	2013 TIP Development - Update RTP ID	NON-EXEMPT	2040
San Francisco	SF-090004	230490	SF DPW	Harney Way Roadway Widening	In San Francisco: Harney Way from US 101 to Jamestown;Improvements including right-of-way engineering, land acquisition for future widening of roadway, design, landscaping and sidewalk improvements, roadway construction, and traffic signal improvements.	2013 TIP Development - Update RTP ID and funding plan to reprogram RTP-LRP funds and Private Developer Fees to FY20, and increase total project cost by \$2.05M	NON-EXEMPT	2030
San Francisco	SF-090012	240309	SFMTA	Additional Light Rail Vehicles to Expand Muni Rail	SFMTA: Addition of 10 light rail vehicles to expand service and reduce overcrowding on Muni Light rail lines.	2013 TIP Development - Update project schedule and funding plan to reprogram RTP-LRP funds from FY15 to FY19	NON-EXEMPT	2020
San Francisco	SF-090013	240147	SFMTA	Geneva/Harney Limited/Express Bus Service	Muni: provide 22 vehicles to operate Bus Rapid Transit service on existing streets in the Geneva/Harney corridor	2013 TIP Development - Update the funding plan to reprogram \$1M in CON Other Local from FY14 to FY16 and \$27M in CON Other Local from FY15 to FY17	NON-EXEMPT	2030
San Francisco	SF-090016	240147	SFMTA	Transit Center in Hunters Point	Muni:Transit Center in Hunters Point; Construct 10 bays, Low-level platform, Operator restroom, bus shelters,Electrical ductbank for MUNI power,etc	2013 TIP Development - add PBA RTPID, move CON funds from 2017 to 2019	NON-EXEMPT	2030
San Francisco	SF-090017	240147	SFMTA	Express/Ltd Bus Service into Hunters Point (north)	Muni: Procure and customize 20 trolley vehicles to operate new peak-period Bus Rapid Transit Service between Hunters Point and Downtown San Francisco.	2013 TIP Development - Update project schedule and funding plan to reprogram RTP-LRP funds to FY19	NON-EXEMPT	2030

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San Francisco	SF-090018	240309	SFMTA	Oakdale-Palou Interim High-Capacity Bus Corridor	Muni: Procure, provide and customize 18 vehicles to operate High-Capacity Bus Service on existing transit corridor in the Bayview anticipating future Transit-Preferential Streets improvements.	2013 TIP Development - Update funding plan to move CON funds to 2019 and reduce PE funds by \$1M	NON-EXEMPT	2020
San Francisco	SF-090019	240328	SFMTA	Extended Trolleybus Service into Hunters Point	SFMTA: Procure 5 electric trolley vehicles and construct 1 mile overhead wire infrastructure to extend High-Capacity Bus Service from existing transit corridor in the Bayview to Hunters Point	2013 TIP Development - Update RTP ID and funding plan to reprogram CON phase funds to FY19	NON-EXEMPT	2020
San Francisco	SF-090020	240147	SFMTA	Geneva-Harney BRT to Hunters Point - Geneva Extn	SFMTA: Extension of Geneva Harney BRT with an additional 0.35 miles from Bayshore/Geneva to Bayshore Transit Center, includes special bus shelters/landscaping/art for identity	2013 TIP Development - update funding plan to replace RTP-LRP funds in FY15 with Other Local funds in FY14	NON-EXEMPT	2030
San Francisco	SF-090021	240328	SFMTA	Geneva-Harney BRT to Hunters Point - Geneva Portio	SFMTA: Construct BRT in exclusive right-of-way on Geneva from Balboa BART to Naples. Construct TPS treatments on Geneva from Naples to Bayshore Blvd.	2013 TIP Development - Update RTP ID and funding plan to reprogram \$42m in CON phase funds from Other Local to RTP-LRP funds in FY19	NON-EXEMPT	2020
San Francisco	SF-090023	240147	SFMTA	Geneva-Harney BRT to Hunters Point - Harney Portio	San Francisco: Bayview and Hunters Point: Construct extension of Geneva Harney BRT from Bayshore Transit Center to Hunters Point Transit Center	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram PE phase to FY14, \$5M in FY14 CON to FY16 ROW and remaining CON funds to FY19; and	NON-EXEMPT	2030
San Francisco	SF-090032	240171	SFMTA	SFMTA: TEP Capital Implementation Program	SFMTA: Design and construction of investments focused on reliability improvements, travel time reductions, and Muni route updates. This is a phased project.	2013 TIP Development - Update RTP ID; Update the regional air quality description to "NON-EXEMPT" to better reflect the project scope	NON-EXEMPT	2020
San Francisco	SF-110002	240358	SFMTA	Mission Bay/UCSF Multi-Modal Transportation Imps.	San Francisco: Mission Bay: street additions, connections, realignments, improvements and enhancements; widen I-280/Mariposa off-ramp; and construct a transit loop for the T-third light rail line.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Expand description to incorporate elements from SF-110001, SF-110003, and SF-110004; Update the funding plan to add \$38M	NON-EXEMPT	2020
San Francisco	SF-110006	240163	SF DPW	Hunters Pt Shipyard and Candlestick Pt Local Roads	In San Francisco: Hunters Point Shipyard and Candlestick Point: Implement new local streets to support multi-modal mixed use development.The project is phased	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area and the funding plan to remove \$450K in Other Local and add \$338M in Private-P3 funds. The project is phased	NON-EXEMPT	2030
San Francisco	SF-110042	240526	SFMTA	SFMTA: N-Judah Customer First Program	SFMTA: On the N-Judah transit Corridor : enhancements include but are not limited to the following: Colorizing existing dedicated transit lanes, Transit Signal Priority, Vehicle Branding, and Enhanced stop identification.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the regional air quality description to "NON-EXEMPT" to better reflect the project scope	NON-EXEMPT	2020
San Francisco	SF-110045	240526	SFMTA	SFMTA: 8X Customer First Program	Project improves mobility and accessibility by moving people faster and with higher reliability. This premium transit service improves connections by providing a network benefit and expanding the range of destinations for 8X customers.	2013 TIP Development - Update RTP ID; Update the Regional Air Quality Description to Non-Exempt to better reflect the project description	NON-EXEMPT	2020
San Francisco	SF-110049	240728	SF County TA	Treasure Island Congestion Pricing Program	San Francisco: Treasure Island: Implement Congestion Pricing Program	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the project description to include implementation of the Congestion Pricing Program; Update funding plan; Update the	NON-EXEMPT	2040
San Francisco	SF-130001	240155	SF DPW	SF- Better Market Street Transportation Elements	In San Francisco: Market St from Steuart St to Octavia Blvd: improve roadway, including resurfacing, sidewalk and transit boarding improvements, transit connections, traffic signals, transportation circulation changes and utility relocation and upgrade.	2013 TIP Development - Amend in a new non-exempt multi-phase project totaling \$206.4 M	NON-EXEMPT	2020

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San Francisco	SF-130002	240399	SFMTA	Implement Parkmerced Street Network	In San Francisco: Implement Parkmerced Street Network (includes a new street network, traffic calming, pedestrian improvements, biking improvements, streetscape improvements, and transit/shuttle stops)	2013 TIP Development - Amend in a new non-exempt multi-phase project totaling \$47.96M	NON-EXEMPT	2040
San Francisco	SF-130003	240545	SFMTA	19th Ave. & Parkmerced M-Line Realignment	In San Francisco: Extend light rail corridor into Parkmerced development project, add three new light rail stations and facilities. Add rail track and operator support facilities.	2013 TIP Development - Amend in a new non-exempt multi-phase project totaling \$80.94M	NON-EXEMPT	2030
San Francisco	SF-130004	240400	SF County TA	Treasure Is/Yerba Buena Is Street Improvements	In treasure Island: Implement Treasure Island/Yerba Buena Island street network Project includes a new street network, traffic calming, bike & pedestrian improvements, streetscape and transit/shuttle stops.	2013 TIP Development - Amend in a new non-exempt multi-phase project totaling \$47.96M	NON-EXEMPT	2040
San Francisco	SF-130005	240730	SF County TA	Treasure Island Pricing Mobility Improvements	In Treasure Island: Pricing Program Mobility Improvements including Transit Capital and maintenance improvements. The project is phased	2013 TIP Development - Amend in a new non-exempt multi-phase project totaling \$23.5M	NON-EXEMPT	2040
San Francisco	SF-130006	240147	SF DPW	Southeast Waterfront Transportation Improvements	In San Francisco: Between Hunters Point Shipyard and Candlestick Point: improve roadways to facilitate connection of a 5-mile, multi-modal corridor, connecting project area with the Bayshore Intermodal Station. Project development was part of SF-010038	2013 TIP Development - Amend a new non-exempt project into the TIP using \$103M in Local, \$103M in Private, and \$48M in RTP-LRP.	NON-EXEMPT	2030
San Francisco	SF-130007	240370	SF DPW	HOPE SF Street Grid Phase 1	In San Francisco: Hunters View in Southeast at the intersections of Evans and Middle Point Road: realign existing streets and add new streets at public housing sites to improve transit, walking, and biking.	2013 TIP Development - Amend a new non-exempt project into the TIP using \$10M in local funds from the 2011 Road Repaving and Street Safety Bond	NON-EXEMPT	2030
San Francisco	SF-990004	240309	SFMTA	Islais Creek Motor Coach Facility	Muni: Islais Creek Motor Coach Facility; Develop a new operating division to replace the Kirkland motor coach operating facility when it is vacated for redevelopment. Phase 2 will construct a Maintenance and Operations Bldg.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	NON-EXEMPT	2020
San Francisco	SF-991030	94089	SF County TA	US 101 Doyle Drive Replacement	San Francisco: US 101 (Doyle Drive) from Lombard Street/Richardson Avenue to Route 1 Interchange; Replace/rehabilitate roadway.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to add \$928.65M in FY18 SHA (non-SHOPP), \$6k FY13 SLPP and make minor phase/programming year	NON-EXEMPT	2040
San Mateo	SM-010031	240745	Caltrans	US 101 Auxiliary Lanes - 3rd to Millbrae	Cities of San Mateo & Millbrae: Route 101 from 3rd Ave. in San Mateo to Millbrae Avenue in Millbrae; Construct new Auxiliary Lanes, reconstruct overcrossing & install ramp meters.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	NON-EXEMPT	2040
San Mateo	SM-030001	21608	Caltrans	US 101 Auxiliary Lanes - Marsh Road to SCL County	San Mateo County: On US 101 from Santa Clara County Line to Marsh Road; Construct new Auxiliary Lanes.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	NON-EXEMPT	2020
San Mateo	SM-050001	98204	Pacifica	SR 1 - Fassler to West Port Drive Widening	In Pacifica: Route 1 between Fassler Ave. & West Port Dr.; Add an additional lane in each direction.	2013 TIP Development - Update RTP ID and funding plan to increase total project cost to \$50.55M funded with \$41.75M in Sales Tax Measure Funds, \$6.9M in RIP funds and \$1.9M in Other Local funds	NON-EXEMPT	2020
San Mateo	SM-050002	240018	SMCTA	Dumbarton Rail Service (PE and ROW only)	Dumbarton Bridge: Rail service over the Dumbarton bridge.	2013 TIP Development - update funding plan	NON-EXEMPT	2040
San Mateo	SM-050027	21603	SMCTA	US 101 / Woodside Interchange Improvement	Redwood City: US101/Woodside; Reconstruct and reconfigure interchange.	2013 TIP Development - Update RTP ID and funding plan to reprogram PE phase funds to FY15, ROW phase funds to FY18 and CON phase funds to FY19	NON-EXEMPT	2030
San Mateo	SM-050028	21602	Caltrans	US 101 / Broadway Interchange Improvement	City of Burlingame: US 101/Broadway Interchange; Reconstruct and reconfigure interchange. Replace existing bridge with a wider bridge structure. CMAQ funds to be used on bike/ped components of project.	2013 TIP Development - Update RTP ID	NON-EXEMPT	2020

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San Mateo	SM-070008	240048	Caltrain	Caltrain South Terminal Phase II and III	Phase II of this project is to construct an additional mainline track and new signal controls just north of Diridon Station. Phase III is to install an additional mainline track and signal controls just south of Diridon Station.	2013 TIP Development - update funding plan.	NON-EXEMPT	2020
San Mateo	SM-090003	94644	SMCTA	Construct WB lane on Rte 92	In San Mateo County: On Route 92; Construct a West Bound portion of slow vehicle passing lane in the vicinity between Route 35 to I-280.	2013 TIP Development - Update scope to portion of the passing lane and change funding to within RTP limits and push out ROW, PSE&E and CON to outer years with RTP-LRP.	NON-EXEMPT	2030
San Mateo	SM-090004	22756	Brisbane	US 101/Candlestick Interchange	In San Mateo County: U.S. 101/Candlestick Point Interchange - Reconfigure interchange to allow for safer and better flow of traffic	2013 TIP Development - Update project funding year for the RTP-LRP funds from FY 2016 to FY 2019 to reflect actual progress of PSR and related development's Environmental Impact Report.	NON-EXEMPT	2020
San Mateo	SM-090005	240176	Foster City	Foster City - Triton Drive Widening	In Foster City: Construct additional eastbound lane on Triton Drive between Foster City Blvd. and Pilgrim Drive. in addition, re-stripe Metro Center Boulevard and re-align traffic median on east bound MCB between the off-ramp and Foster City Boulevard	2013 TIP Development - Update funding plan	NON-EXEMPT	2040
San Mateo	SM-090006	230704	Foster City	State Route 92/Chess Drive - Ramp Widening Project	In Foster City: At the SR 92/Chess Drive intersection; widen on and off ramps	2013 TIP Development - Update RTP ID and funding plan	NON-EXEMPT	2040
San Mateo	SM-090007	230428	Redwood City	Blomquist Street Extension	In Redwood City: On Blomquist Street; extend from Seaport Blvd to Bair Island Road. Project may be phased.	2013 TIP Development - Update RTP ID and funding plan to reprogram PE phase funds to FY15, and CON phase funds to FY20	NON-EXEMPT	2040
San Mateo	SM-090008	230417	San Carlos	US101/Holly Interchange modification	City of San Carlos: At Holly St./ 101 Interchange Modification;Widen east bound to north bound ramp to two lanes and eliminate north bound to west bound loop	2013 TIP Development - Update funding plan	NON-EXEMPT	2020
San Mateo	SM-090009	21604	SMCTA	US 101 Aux lanes from Sierra Point to SF Cnty Line	San Mateo County: On US 101; Construct auxiliary lanes from Sierra Point to SF County Line	2013 TIP Development - Update project schedule and change the funding year for the RTP-LRP funds from FY2015 to FY2019.	NON-EXEMPT	2020
San Mateo	SM-090010	21615	SMCTA	I-280/Route 1 interchange safety improvements	Daly City: Implement interim safety and operational improvements at the I-280/Route 1 interchange.	2013 TIP Development - Update RTP ID and funding plan to reprogram CON phase funds to FY19	NON-EXEMPT	2030
San Mateo	SM-090011	21892	SMCTA	Woodside Road Widening - El Camino to Broadway	Redwood City: Widen portions of Woodside Road from 4 to 6 Lanes from El Camino Real to Broadway	2013 TIP Development - Update funding plan	NON-EXEMPT	2040
San Mateo	SM-090013	21613	SMCTA	Improve Rte 92 from SM Bridge to I-280	In San Mateo County: On Route 92; Widen and add an uphill passing lane from US 101 to I-280.	2013 TIP Development - Update project schedule and change the funding year for the RTP-LRP funds from FY2015 to FY2019. Reduce project cost to RTP cap.	NON-EXEMPT	2030
San Mateo	SM-090014	22282	SMCTA	Improve US 101 operations near Rte 92	City of San Mateo: On US 101; Operational improvements near Route 92	2013 TIP Development - Update funding plan	NON-EXEMPT	2030
San Mateo	SM-090015	22751	Half Moon Bay	Route 1 improvements in Half Moon Bay	In Half Moon Bay: On Route 1; Improve safety on Route 1, including adding protected left and right turn lanes at Route 1, adding through lanes on Route 1 at signalized intersections, and constructing new pedestrian/bicycle path	2013 TIP Development - Update scope and funding plan to reflect the scope in the RTP	NON-EXEMPT	2040
San Mateo	SM-110002	22120	WETA	WETA: Redwood City Ferry Service	WETA: Redwood City; Implement ferry transit service between Redwood City and San Francisco	2013 TIP Development	NON-EXEMPT	2040
San Mateo	SM-110003	22279	SSF	Utah Avenue (Produce Avenue) Overcrossing	This project will develop a construct a local interchange over highway 101 and ramp improvements at Oyster Point, Miller Avenue, Wondercolor Lane, and Grand Avenue.	2013 TIP Development - Update RTP ID and funding plan to reprogram PE phase funds to FY14, CON phase funds to FY19 and add \$160K to the PE phase	NON-EXEMPT	2040
San Mateo	SM-110007	21011	San Mateo	Delaware Street Bike Lane and Streetscape	In City of San Mateo: On Delaware Street between Charles Lane and Guilford Avenue; Bicycle/pedestrian improvements	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	Non-Exempt NRS - NON-EXEMPT - Not Regionally Significant Project	2040

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San Mateo	SM-979013	240745	Caltrans	SR 1 Devils Slide Bypass	San Mateo County: SR 1 between 2nd Street in Montara and Linda Mar Boulevard in Pacifica; Construct new bypass with tunnel(s) and approaches.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	NON-EXEMPT	2040
Santa Clara	BRT030001	240375	VTA	BART - Berryessa to San Jose Extension	BART: Extend BART from Berryessa Station to San Jose and Santa Clara. (Please see expanded project description for more details.)	2013 TIP Development - Update RTP ID and funding plan to remove project development phases and update construction funding	NON-EXEMPT	2030
Santa Clara	SCL030006	21785	San Jose	US 101 / Blossom Hill I/C Reconst & Road Widening	San Jose: US-101/Blossom Hill Rd IC; widen Blossom Hill Rd and reconstruct I/C to provide an additional lane in each direction, including the OC structure over US-101 plus other improvements.	2013 TIP Development - Update RTP ID and funding plan to reprogram ENV phase funds to FY14, PSE phase funds to FY15, ROW phase funds to FY16 and CON phase funds to FY19	NON-EXEMPT	2020
Santa Clara	SCL050009	22956	VTA	Capitol Expressway LRT Extension- Phase II	Phase II of the project will provide light rail extension in the East Valley extending the Capitol Avenue light Rail line 2.6 miles from the existing Alum Rock Transit Center to a rebuilt Eastridge Transit Center.	2013 TIP Development - Update RTP ID and funding plan to reduce total project cost to \$293.9M	NON-EXEMPT	2020
Santa Clara	SCL050077	240404	Milpitas	SR 237 - Calaveras Blvd Widening	In Milpitas: Calaveras Boulevard from Town Center Drive to Abel Street; widen roadway from 4 to 6 lanes and add pedestrian and bicycle facilities.	2013 TIP Development - Update RTP ID and funding plan to reprogram PE phase funds to FY16, ROW phase funds to FY18 and CON phase funds to FY20. Increase project cost to \$61.5M	NON-EXEMPT	2020
Santa Clara	SCL050080	240740	Santa Clara Co	Oregon-Page Mill Expwy Improvements	Santa Clara County: On the Oregon-Page Mill Expwy btw US 101 and SR 82, Traffic improvements including traffic signal upgrade, optimizing timing plans & bike and ped facilities, and pavement microsurfacing	2013 TIP Development - Update RTP ID	NON-EXEMPT	2040
Santa Clara	SCL070004	22965	San Jose	US 101 / Mabury New Interchange	In San Jose: US 101/Mabury interchange; Construct full interchange.	2013 TIP Development - Update RTP ID and funding plan to reprogram PE phase funds to FY14, ROW phase funds to FY15 and CON phase funds to FY19	NON-EXEMPT	2030
Santa Clara	SCL070049	22180	Santa Clara Co	Central Expressway Auxiliary Lanes	Design, environmental clearance and construction to add auxiliary lanes on Central Expressway between Lawrence Expressway and Mary Avenue.	2013 TIP Development - Update the funding plan to reprogram CON RTP-LRP funds from FY15 to FY19 and it is a multi-phase project	NON-EXEMPT	2020
Santa Clara	SCL090001	240117	VTA	Santa Clara/Alum Rock Transit Improvement/BRT	In San Jose: Implement BRT improvements in the Santa Clara/Alum Rock route for BRT lines 522 and 523, including: dedicated guideways, signal prioritization, ticket vending machines, premium BRT stations, real-time information, and specialized vehicles.	2013 TIP Development - Update RTP ID, exemption code to non-exempt and update funding plan	NON-EXEMPT	2040
Santa Clara	SCL090003	230449	San Jose	San Jose Charcot Avenue Extension Over I-880	San Jose: Charcot Avenue Extension over I-880; Extend new 2-lane roadway with bike lanes and sidewalks providing new multi-modal connection to the North San Jose employment center.	2013 TIP Development - Update RTP ID and funding plan to reprogram PE phase funds to FY16, ROW phase funds to FY17 and CON phase funds to FY17 and FY19. Reduce cost to reflect latest estimates	NON-EXEMPT	2020
Santa Clara	SCL090004	240740	San Jose	Downtown San Jose Couplet Conversions	In San Jose: Conversions of one-way couplets to two-way streets; reduce lanes; add bike lanes along 10th/11th Streets, Almaden/Vine, and 2nd/3rd Streets.	2013 TIP Development - Update RTP ID and funding plan to reprogram PE phase funds to FY13, ROW phase funds to FY18 and CON phase funds to FY20	NON-EXEMPT	2040
Santa Clara	SCL090005	230201	San Jose	Coleman Avenue Widening from I-880 to Taylor St.	In San Jose: Coleman Ave from I880 to Taylor St: Widen from 4 to 6 lanes.	2013 TIP Development - Update the project description to provide clarity with no change in the project scope and update the funding plan to reflect the delay in the project schedule.	NON-EXEMPT	2040
Santa Clara	SCL090007	230645	San Jose	San Jose North 1st Street Core Area Streets Imps.	In San Jose: Improve the North 1st Street "core area grid."	2013 TIP Development - Update RTP ID and funding plan to reprogram PE phase funds to FY14, ROW phase funds to FY15 and CON phase funds to FY19	NON-EXEMPT	2020

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Santa Clara	SCL090008	230644	San Jose	San Jose: Various Intersection Improvements	In San Jose: Construct various intersection improvements.	2013 TIP Development - Update RTP ID and funding plan to reprogram PE phase funds to FY14, ROW phase funds to FY16 and CON phase funds to FY19	NON-EXEMPT	2020
Santa Clara	SCL090010	230273	San Jose	Montague Expwy Widening - Lick Mill-Trade Zone	In San Jose: On Montague Expressway between Lick Mill and Trade Zone: widen to 8 lanes	2013 TIP Development - Update project funding plan to reflect schedule delay	NON-EXEMPT	2020
Santa Clara	SCL090015	230363	San Jose	I-880/Montague Expressway interchange Improvements	In San Jose: Construct I-880/Montague Expressway interchange Improvements.	2013 TIP Development - Update RTP ID and funding plan to reprogram PE phase funds to FY15, ROW phase funds to FY15 and CON phase funds to FY16 and reduce project cost to \$14.34M	NON-EXEMPT	2020
Santa Clara	SCL090016	230294	VTA	New SR152 Alignment Study	Santa Clara/ San Benito counties: Complete PA&ED for new alignment of SR152 between US101 and SR156 in Santa Clara and San Benito counties.	2013 TIP Development - Update RTP-ID and retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2020
Santa Clara	SCL090017	230273	Santa Clara Co	Montague Expwy Widening - Trade Zone-I-680	In Santa Clara County: Widen Montague Expressway between Trade Zone and I-680.	2013 TIP Development - Update the funding plan to reflect the current schedule and costs and reduce scope to fit within the RTP scope	NON-EXEMPT	2020
Santa Clara	SCL090019	21922	San Jose	San Jose International Airport People Mover	In San Jose: Provide an automated transit service that connects the San Jose Mineta International Airport to VTA's Guadalupe LRT, Caltrain and future BART stations as well as provide circulation within the Airport.	2013 TIP Development - revise funding plan to reflect project delays.	NON-EXEMPT	2040
Santa Clara	SCL090025	21722	San Jose	US 101 SB Trimble Road/De La Cruz Boulevard/Centra	In Santa Clara: Modifies existing loop cloverleaf ramp from SB US 101 to Trimble Rd into a partial cloverleaf ramp.	2013 TIP Development - Update RTP ID and funding plan to reflect schedule delay in project	NON-EXEMPT	2030
Santa Clara	SCL090027	230262	Santa Clara Co	US 101/Montague Expressway Interchange	Reconfigure current interchange into a "parclo" interchange at US 101 and Montague Expressway.	2013 TIP Development - Update the funding plan to change the fund source of RTP-LRP funds to Other Local	NON-EXEMPT	2040
Santa Clara	SCL090030	240439	VTA	SR 85 Express Lanes	In Santa Clara County: Implement roadway pricing on SR 85 carpool lane. Construct additional express lane in each direction between I-280 and Route 87 and add aux lane on 85.	2013 TIP Development - Update funding plan to reflect project cost and updated scope	NON-EXEMPT	2040
Santa Clara	SCL090040	98119	VTA	LRT Extension to Vasona Junction	In Campbell: Extend the light-rail line from the existing Winchester Station to a new Vasona Junction Station, near Route 85.	2013 TIP Development - Update the funding plan to reflect a delay in the ROW and CON phases	NON-EXEMPT	2020
Santa Clara	SCL110002	240466	VTA	Santa Clara County - US 101 Express Lanes	Santa Clara County: US 101 from Dunne Ave in Morgan Hill to San Mateo county line in Palo Alto: Convert existing US 101 HOV lane to express lane, add a second express lane and add SB aux lanes between Great America Parkway and Lawrence Expressway.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to add PSE and ROW to TIP Years and add \$339M in RTP-LRP; Update the project description to include	NON-EXEMPT	2020
Santa Clara	SCL110004	22854	Santa Clara Co	Page Mill Road/I-280 Interchange Reconfiguration	In Santa Clara County: modify I-280/Page Mill Road interchange.	2013 TIP Development - Update the funding plan to delay the ROW phase to FY13 and the CON phase to FY14 and reflect current cost estimate.	NON-EXEMPT	2040
Santa Clara	SCL110005	240374	VTA	BART - Warm Springs to Berryessa Extension	In Santa Clara County: This project will extend BART from Warm Springs to the future Berryessa Station in San Jose, California.	2013 TIP Development - Update RTP ID	NON-EXEMPT	2020
Santa Clara	SCL110006	230200	San Jose	San Jose - Autumn Street Extension	In San Jose: Autumn St between Julian Street and San Carlos Street: Widen, partially realign, and extend Autumn Street to adequately accommodate projected traffic demand	2013 TIP Development: update the project description for clarification with change in the actual scope of the project and update funding plan	NON-EXEMPT	2020
Santa Clara	SCL110007	22186	Santa Clara Co	San Tomas Expressway Widening	In Santa Clara County: Widen San Tomas Expressway between El Camino Real and Williams Road including adding sidewalks, adding a Class 1 Bike Path and replacing sound walls. Project is phased.	2013 TIP Development - Update RTP ID and funding plan to reprogram \$9M in CON phase RTP-LRP funds to FY19 and reduce total project cost to \$56.1M	NON-EXEMPT	2030

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Santa Clara	SCL110008	240463	VTA	SR 237 Express Lanes: Zanker Rd to Mathilda Ave	In Santa Clara County: Implement roadway pricing on SR 237 carpool lane.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to add \$1.1M in FY13 PSE and reprogram \$1.9M in Other Local from FY14 to FY15 and \$10M in Other	NON-EXEMPT	2040
Santa Clara	SCL110009	240119	VTA	El Camino Real Bus Rapid Transit	In Santa Clara County: Implement Bus Rapid Transit improvements on El Camino Real/The Alameda including: dedicated guideways, signal prioritization, low-floor boarding, ticket vending machines, premium BRT stations, real-time information, and vehicles.	2013 TIP Development - Update project schedule and funding plan	NON-EXEMPT	2040
Santa Clara	SCL110010	240118	VTA	VTA: Stevens Creek Bus Rapid Transit	Implement Bus Rapid Transit improvements in the Stevens Creek corridor including: dedicated guideways, signal prioritization, low-floor boarding, ticket vending machines, premium BRT stations, real-time information, and specialized vehicles.	2013 TIP Development - Update RTP ID and funding plan to increase total project cost to \$161.5M	NON-EXEMPT	2020
Santa Clara	SCL110037	240508	Palo Alto	Palo Alto California Avenue Transit Hub	Palo Alto: On California Ave between El Camino Real (SR82) and the California Avenue - Park Blvd Plaza; streetscape, traffic calming, and Park Bvd Plaza improvements.	2013 TIP Development - Update the funding plan to reprogram the CON phase to FY13. Project back on Schedule for Fall 2013 Construction.	Non-Exempt NRS - NON-EXEMPT - Not Regionally Significant Project	2040
Santa Clara	SCL130001	240443	Sunnyvale	SR 237/US 101/Mathilda Interchange Modifications	In Sunnyvale: Modify US 101/Mathilda and SR 237/Mathilda interchanges to relieve congestion and improve local circulation.	2013 TIP Development - Amend in a new non-exempt project into the TIP totaling \$15M	NON-EXEMPT	2020
Santa Clara	SCL130002	240477	VTA	SR 237 Express Lanes : Mathilda Avenue to SR 85	In Santa Clara County: Build new HOV/express lanes on SR 237 between Mathilda Avenue and SR 85.	2013 TIP Development - Amend in a new non-exempt project into the TIP totaling \$83.79M	NON-EXEMPT	2020
Solano	SOL010031	240313	Benicia	Military/Southampton & Military/First Intermodal	Benicia: On Military West and Southampton Avenue and on Military and First Street; construct intermodal facilities (Construct parking lot and transit transfer area).	2013 TIP Development - Update RTP ID, exemption code to non-exempt and retain in the TIP for informational purposes as the project is ongoing	NON-EXEMPT	2040
Solano	SOL030002	21341	Fairfield	Fairfield/Vacaville Intermodal Rail Station	In Fairfield: Capitol Corridor; Construct train station with passenger platforms, pedestrian undercrossing, highway overcrossing, park and ride lot,bike and other station facilities.	2013 TIP Development - Update RTP ID and update the funding plan	NON-EXEMPT	2040
Solano	SOL050012	22794	Vallejo	Vallejo Curtola Transit Center	In Vallejo: Vallejo Curtola Transit Center; Construct intermodal facilities for express bus service.	2013 TIP Development - Update RTP ID, exemption code to non-exempt project, and update funding plan to add RM2 funds: \$1.8M in FY13 PSE, \$3.5M in FY14 CON,\$4.95M in FY14 CON and delete RM2	NON-EXEMPT	2040
Solano	SOL070002	240745	Caltrans	I-80 Alamo Creek On-Ramp and Bridge Widening	Route 80: In Vacaville, west of Alamo Creek Bridge to Alamo west-bound on-ramp; Lengthen on-ramp and widen bridge.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	NON-EXEMPT	2040
Solano	SOL070020	230326	STA	I-80/I-680/SR 12 Interchange Project	Fairfield: Improve I-80/I-680/Route 12 I/C(Ph 1), including connecting I-80 to SR 12 W, I-680 NB to SR 12W (Jameson Canyon), I-80 to I-680 (+ Express Lane Direct connectors), build local I/C and build new connecting local roads to SR 12/Red Top I/C.Phased	2013 TIP Development - Update RTP ID and update funding plan to reflect RM2 and AB1171 funds programming actions and to add \$579,691,000 in RTP-LRP funds in FY19 ☐	NON-EXEMPT	2040
Solano	SOL090001	240210	Vacaville	I-505/Vaca Valley Off-Ramp and Intersection Imprv.	Widen the southbound I-505 off-ramp at Vaca Valley Parkway to provide left turn storage and signalize the southbound ramps at the intersection of Vaca Valley Parkway.	2013 TIP Development - Update RTP ID and update funding plan to reprogram CON phase funds to FY14	NON-EXEMPT	2040
Solano	SOL090003	230322	STA	EB I-80 Cordelia Truck Scales Relocation Project	Solano County: rebuild and relocate the Eastbound Truck Scales Facility, build a 4-lane bridge across Suisun Creek, and construct braided ramps from the new truck scales facility to EB I-80 and EB SR 12 ramps.	2013 TIP Development - Update RTP ID, funding plan to reduce RM2 funds by \$24.6M and add in \$22.583M in AB1171 funds and retain in the TIP for informational purposes as the project is ongoing	NON-EXEMPT	2040
Solano	SOL110001	240581	MTC	I-80 Express Lanes (Vacaville)	I-80 in Solano County from I-505 to Air Base Parkway (new lanes); widen to add an express lane in each direction from I-505 to Air Base Parkway.	2013 TIP Development - Update RTP ID and funding plan to reduce the cost to match the RTP costs	NON-EXEMPT	2020

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Solano	SOL110002	230660	MTC	I-80 HOV conversion to Express Lanes (Fairfield)	I-80 Red Top Road to Airbase Parkway: widen and convert existing HOV lane to HOT lane.	2013 TIP Development - Update RTP ID and funding plan to reduce the cost to match the RTP costs and moved the CON phase to FY19 as RTP-LRP funds	NON-EXEMPT	2020
Solano	SOL110003	94151	STA	Jepson: Vanden Road from Peabody to Leisure Town	Jepson Parkway segment: Vanden Road project from Peabody Road to Leisure Town Road.	2013 TIP Development - Update RTP ID and funding plan to reduce FY16 STIP funding to \$16.9M, move \$8.2M of STIP to SOL110006 and add local funding of \$1.7M	NON-EXEMPT	2040
Solano	SOL110004	94151	STA	Jepson: Walters Rd Ext - Peabody Rd Widening	Jepson Parkway segment: Walters Road Extension - Peabody Widening.	2013 TIP Development - Update RTP ID and update funding plan to reprogram ROW and CON phase funds to FY19	NON-EXEMPT	2040
Solano	SOL110005	94151	STA	Jepson: Leisure Town Road from Vanden to Elmira	Jepson Parkway segment: Leisure Town Road from Vanden Road to Elmira Road	2013 TIP Development - Update RTP-ID and funding plan to increase STIP funds in FY16 from \$8.2M to \$13.6M and add \$1.7M in local funds in FY16	NON-EXEMPT	2040
Solano	SOL110006	94151	STA	Jepson: Leisure Town Road from Elmira to Orange	Jepson Parkway segment: Leisure Town Road from Elmira Road to Orange Road	2013 TIP Development - Update RTP ID and funding plan to add \$8.3M in STIP funds in FY16 (transferred in from SOL110003) and add local funds in FY16 by \$2M and remove \$7.3M in RTP-LRP funds.	NON-EXEMPT	2040
Solano	SOL110007	21017	Fairfield	Fairfield Transportation Center - Phase 3	In Fairfield: Fairfield Transportation Center; Construct approximately 600 automobile parking spaces in a parking structure, multi-use trail to improve access to FTC and other passenger amenities.	2013 TIP Development - Update RTP-ID and update funding plan to reprogram unallocated RM2 project #6.3 funding of \$4,500,000 to FY 14 and added RM2 project #17.2 funding of \$2,250,000 in FY 14	NON-EXEMPT	2040
Solano	SOL110009	230635	Vacaville	Vacaville Intermodal Station - Phase 2	In Vacaville: Construction of a three to four story, approximately 400 space, parking garage.	2013 TIP Development - Update RTP ID and funding plan to reprogram RTP-LRP funds to FY19 and change amount to \$11.2M	NON-EXEMPT	2040
Solano	SOL110037	240746	Vallejo	Sonoma Boulevard Improvements HSIP5-04-031	Vallejo: Sonoma Blvd between Georgia St and Florida St: Implement road diet - reduce travel lanes from 4 to 3, add a two-way left-turn lane or median, and add bike lanes	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram all funds to FY14 and add \$4.5K in Other Local funds	Non-Exempt NRS - NON-EXEMPT - Not Regionally Significant Project	2040
Solano	SOL130001	22243	F-S Transit	Oliver Road Park and Ride	In Fairfield off I-80 - Oliver Road park and ride will increase options for regional commuters (e.g., van pool pick up) and reduce parking congestion at the Fairfield Transportation Center.	2013 TIP Development - Amend in a new non-exempt - Not Regionally Significant project into the TIP funded with \$1.927M in Other Local funds	Non-Exempt NRS - NON-EXEMPT - Not Regionally Significant Project	2040
Solano	SOL950035	22629	Vallejo	Vallejo Ferry Terminal (Intermodal Station)	Vallejo: Baylink Ferry Terminal; Construct new intermodal facility, including additional parking, upgrade of bus transfer facilities, and improvement to pedestrian access.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	NON-EXEMPT	2040
Solano	SOL990018	240595	Vallejo	I-80 / American Canyon Rd overpass Improvements	Vallejo: American Canyon Road overpass at Hwy. 80; capacity and safety improvements.	2013 TIP Development - Update RTP ID and funding plan to reprogram CON funds from FY15 to FY19 (later years)	NON-EXEMPT	2040
Sonoma	SON010001	240745	Caltrans	Son 101 HOV - SR 12 to Steele & Steele Lane I/C	In Santa Rosa: On 6th St. between Morgan St and Davis St: the construction of 280 feet of roadway with two new travel lanes and a westbound left turn lane; from SR 12 to Steele Lane: follow-up landscaping	2013 TIP Development - Retain in the TIP for informational purposes as the landscaping portion of the project remains to be completed	NON-EXEMPT	2040
Sonoma	SON010019	98183	Son Co TA	Son 101 HOV - Steele Lane to Windsor (North)	Santa Rosa-Windsor: US 101 btw Steele Lane in Santa Rosa and Windsor River Road in Windsor; Widen from 4 to 6 lanes for High Occupancy Vehicle (HOV) lanes.	2013 TIP Development - Update funding plan to reflect the actual earmark obligations and to add in \$2M in RTP-LRP funds for Landscaping.	NON-EXEMPT	2040
Sonoma	SON010024	21902	Son Co TA	Son 101 HOV - Redwood Hwy to Rohnert Park Expwy	Petaluma-Rohnert Park: US 101 Btw Old Redwood Hwy in Petaluma & Rohnert Park Expwy: widening roadway from 4 to 6 lanes for HOV funds	2013 TIP Development - Update funding plan to add in \$2.6M in RTP-LRP funds in FY19 for landscaping and replace \$22.8M in RTP-LRP funds with \$16.312M in CMIA funds	NON-EXEMPT	2040

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Sonoma	SON050001	22490	Caltrans	Replace Laughlin Bridge over Mark West Crk 20C0246	Mark West Creek Bridge: Laughlin Rd/Brickway Blvd Extension; Construct new 2 lane bridge.	2013 TIP Development - Update RTP ID	NON-EXEMPT	2020
Sonoma	SON050015	22656	Son Co TA	US 101/East Washington I/C Reconfiguration	Petaluma: On US 101 at East Washington Interchange: Reconfigure interchange including new ramps.	2013 TIP Development	NON-EXEMPT	2040
Sonoma	SON070004	240672	Son Co TA	US 101 Marin/Sonoma Narrows (Sonoma)	Marin and Sonoma Counties: From SR37 in Novato to Old Redwood Highway in Petaluma, convert expressway to freeway, construct NB auxillary lane between Lakeville Highway and East Washigton Street, and widen to 6 lanes for HOV lanes.	2013 TIP Development - Update RTP ID and funding plan to reprogram RTP-LRP funds to FY19	NON-EXEMPT	2040
Sonoma	SON090002	22001	SMART	Sonoma Marin Area Rail Corridor	Between Sonoma and Marin Counties: Implement passenger rail service and non-motorized pathway on NWP rail line	2013 TIP Development - Update RTP ID and update funding plan	NON-EXEMPT	2040
Sonoma	SON090003	22195	Son Co TA	Improve U.S. 101/Old Redwood Highway interchange	In Petaluma, replace old redwood highway overcrossing and ramps to/from Highway 101.	2013 TIP Development - Update funding plan and retain in the TIP for informational purposes as the project is ongoing	NON-EXEMPT	2040
Sonoma	SON090005	22191	Son Co TA	US 101 Airport I/C (North B)	In Sonoma County: Replace Airport Blvd overcrossing and reconstruct interchange with US 101. Improve operations between Airport and Fulton. Construct soundwalls. (Project is the second phase of the (SON010019).	2013 TIP Development - Update RTP ID and update funding plan to reduce FY15 Other Local funds by \$3M	NON-EXEMPT	2040
Sonoma	SON110001	240529	Caltrans	HWY 101 HOV Lane 12/Steele - Follow-up College Ave	Sonoma County: College Ave at US 101: Widen College Avenue at Highway 101 Interchange.	2013 TIP Development - Update funding plan to reflect 2012 STIP programming	NON-EXEMPT	2020
Sonoma	SON110006	230700	Petaluma	Petaluma Boulevard South Road Diet	In Petaluma: On Petaluma Boulevard South from 100 ft South of East Washington Street to E Street; Road Diet will reconfigure the current 4-through lanes to 2-through lanes and one two way left turn lane	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	Non-Exempt NRS - NON-EXEMPT - Not Regionally Significant Project	2040
Sonoma	SON110015	22001	Cotati	City of Cotati Train Depot	In Cotati: Located at 970 East Cotati Avenue; Construction of a Transit Center, including a pedestrian plaza and transit building to connect pedestrian/bicycle/bus/train/automobile transit modes.	2013 TIP Development - Update Air quality exemption code to non-exempt project	NON-EXEMPT	2040
Sonoma	SON110030	230700	FWLS	San Pablo Bay NWR Access Road in Petaluma	In San Pablo Bay National Wildlife Refuge: Construct the Sears Point Access Road & Trail to the headquarters near Petaluma. USFWS, in partnership with Sonoma Land Trust (SLT), received an FHWA grant of \$2.25M to construct the access road.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	Non-Exempt NRS - NON-EXEMPT - Not Regionally Significant Project	2040
Sonoma	SON950005	22655	Caltrans	Son 101 HOV - Rohnert Park Expwy to Santa Rosa Av	Rohnert Park: US 101 between Rohnert Park Expressway & Santa Rosa Avenue; Widen from 4 to 6 Lanes, Modify Wilfred Avenue Interchange, add Auxiliary lanes and other interchange improvements.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the landscaping portion of the project remains and the HOV lanes are in construction	NON-EXEMPT	2040

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Regionally Exempt Projects								
Regional	BRT030004	94525	BART	BART Train Control Renovation	BART: Replace obsolete elements and subsystems of the train control system.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Regional	BRT030005	94525	BART	BART: Traction Power System Renovation	BART: System wide: Replace obsolete elements and subsystems of the traction power system to maintain and improve reliability and safety	2013 TIP Development - Update RTP ID	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Regional	BRT050003	22636	BART	BART Transbay Tube Seismic Retrofit	San Francisco: Transbay Tube; Seismically retrofit the BART Tube/Tunnel which connects Oakland to San Francisco.	2013 TIP Development - Update funding plan to add in \$10.797M in FY06 ENV RM2 funds and retain in the TIP for informational purposes as the project is on-going	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Regional	BRT97100B	94525	BART	BART: Rail, Way and Structures Program	BART: Systemwide; Replace worn out mainline rail and make other timely reinvestments in way.	2013 TIP Development - Update RTP ID	2.09 - EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
Regional	BRT99T01B	94525	BART	ADA Paratransit Capital Accessibility Improve	BART: At various stations: Capital Access Improvements Program including, station elevator improvements, installation of hands-free emergency telephones, and tactile stair tread replacement	2013 TIP Development - Update RTP ID	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional	MTC050001	230550	MTC	Transit Commute Benefits Promotion	San Francisco Bay Area: Region wide: Project to increase the participation rate of employers offering employees a tax-free benefit to commute to work by transit.	2013 TIP Development - Update the funding plan to reprogram \$1M in RM2 funds from FY11 to FY12 and \$780K in RM2 funds from FY11 to FY14	3.01 - EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2030
Regional	MTC050008	240745	Caltrans	GL: Shoulder Imprv - SHOPP Roadside Preservation	GL: SHOPP Roadside Preservation. Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Fencing,Safety roadside rest areas	2013 TIP Development - Retain this grouped listing in the TIP as it is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Regional	MTC050020	230419	MTC	Real-time Transit Information Program	San Francisco Bay Area: Regionwide; Provide real-time transit information to riders at transit stops or via telephone, wireless or internet communication.	2013 TIP Development - Update funding plan to reflect the latest RM2 programming information with no change in the total cost of the project	4.11 - EXEMPT (40 CFR 93.126) - Directional and informational signs	2040
Regional	MTC050021	22245	MTC	Safe Routes to Transit	Regionwide: Grants to fund infrastructure projects that improve bike/ped access to transit stations. Including signs, multi-use trails and bike parking.	2013 TIP Development	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Regional	MTC050028	22241	WETA	WETA Ferry Expansion Studies.	WETA: Regionwide studies to determine environmental/other impacts of expanded ferry service in the Bay Area.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to remove \$770K in RM2 funds; Update the project title to reference WETA	4.05 - EXEMPT (40 CFR 93.126) - Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action	2040
Regional	MTC990015	230550	BAAQMD	Spare the Air Program	San Francisco Bay Area: Spare the Air Campaign: Inform/educate the public about ozone problems, notify when Spare the Air days are called & encourage use of transit, ridesharing etc.	2013 TIP Development - Update RTP ID	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2030
Regional	REG050013	22425	MTC	Transit Capital Inventory Improvements	MTC: Procure Asset Management System to enable ability to anticipate regional rehab, replacement and funding needs.	2013 TIP Development - Retain this project in the TIP for informational purposes as it is ongoing	2.04 - EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040

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Regional	REG050020	94525	BART	BART Car Exchange (Preventive Maintenance)	BART: Preventive maintenance program, including maintenance of rail cars and other system components in exchange for local funds to the BART car replacement reserve.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Regional	REG090002	22423	MTC	GL: JARC FY 09 - FY 10 - Large UA	GL: JARC FY 09 - FY 10 - Large UA. Various JARC projects in large urbanized areas. Project is consistent with 40 CFR Part 93.126, 127, 128, Exempt Tables 2 & 3.	2013 TIP Development - Retain this program in the TIP for informational purposes as the projects are ongoing	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional	REG090037	94525	BART	BART: Railcar Replacement Program	BART: Replace 669 Railcars.	2013 TIP Development - move future funding to 2019 until such time as it is programmed.	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Regional	REG090038	22425	MTC	Regional Planning Activities and PPM - MTC	Regional: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2013 TIP Development - Update RTP ID	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Regional	REG090039	240740	MTC	Regional Streets and Roads Program	Regionwide: Regional Streets and Roads Program including providing assistance to Bay Area agencies to implement & maintain computerized pavement management system (PMS), implementing PTAP (Pavement Technical assistance program), updating regional Needs	2013 TIP Development - Update RTP ID	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Regional	REG090040	22425	MTC	Regional Planning Activities - ABAG	Regionwide: Support for Regional Planning Activities	2013 TIP Development - Update funding plan to remove \$1M in FY13 PE Other Local funds	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Regional	REG090041	22425	MTC	Regional Planning Activities - BCDC	Regional Planning Activities	2013 TIP Development	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Regional	REG090042	230419	MTC	511 Traveler Information	Regionwide: Collect real-time/static data (traffic, transit, rideshare and bicycle) and disseminate the information to the public by telephone and website. Supports congestion pricing and vehicle infrastructure integration.	2013 TIP Development	4.11 - EXEMPT (40 CFR 93.126) - Directional and informational signs	2040
Regional	REG090044	230419	MTC-SAFE	Incident Management Program	Regionwide: Manage congestion by preventing and/or addressing minor & major highway incidents/events including incident detection equipment & incident management systems, etc.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan and project description to split out the FSP and Call Box program to REG130003 along with \$14.29M in	1.07 - EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization projects	2040
Regional	REG090045	21017	MTC	Clipper Fare Collection System	San Francisco Bay Area: Regionwide; Design, build, operate and maintain the Clipper fare collection system. Note: Translink became Clipper on 6/16/10.	2013 TIP Development - Update the funding plan to add \$4.04M in FY10 RM2, \$2.55M in FY11 RM2, and \$20K in FY14 RM2 funds to reflect the latest programming information, remove \$3.46M in FY06	2.05 - EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Regional	REG090046	230419	MTC	Regional Arterial Operations & Signal Timing Prog	Regional: Develop plan to guide arterial investments, and provide project management and traffic engineering assistance (including procuring communications equipment) for arterial system synchronization. See MTC990018 for PY funds.	2013 TIP Development & Update RTP-ID	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Regional	REG090051	22481	Caltrain	Caltrain: Revenue Vehicle Rehab Program	Caltrain: Systemwide: The Revenue Vehicle Rehab Program provides overhauls and repairs/replacements to key components of the Caltrain rolling stock to maintain it in a state of good repair and to extend the useful life of the fleet.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram \$868K in 5307 and \$217K in Other Local from FY13 to FY14	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Regional	REG090052	94572	GGBHTD	Golden Gate Transit: SF Bus Lot Modifications	GGBHTD: Modifications to SF Bus Facility including resurfacing, subgrade, drainage, lighting, and fencing.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040

*Projects with conformity analysis years 2040 reference programmatic projects or project with a completion date after 2030 in Plan Bay Area.

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County	TIP ID	RTP ID	Sponsor	Project	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Regional	REG090053	22481	Caltrain	Caltrain: Preventive Maintenance	Caltrain: Systemwide: Capitalized maintenance activities for the Caltrain fleet, equipment and facilities.	2013 TIP Development - Update RTP ID	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Regional	REG090054	21017	WETA	WETA: Ferry Channel & Berth Dredging	WETA: Various service areas: Dredge ferry channel, ferry basin and berth	2013 TIP Development - Update RTP ID	2.09 - EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
Regional	REG090055	21017	WETA	WETA: Ferry Propulsion System Replacement	WETA: Ongoing: A mid-life overhaul is scheduled when a ferry reaches approximately 12.5 years of service life. Equipment service hours and specific vessel needs may affect the timing of the projects.	2013 TIP Development - Update RTP ID and update funding plan to add funding from SOL090011 which is being deleted.	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Regional	REG090057	21017	WETA	WETA: Ferry Major Component Rehab/Replacement	WETA: Ferry vessels are required to undergo periodic haul-out and rehabilitation work to remain in working order over their 25-year life.	2013 TIP Development - Update RTP ID	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Regional	REG090065	230550	MTC	Climate Initiatives Program Public Education	Climate Initiatives Program: Regionwide, community-based social marketing campaign & support for programs to encourage sustainable transportation behavioral changes to reduce criteria pollutants and greenhouse gases including those relating to SCS	2013 TIP Development - Retain this project in the TIP for informational purposes as it is ongoing	4.02 - EXEMPT (40 CFR 93.126) - Grants for training and research programs	2030
Regional	REG090066	230550	MTC	Climate Initiatives Evaluation and Administration	Regional: Program development for the Climate Initiatives program activities and evaluation. Programs falling under this project include the following sub-programs: Innovative Grants, Safe Routes to Schools, Evaluation, and Public Outreach.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2030
Regional	REG090067	21017	WETA	WETA: Fixed Guideway Connectors	WETA: Various locations: This project will replace/rehab fixed guideway connectors such as floats, floating barges, ramps and gangways throughout the system.	2013 TIP Development - Update RTP ID	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Regional	REG110010	230550	BAAQMD	Regional Bicycle Sharing Pilot	San Francisco, San Mateo and Santa Clara Counties: various locations: Implement a pilot bikesharing program	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2030
Regional	REG110011	230550	MTC	Electric Vehicle Funding Strategies	Region-wide: Support the deployment of electric vehicles in the Bay Area including approaches such as infrastructure, outreach, and other supportive strategies.	2013 TIP Development	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2030
Regional	REG110012	230550	SF County TA	eFleet: Carsharing Electrified	SF and Berkeley: Purchase up to 29 electric-based vehicles (incl. conversion of hybrid vehicles)and install up to 35 chargers;conduct an outreach & awareness campaign; perform evaluation.	2013 TIP Development -- Retain in TIP for informational purposes	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2030
Regional	REG110013	240393	Alameda County	Local Government EV Fleet Program	Various Locations: Purchase 90 EVs and install 90 EV charging stations in various jurisd. Tests smart driving with 20 real-time fuel economy gauges in gas vehicles. Pilot fleet carshare (4 cars) in ALA County and San Jose. Includes outreach/marketing	2013 TIP Development	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Regional	REG110014	21011	MTC	Station Area Planning Program & Implementation	Regionwide: Provide grants to local jurisdictions to develop plans for their transit stations in order to help increase transit ridership and implementation of the program.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Regional	REG110015	230550	Son Co TA	Regional Dynamic Ridesharing Pilot	Contra Costa, Marin, and Sonoma Counties: Apply dynamic ridesharing technology in within various affinity groups. Software procurement and customization, marketing and incentives, monitoring and reporting. Includes program evaluation.	2013 TIP Development - Update the RTP ID and update the funding plan; Retain in the TIP for informational purposes as the project is ongoing	3.01 - EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2030

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Regional	REG110016	230550	ACWA	Green Star / Cool Schools Program	Alameda, San Mateo, and Sonoma Counties, San Jose: Development of a curriculum framework for teachers; web based interface and trip tracking; green teams, competition with other schools/ classrooms; events; evaluation	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2030
Regional	REG110017	230550	SFMTA	Electric Vehicle Taxi Battery Switch Stations	San Francisco and San Jose: Install up to four battery switch stations. Includes project evaluation.	2013 TIP Development - Update the RTP ID and funding plan	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2030
Regional	REG110020	21017	WETA	WETA: Facilities Rehabilitation	WETA: Various Locations: This project will rehabilitate ferry facilities in order to maintain existing transit services.	2013 TIP Development - Update RTP ID	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Regional	REG110021	21017	WETA	WETA: Revenue Vehicle Communication Equipment	WETA: Purchase and/or upgrade revenue vehicle communication equipment.	2013 TIP Development - Update RTP ID	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Regional	REG110022	240745	Caltrans	Statewide Archaeological Reburial Database	Region-wide: Identify reburial locations for Native American human remains excavated as part of statewide Caltrans projects.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Regional	REG110023	240745	Caltrans	Cultural Resources Legacy Data Database	Augment information in various cultural resources databases statewide.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Regional	REG110024	240745	Caltrans	Geoarchaeological Study of Route 101 Corridor	Along Route 101: Various Locations: Enhance the existing inventories of archaeological resources by transferring such data into an electronic database for each county.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Regional	REG110025	22481	Caltrain	Caltrain Transit Asset Management System (CTAMS)	Caltrain: Systemwide: Development of the Caltrain Transit Asset Management System (CTAMS)	2013 TIP Development - Update RTP ID	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Regional	REG110026	230716	MTC	GL: New Freedom FY10 & FY11 Large UA	GL: New Freedom FY2010 & FY2011 Large UA. Various Cycle 4 (FY10 & FY11) New Freedom projects in large urbanized areas	2013 TIP Development	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional	REG110028	22423	MTC	GL: FY10 JARC Mobility Management	GL: Mobility Management. Various mobility management projects in the SFO, Concord and San Jose large urbanized areas. Project is consistent with 40 CFR Part 93.126, 127, 128, Exempt Tables 2 & 3.	2013 TIP Development	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional	REG110029	22425	MTC	Parking Pricing Regional Analysis	Regionwide: Construct a regional parking database, integrated with our land use/transportation models, analyzes regional and local parking pricing schemes, conducts technical workshops, and proposes policies for implementation of pricing of parking	2013 TIP Development - Update RTP ID	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Regional	REG110030	21627	Caltrain	Caltrain Positive Train Control System	CBOSS/PTC is an advanced train control system that allows for automated collision prevention, improved manual collision prevention, and improved headways. The FRA has mandated PTC be in place by December 2015.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to match the regional MOU with a total cost decrease of \$9.18M, Includes the programming of \$2.83M in	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2020
Regional	REG110032	22423	MTC	GL: JARC FY11-FY12 Large UA	GL: JARC FY11-FY12 Large UA. Various JARC projects in large urbanized areas. Project is consistent with 40 CFR Part 93.126, 127, 128, Exempt Tables 2 & 3.	2013 TIP Development	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional	REG110033	22423	MTC	GL: JARC FY10-FY12 Small UA & Rural	GL: JARC FY10-FY12 Small UA & Rural. Various JARC projects in small urbanized areas and nonurbanized areas. Project is consistent with 40 CFR Part 93.126, 127, 128, Exempt Tables 2 & 3.	2013 TIP Development	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040

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Regional	REG110034	230716	MTC	GL: New Freedom FY10-FY12 Small & Rural	GL: New Freedom FY10-FY12 Small & Rural. Various Cycle 6 (FY10-FY12) New Freedom projects in small urbanized and rural areas.	2013 TIP Development - Update the back up listing to clarify the use of toll credits on the project	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional	REG110036	230550	MTC	Climate Initiatives Program	Climate Initiatives Program: Regionwide, support for programs to encourage sustainable transportation behavioral changes to reduce criteria pollutants and greenhouse gases	2013 TIP Development - Update RTP ID and update the funding plan	4.02 - EXEMPT (40 CFR 93.126) - Grants for training and research programs	2030
Regional	REG110037	22425	MTC	Regional Planning - PDA Implementation	Regionwide: Planning Assistance to support transportation investments and improve their performance in priority development areas.	2013 TIP Development	4.02 - EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Regional	REG110038	230550	SFMTA	Electric Vehicle Taxis	San Francisco: Purchase up to 25 electric vehicles for neighborhood taxi services in San Francisco. Includes project evaluation.	2013 TIP Development - Update RTP ID and update the funding plan	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2030
Regional	REG110039	22423	MTC	GL: 5307 JARC Set-aside FY13 Large UA	GL: 5307 JARC Set-aside FY13 Large UA. Various 5307 (former JARC) projects in large urbanized areas. Project is consistent with 40 CFR Part93.126, 127, 128, Exempt Tables 2 & 3.	2013 TIP Development	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional	REG110040	240612	Natl Park Svc	GL: US 206 Recreational Grants	GL: US 206 Recreational Grants. Projects with US Recreational Grant Program Funds. Project is consistent with 40 CFR Part 93.126, 127, 128, Exempt Tables 2 & 3.	2013 TIP Development	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Regional	REG110041	21017	Caltrans	GL: FTA Non-Urbanized Formula Program	GL: FTA Section 5311 Non-Urbanized Formula Program, Non-ITS portion. Projects include capital and operating assistance, capital and preventive maintenance. Projects consistent with 40 CFR Part 93.126, 127, 129, Exempt Tables 2 and 3.	2013 TIP Development - update the funding plan	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Regional	REG110042	230716	Caltrans	GL: Elderly & Persons with Disability Program	Region-Wide: Eld. & persons with Disabilities. Prog Lump Sum Listing; Project incl. Veh. replacements, minor expansion & office equip. Consist with 40 CFR Part 93.126, 127, 128 Exempt Tables 2 & 3.	2013 TIP Development	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Regional	REG110043	22425	MTC	Climate Change Adaptation&Vulnerability Assessment	Region-wide: Phase one: Conduct sea level rise transportation vulnerability and risk assessment pilot project. Phase two: Develop adaptation options to protect critical transportation infrastructure from sea level rise.	2013 TIP Development	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Regional	REG110044	21017	ACE	ACE Positive Train Control	ACE System-wide: Install an advanced train control system that allows for automated collision prevention, improved manual collision prevention, and improved headways.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area and update the funding plan	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Regional	REG130001	21013	MTC	Toll Bridge Maintenance	Region-wide: Seven state-owned toll bridges: routine maintenance of bridge facilities	2013 TIP Development: Amend a new exempt project into the TIP totaling \$48M	1.19 - EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Regional	REG130002	21013	MTC	Toll Bridge Rehabilitation Program	Bay Area: On 7 state-owned toll bridges: Rehabilitation program	2013 TIP Development: Amend a new exempt project into the TIP	1.19 - EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Regional	REG130003	230419	MTC-SAFE	FSP and Call Box Program	Regionwide: Manage congestion by preventing and/or addressing minor & major highway incidents/events including FSP and Call Box.	2013 TIP Development: Split out this project from REG090044 along with \$14.29M in STP funds and add \$4.5M in Other Local funds	1.07 - EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization projects	2040
Regional	SF-030002	240727	Natl Park Svc	Golden Gate Nat'l Rec. Area Road Rehab	Golden Gate National Recreation Area: Rehabilitate roadways providing access to and within the Golden Gate National Recreation Area in San Francisco, Marin and San Mateo Counties	2013 TIP Development & Update RTP-ID	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Regional	SF-050045	240727	Natl Park Svc	Golden Gate Nat'l Rec. Area Non-Motorized Access	Golden Gate Nat'l Recreation Area: Rehabilitate trail network. Implementing agencies are Golden Gate Nat'l Parks Conservancy and National Park Service.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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Regional	SF-090024	240727	Natl Park Svc	Golden Gate Nat'l Rec. Area Water Transit Planning	Golden Gate National Recreational Area: Prepare planning studies to improve water transit access to national parklands in San Francisco and Marin counties.	2013 TIP Development - Update the funding plan to reprogram all funds from PE to CON per Caltrans guidance on planning study projects and update the RTP reference to conform with Plan Bay Area	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Regional	SF-090027	240727	Natl Park Svc	Golden Gate Nat'l Rec. Area Transit Enhancements	Golden Gate National Recreational Area: Plan, design and construct exempt enhancements to public transit access to park sites.	2013 TIP Development - Update RTP ID	2.07 - EXEMPT (40 CFR 93.126) - Construction of small passenger shelters and information kiosks	2040
Regional	SM-03006B	22481	Caltrain	Caltrain: Systemwide Track Rehab & Related Struct.	Caltrain: Replace jointed rail and upgrade existing main line track and related civil structures on the Caltrain Corridor.	2013 TIP Development - Update funding plan	2.09 - EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
Regional	SM-050041	22481	Caltrain	Caltrain: Signal/Communication Rehab. & Upgrades	Caltrain: Systemwide: Rehabilitate existing signal system and upgrade/replace communication equipment.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area and update the funding plan	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Regional	VAR110001	240745	Caltrans	GL: Safety Improvements - SHOPP Mobility Program	Grouped Listing: SHOPP-Mobility; Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and 3	2013 TIP Development - Update the funding plan and back-up listing to reflect the latest information from Caltrans	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Regional	VAR110003	240745	Caltrans	GL: Pavement Resurf./Rehab - SHOPP Roadway Presv.	Grouped Listing: SHOPP - Roadway Preservation. Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories	2013 TIP Development - Update the funding plan and back-up listing to reflect the latest information from Caltrans	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Regional	VAR110004	240745	Caltrans	GL: Safety Imprv. - SHOPP Collision Reduction	GL: SHOPP - Collision Reduction. Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories.	2013 TIP Development - Update the funding plan and back-up listing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Regional	VAR110005	240745	Caltrans	GL: Emergency Repair - SHOPP Emergency Response	Grouped Listing for SHOPP - Emergency Response. Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Repair damage caused by natural disasters, civil unrest, or terrorist acts.	2013 TIP Development - Update the RTP ID, funding plan and back-up listing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Regional	VAR110007	240746	Caltrans	GL: Safety Imprv - Highway Safety Improvement Prog	GL: Safety Imprv - Highway Safety Improvement Program. Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	1.06 - EXEMPT (40 CFR 93.126) - Highway Safety Improvement Program implementation	2040
Regional	VAR110012	240747	Caltrans	GL: Safety Improvements - SRTS	GL: Safety Improvements - Safe Routes to School (SRTS) program. At various locations, Safe Routes to School (SRTS) projects. Consistent with 40 CFR Part 93.126, 127, 128, Exempt Tables 2 & 3.	2013 TIP Development	1.06 - EXEMPT (40 CFR 93.126) - Highway Safety Improvement Program implementation	2040
Regional	VAR110031	240745	Caltrans	GL: Pvmnt Resurf/Rehab SHS - Highway Maint.	GL: Pavement Resurf/Rehab State Highway System - Highway Maintenance. Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories - Pavement resurfacing and/or rehabilitation.	2013 TIP Development	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Regional	VAR110037	240745	Caltrans	GL: Pvmnt Resurf/Rehab State Hwy Sys - SHOPP Minor	GL: Pavement Resurf/Rehab State Hwy System - SHOPP Minor. Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories - Pavement resurfacing and/or rehabilitation.	2013 TIP Development	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Regional	VAR110042	240745	Caltrans	GL: Safety Improvements - SHOPP Mandates	GL: Safety Improvements - SHOPP Mandates. Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories.	2013 TIP Development - Update the funding plan and back-up listing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Regional	VAR110044	240745	Caltrans	GL: Bridge Rehab and Reconstruction - SHOPP	GL: Bridge Rehab/Reconst-SHOPP. Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Widening narrow pavements or reconstructing bridges (no additional travel lanes).	2013 TIP Development - Update the funding plan and back-up listing to reflect the latest information from Caltrans	1.19 - EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Regional	VAR110045	240748	Caltrans	GL: Bridge Rehab/Recon. - Local Hwy Bridge Program	GL: Local Bridge Rehab/Recon. - Local Highway Bridge Program(HBP) or Highway Bridge Replacement and Rehabilitation (HBRR). Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories.	2013 TIP Development - Update the funding plan and back-up listing	1.19 - EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040

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Regional	VAR110046	240749	Caltrans	GL: Railroad/Highway Crossings	GL: Railroad/Highway Crossings. Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Railroad/highway crossing	2013 TIP Development	1.01 - EXEMPT (40 CFR 93.126) - Railroad/highway crossing	2040
Alameda	ALA010003	240094	Alameda County	Crow Canyon Safety Improvements	Alameda County: On Crow Canyon Road: from I-580 north to the Alameda/Contra Costa County line; Safety improvements, shoulder widening and curve realignment.	2013 TIP Development - Update funding plan to reduce RTP-LRP funding by \$4M and add in \$1.55M in Other Local funds and reprogram \$450K in PSE funds from FY07 to FY13	1.04 - EXEMPT (40 CFR 93.126) - Shoulder improvements	2040
Alameda	ALA010034	94526	AC Transit	AC Transit Facilities Upgrade	AC Transit: Agency's facilities & equipment upgrades.	2013 TIP Development - Update RTP ID	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Alameda	ALA010052	21103	Newark	Central Avenue Railroad Overpass at UPRR	Newark: On Central Avenue at the Union Pacific Railroad tracks; Construct grade separation. No new lanes.	2013 TIP Development-Update the funding plan to reprogram \$567K in HPP from FY09 CON to FY13 PE and add \$2.8M in FY13 PE Sales-tax, \$2.2M in FY19 ROW RTP-LRP, and \$12.5M in FY19 CON RTP-	1.01 - EXEMPT (40 CFR 93.126) - Railroad/highway crossing	2020
Alameda	ALA010056	21017	ACE	ACE Track Improvements.	ACE: From Stockton to San Jose:Corridor improvements for signaling, grade crossing, track and other cost associated	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing and update the project sponsor to ACE from SJRC	2.09 - EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
Alameda	ALA030002	240386	Alameda County	Alameda: Vasco Road Safety Improvements	Livermore: On Vasco Road from Livermore to CC County line; Realign roadway, provide standard shoulder widths, install median barriers and add truck-climbing lanes. (Total length of truck lanes is .9 miles). Project is phased.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reflect a delay in the project	1.17 - EXEMPT (40 CFR 93.126) - Truck climbing lanes outside the urbanized area	2040
Alameda	ALA030030	94527	LAVTA	LAVTA: Preventive Maintenance	LAVTA: Preventive Maintenance Program for Agency Fleet.	2013 TIP Development - Update RTP ID	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Alameda	ALA050035	240381	Alameda County	Cherryland/Ashland/CastroValley/Fairview Sidwklmp	Cherryland, Ashland, Castro Valley, Fairview, San Lorenzo and other Unincorporated Areas of Alameda County: Sidewalk improvements in the vicinity of Schools within unincorporated Alameda County area.	2013 TIP Development - Update RTP ID with an updated funding plan to reflect earmark allocations	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA050043	21017	ACE	ACE Signal System Rehabilitation	ACE: Rehabilitate the existing Signal System between Niles Junction and Lathrop on the UPRR alignment.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing and update the project sponsor to ACE from SJRC	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Alameda	ALA050062	21017	Union C Transit	Union City: Replacement of One Transit Bus	Union City Transit is replacing a vehicle that has reached the end of its useful life.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing and update sponsor and implementing agency to Union City Transit	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA050064	94526	AC Transit	Transit Security Project	AC Transit: District facilities and Buses; Install cameras on District's buses and at District's facilities, including the passenger transfer stations, also fund design and fabrication of a mobile emergency-operating center.	2013 TIP Development - Update RTP ID and funding to add in remaining years through 2017 of Prop 1B CTS GP funding.	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Alameda	ALA050067	21017	ACE	GPS Train Tracking & Reporting System	ACE: Alameda County ACE Stations: Install instant messaging systems	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing and update the project sponsor to ACE from SJRC	4.11 - EXEMPT (40 CFR 93.126) - Directional and informational signs	2040
Alameda	ALA050079	21144	Berkeley	I-80 Gilman Interchange Reconfiguration	Berkeley: On Gilman Avenue at I-80; Reconfigure interchange providing dual roundabout at the entrance & exits from I-80 as well as the Eastshore Highway and West Frontage Road.	2013 TIP Development - Update the funding plan to change the fund source and program year for \$3.6M in CON funds from FY15 RTP funds to FY19 RTP funds, add \$12K in Other Local funds and	5.04 - EXEMPT (40 CFR 93.127) - Changes in vertical and horizontal alignment	2020
Alameda	ALA070012	240391	Oakland	Oakland Coliseum TOD	Oakland: Adjacent to the Oakland Coliseum; Construct Pedestrian walkway and plaza to link residents of the adjacent TOD and Coliseum station.	2013 TIP Development - Update RTP ID, update funding plan to add in \$217,622 in Other Local funds and retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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Appendix B

County	TIP ID	RTP ID	Sponsor	Project	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Alameda	ALA070016	22009	CCJPA	Capitol Corridor Rail Improvements	Between Oakland and San Jose: Rail improvements including construction of siding, extensions, additional mainline track, crossovers and signal control systems.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.09 - EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2030
Alameda	ALA070022	240386	Alameda	City of Alameda - Park St Streetscape	In the City of Alameda: Streetscape improvements including utility work, installation of vintage lighting, street trees, sidewalks, and pedestrian appurtenances, bulb-outs and pedestrian warning lights.	2013 TIP Development - Update RTP ID	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Alameda	ALA070039	240347	Oakland	Oakland Waterfront Bay Trail	Oakland: From Jack London Square to 66th Avenue; Construct new segments of the Bay Trail.	2013 TIP Development - Update funding plan to add in \$1.1M in Other Local funds and reprogram RTP-LRP funds from FY15 to FY19	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2030
Alameda	ALA070040	240381	Alameda County	Hampton Rd Streetscape	Alameda County: Along Hampton Road; Sidewalk Improvements including new curbs, gutters, and other pedestrian improvements.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA070041	230221	ACTC	I-80 Integrated Corridor Mobility Project	Contra Costa and Alameda Counties: Along the I-80 corridor from Carquinez Bridge to San Francisco-Oakland Bay Bridge Toll Plaza; create an integrated ITS arterial network.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	1.07 - EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization projects	2040
Alameda	ALA070046	94526	AC Transit	Zero Emission Bus Advanced Demonstration	AC Transit: Zero Emissio Bus Advanced Demonstration project, including purchase of 12 new ZEBs, and associated fueling, maintenance facilities, testing/monitoring of buses, solar panels, stationary fuel cell and eletrolyzer for hydrogen fueling stations.	2013 TIP Development - Update the funding plan to reprogram RTP-LRP funds from FY15 to FY19	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA070051	94525	BART	BART Station Electronic Bike Lockers, Ph. 2	Alameda County: Five BART Stations: Purchase and install electronic bicycle lockers	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Alameda	ALA070054	22425	Port of Oakland	California Inter-regional Rail Intermodal Study	Port of Oakland: Study to determine the feasibility freight rail shuttle system between the Port and inland points in the Central Valley.	2013 TIP Development - Update RTP ID	4.05 - EXEMPT (40 CFR 93.126) - Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action	2040
Alameda	ALA070060	22063	Caltrans	I-238 Widening Replacement Planting	Landscape replacement planting in and near San Leandro on Route 238 from Route 580 to Route 880	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.09 - EXEMPT (40 CFR 93.126) - Plantings, landscaping, etc	2040
Alameda	ALA070062	21017	Union C Transit	Union City Transit: Purchase Six (6) CNG Buses	Union City: Purchase Six (6) CNG Buses to replace 6 diesel buses.	2013 TIP Development - Update sponsor, implementing agency, RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA090009	22776	Pleasanton	PSR: SR 84 Widening from Pigeon Pass to I-680	Pleasanton: Supplemental Project Study Report for the widening of State Route 84 from Pigeon Pass to I-680.	2013 TIP Development - Update funding plan to reduce cost by \$100K and to reprogram the funds to FY13	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Alameda	ALA090023	240101	Alameda County	Fruitvale Ave Roadway Bridge Retrofit	Alameda County: Retrofit Fruitvale Roadway Bridge a lifeline facility	2013 TIP Development - Update exemption code from non-exempt to "EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)", RTP ID and update	1.19 - EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Alameda	ALA090028	240745	Caltrans	Eastbound Truck Climbing Lane	In Livermore, Alameda County: On Route 580 in the City of Livermore from North Flynn Rd to Greenville Rd. Construct a truck-climbing lane in the eastbound direction.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	1.17 - EXEMPT (40 CFR 93.126) - Truck climbing lanes outside the urbanized area	2040
Alameda	ALA090030	22425	MTC	Regional Planning Activities and PPM - Alameda	Alameda: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040

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Alameda	ALA090031	21017	Union C Transit	Union City Transit: Replace Two 35' Buses	Union City Transit: Replace two 35' Transit Buses with CNG low-floor buses.	2013 TIP Development - Update sponsor, implementing agency, RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA090039	240381	Berkeley	Berkeley Bike/Ped Overcrossing Site Access Imps	Berkeley: On Addison Street, Access improvements at east touchdown plaza of newly-constructed bike/ped over crossing, south of the University Ave over crossing.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA090060	21017	ACE	SJRC: Rebuild Diesel Locomotives	San Joaquin Rail Commission: 3 of our locomotives: complete an overhaul of the prime mover, replace head-end power generator-sets, perform body work, and repaint	2013 TIP Development - Update RTP ID and update the project sponsor to ACE from SJRC	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Alameda	ALA090061	21017	Union C Transit	Union City: Replacement of Four (4) Transit Buses	Union City Transit is replacing vehicles that have reached the end of their useful life.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA090062	240381	Berkeley	Berkeley Bay Trail Extension - Segment One	In Berkeley: On University Ave between West Frontage Road and Marina Blvd, construct a class 1 bike path and a bike / pedestrian bridge over Strawberry Creek, and add a Water Trail Access Point at Hs Lordships Restaurant at Seawall Drive.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA090065	94525	BART	BART: Fare Collection Equipment	BART: Systemwide: Acquire and install fare collection equipment.	2013 TIP Development - Update RTP ID	2.05 - EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Alameda	ALA090066	240683	Dublin	Alamo Canal Regional Trail, I-580 Undercrossing	In Dublin and Pleasanton: This project will construct a segment of the Alamo Canal Trail underneath Interstate 580 to close a gap between the section of the Alamo Canal Trail located in Dublin and Centennial Trail located in Pleasanton south of I-580.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA090067	240388	ACTC	I-580 Landscaping in the City of San Leandro	Along I-580 in the City of San Leandro from PM 33.5 to PM 34.6 between Estudillo Avenue and 141st Street; Landscaping and Irrigation work.	2013 TIP Development - Retain in the TIP for informational purposes as the project is on-going	4.09 - EXEMPT (40 CFR 93.126) - Plantings, landscaping, etc	2040
Alameda	ALA090068	94525	BART	MacArthur BART Plaza Remodel	Oakland: MacArthur BART Station: Renovate the entry plaza	2013 TIP Development-Added \$157,000-Other State(Prop 1C). Added \$299,700-Prop 1B. Revised \$81,000 to reflect "Other State". Revised \$162,000 to reflect "Other State". Some changes to milestone	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Alameda	ALA090069	240386	Alameda County	Alameda County: Rural Roads Pavement Rehab	Alameda County: Pavement Rehabilitation of various roadways in unincorporated areas.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing and update the Plan Bay Area RTP ID	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA110004	240388	ACTC	I-580 Oakland 14th to Ardley Noise Barriers	Oakland: I-580 Eastbound between west of 14th Avenue to Ardley avenue - Construct noise barriers on route between PM 41.7 to PM 42.2	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram \$1.5M in CON Other Local from FY12 to FY14	4.06 - EXEMPT (40 CFR 93.126) - Noise attenuation	2040
Alameda	ALA110005	94527	LAVTA	LAVTA Rideo Bus Restoration	LAVTA: Rehabilitate a 1960 GMC-vintage historic coach that was one of the last buses operated by the City of Livermore's Rideo bus system	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Alameda	ALA110006	240386	Oakland	Various Streets Resurfacing and Bikeway Facilities	In Oakland. Various locations: Rehabilitate streets, install bikeway facilities, and upgrade curb ramps	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain this project in the TIP for informational purposes as it is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA110007	240393	Berkeley	City of Berkeley Transportation Action Plan - TDM	Berkeley: Implement parking pricing pilot and enforcement programs in Southside, Elmwood and Downtown commercial districts. Implement TDM strategies and outreach focused on small businesses and residents along key commercial/transit corridors.	2013 TIP Development - Update RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	3.01 - EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2040

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Alameda	ALA110008	94526	AC Transit	AC Transit State of Good Repair Program	AC Transit: The project is intended to bring AC Transit's revenue fleet up to a SGR by implementing new SGR process and software in order to reduce operating costs.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Alameda	ALA110009	240393	ACTC	Bikemobile: Bike Repair and Encouragement Vehicle	Alameda County: Mobile truck promoting walking/biking to school including outreach and education activities.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain this project in the TIP for informational purposes as the program is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA110010	230550	Port of Oakland	Shore Power Initiative	Port of Oakland: Equip two international berths with shore power infrastructure, which is electrical infrastructure that enables a ship at dock (at-berth) to plug into the electrical grid. This allows the vessel operator to turn off the diesel engine.	2013 TIP Development - Update RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2030
Alameda	ALA110011	240347	EB Reg Park Dis	East Bay Parks Green Transportation Initiative	Various parts of the Bay Trail: The Green Transportation Initiative completes components in the Alameda and Contra Costa counties' non-motorized transportation network. It will close five critical gaps in EBRPD's 175-mile paved trail system.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2030
Alameda	ALA110012	21011	Fremont	Fremont CBD/Midtown Streetscape	Fremont: In the Fremont Central Business District/Midtown District bounded by Walnut Avenue, and California, Beacon and Liberty Streets: Streetscape enhancements. This is a phased project.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Alameda	ALA110016	240386	Newark	Newark - Cedar Blvd and Jarvis Ave Pavement Rehab	In Newark: On Cedar Boulevard between Milani Avenue and Central Avenue and on Jarvis Avenue between the UPRR and Spruce Street: Pavement rehab.	2013 TIP Development - Update RTP reference to reflect Plan Bay Area; Retain this project in the TIP for informational purposes as it is ongoing and update project delivery milestones.	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA110024	240386	Dublin	Dublin Citywide Street Resurfacing	In Dublin: Silvergate Dr between San Ramon Rd and Dublin Blvd, Clark Ave between Village Parkway and Maple Dr, and Tassajara Rd between North City limits and Shadow Hill Dr.	2013 TIP Development - Update RTP reference to reflect Plan Bay Area; Retain this project in the TIP for informational purposes as it is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA110026	240386	Alameda County	Alameda Co - Central Unincorporated Pavement Rehab	Alameda County: Various Streets: Pavement Rehabilitation Program	2013 TIP Development - Update RTP reference to reflect Plan Bay Area; Retain this project in the TIP for informational purposes as it is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA110027	21011	San Leandro	San Leandro Downtown-BART Pedestrian Interface	In San Leandro: Construct San Leandro Bl Streetscape from Williams St. to Davis St. including lane reduction, ped crossings, wayfinding, traffic signals, street lights and construct bike racks, ped crossings, wayfinding and bus shelter on E 14th Street.	2013 TIP Development - Update RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Alameda	ALA110028	240381	Union City	Union City Blvd Corridor Bicycle Imp, Phase 1	Union City: Union City Boulevard from Smith Street to 600-feet south of Alvarado Boulevard: widen existing pavement for both northbound and southbound directions. This will allow the installation of a Class II Bikeway.	2013 TIP Development - Update RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA110029	21011	Oakland	Oakland Foothill Blvd Streetscape	City of Oakland: Along Foothill Boulevard Corridor from Austin to 61st, and adjacent streets: This project encompasses public improvements which will include pedestrian amenities, pedestrian signals and traffic calming	2013 TIP Development - Update RTP reference to reflect Plan Bay Area; Update the project description to include pedestrian signals; Retain this project in the TIP for informational purposes as it is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Alameda	ALA110030	240381	Albany	Albany - Buchanan Bicycle and Pedestrian Path	In Albany: On Marin Ave./Buchanan St. between San Pablo Ave. and Buchanan bridge overcrossing. Construct a bike/Ped path, install a bike/ped signal, and related improvements at several locations within the project limits.	2013 TIP Development: Update RTP reference to reflect Plan Bay Area; Update funding plan to remove \$1.1M in FY12 Other Local funds, add in \$33K in Prior Year Other Local funds and \$100K in FY12 TFCA	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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Alameda	ALA110031	21489	Pleasanton	Pleasanton - Foothill/I-580 IC Bike/Ped Facilities	In Pleasanton: Two segments of Foothill Road: install northbound and southbound bicycle lanes including realignment of two freeway ramps, installation of traffic signals, and roadway restriping.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA110032	94525	BART	Downtown Berkeley BART Plaza/Transit Area Imps.	In Berkeley: Area around Downtown Berkeley BART Station: Streetscape improvements; design/construction of custom bus shelter, canopy design for 5 secondary BART entries and construction of one; retrofit design for BART rotunda.	2013 TIP Development - Update RTP reference to reflect Plan Bay Area; Updated milestone dates.	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Alameda	ALA110033	240393	ACTC	Alameda County Safe Routes to School	Alameda County: Countywide SR2S Program including education & outreach in various K-12 schools, ridesharing, & project development.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area and update the funding plan	4.02 - EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Alameda	ALA110034	240381	Dublin	West Dublin BART Golden Gate Drive Streetscape	In Dublin: Golden Gate Drive from Dublin Blvd to the West Dublin BART Station. Bicycle, pedestrian, and landscape enhancements.	2013 TIP Development - Update RTP reference to reflect Plan Bay Area; Update the funding plan to add \$506K in Other Local funds and \$247K in Prop-1B-LSR funds	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Alameda	ALA110035	21011	Hayward	South Hayward BART Area/Dixon Street Streetscape	In Hayward: Both sides of Dixon St from Tennyson Rd to Valle Vista Ave. Streetscape, pedestrian safety and landscape improvements. The ROW phase including utility relocation is locally funded	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain this project in the TIP for informational purposes as it is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Alameda	ALA110037	21011	Livermore	Livermore Village Plaza & Infrastructure	Livermore: Livermore Village site: Installation of a landscaped plaza and supporting infrastructure.	2013 TIP Development - Reduce scope to remove land banking, update RTP ID and funding plan to reprogram CON phase funds to FY14 and add \$250K on Other Local CON phase	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Alameda	ALA110072	240381	Oakland	Lake Merritt Improvement Project	In Oakland: Adjacent to Lake Merritt: Reconfigure roadways and construct paths, walls, structures, lighting, parking and landscaping; no added capacity	2013 TIP Development - Update RTP ID	1.04 - EXEMPT (40 CFR 93.126) - Shoulder improvements	2040
Alameda	ALA110085	240746	Alameda	Shoreline Dr, Westline Dr and Broadway Bike Lanes	Alameda: Shoreline Dr-Westline Dr to Broadway; Westline Dr-Otis Dr to Shoreline Dr; Broadway-Shoreline Dr to Bayview Dr: Reduce travel lanes from 4 to 2; Install a cycle track, parking, bike racks, crosswalks, bus shelters, ADA upgrades and bus pad	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram \$7K in HSIP from PE to CON and add \$501K in Other Local funds; Update the description to	1.06 - EXEMPT (40 CFR 93.126) - Highway Safety Improvement Program implementation	2040
Alameda	ALA110086	240726	Caltrans	Environmental Study for ACE Alignment	Altamont Commuter Express (ACE): Along the alignment between the Bay Area and the Central Valley; Conduct an environmental study for a high speed rail corridor	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Alameda	ALA110090	94525	BART	Enterprise Asset Management	BART: Systemwide. Enhance the asset management business process and integration of business and operations across Finance, Operations and Maintenance to support ongoing, long-term asset management and decision making.	2013 TIP Development - Update RTP ID	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Alameda	ALA110091	94526	AC Transit	AC Transit: Procure (23) 60' Articulated Buses	AC Transit: Purchase 23 replacement 60' articulated buses for use on local routes.	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA110092	94526	AC Transit	AC Transit: Procure (38) 40-ft Urban Buses	AC Transit: Purchase 38 replacement 40' urban transit buses.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040

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Alameda	ALA110093	94526	AC Transit	AC Transit: Replace 16 40' Suburban Buses	Purchase 16 replacement 40' Suburban buses.	2013 TIP Development - Update RTP-ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA110095	94527	LAVTA	LAVTA - East Bay Radio Communication System Hookup	LAVTA: Replace radio communication equipment to meet FTA narrow-banding mandate and join the East Bay Regional Communications System (EBRCS).	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.05 - EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Alameda	ALA110096	94527	LAVTA	LAVTA Capital Maintenance-Fuel	LAVTA has elected to program \$128,132 of it's 2011 5307 apportionment to fuel costs.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Alameda	ALA110098	240393	ACTC	Alameda County SR2S Local	In Alameda County: Countywide SR2S Program; Implement Capital Projects and Technical Assistance for future Capital Projects	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Alameda	ALA110099	21017	ACE	ACE Preventative Maintenance	ACE Rail - Preventative maintenance activities for ACE service and associated equipment, functions, and facilities.	2013 TIP Development - Update RTP ID and update the funding plan	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Alameda	ALA110100	240372	AC Transit	AC Transit: Line 51 Corridor	Alameda County: Lines 51A and 51B along the Santa Clara, Broadway, College and University Corridor: Provide key investments in capital infrastructure needed to provide travel time savings	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	5.02 - EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2020
Alameda	ALA110105	22423	AC Transit	San Leandro BART - Transit Access Improvements	San Leandro: At San Leandro BART Station: Make bus, pedestrian, and bicycle access improvements in preparation for the implementation of the East Bay Bus Rapid Transit. This is a project is related to ALA050017.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area;	5.06 - EXEMPT (40 CFR 93.127) - Bus terminals and transfer points	2040
Alameda	ALA110106	94526	AC Transit	Farebox Replacement	AC Transit: System-wide: Replace the existing bus farebox systems and their support equipment	2013 TIP Development - Update RTP-ID	2.05 - EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Alameda	ALA110107	22423	ACTC	ALA-Community-Based Transportation Plan Updates	Alameda County: Countywide: For the five community-based transportation plans, review, update and integrate with completed countywide plans and develop an integrated, more comprehensive implementation strategy.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Alameda	ALA110114	21017	Union C Transit	Union City: Replacement of Two (2) Transit Buses	Union City Transit:Replace two (2) compressed natural gas (CNG) buses	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA110115	240508	CCJPA	Bicycle Lockers at Capitol Corridor Stations	Capitol Corridor Joint Powers Authority (CCJPA): at Capitol Corridor Stations: Establish a bicycle storage standard for design(s), function, and procurement for secure bicycle storage	2013 TIP Development - Update the RTP ID and update the funding plan	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA110116	94526	AC Transit	AC Transit: Bus Diesel Particulate Filters	AC Transit: 51 VanHool 30ft busses: install diesel particulate filters (DPF)	2013 TIP Development - Update RTP-ID	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Alameda	ALA110117	94526	AC Transit	AC Transit: Procure (28) 40-ft Urban Buses	AC Transit: Purchase (28) 40-ft buses to replace buses in existing fleet	2013 TIP Development - Update RTP-ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA110118	94526	AC Transit	AC Transit: Procure (40) 40-ft Urban Buses	AC Transit: Purchase (40) 40-ft buses to replace buses in existing fleet	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA110119	94526	AC Transit	AC Transit: Spectrum Ridership Growth	AC Transit: Encourage new riders among East Bay residents, employees, and visitors, as well as increased ridership among current riders. The principal three areas of focus will be Passenger Info Systems, Fare structure/programs, and Marketing	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram Other Local funds from FY13 to FY14	4.02 - EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040

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Alameda	ALA110120	240726	Livermore	Livermore TOD Study at I-580/SR84	In Livermore: Near I-580/SR84 I/C: Create a community based transit oriented development plan for local land uses and access improvements to complement a planned Phase 1 extension of the BART system to Livermore	2013 TIP Development - Update RTP ID and schedule to delay some funds to FY14	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Alameda	ALA110121	94525	BART	BART Train Car Accident Repair Project	BART: Two BART Cars: Repair of two BART cars that were damaged in an accident in March 2011.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area;	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Alameda	ALA110122	21011	ACTC	Local PDA Planning - Alameda	Alameda County Various Agencies: Planning assistance pass through to local jurisdictions to support transportation investments and improve their performance in Priority Development Areas (PDAs)	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the Project Sponsor and Implementing Agency to ACTC	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Alameda	ALA110123	94526	AC Transit	AC Transit: Replace 27 40' Urban Buses	AC Transit: Purchase 27 40-foot replacement buses for use on local routes	2013 TIP Development - Update RTP-ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA110124	94526	AC Transit	AC Transit: Replace 38 40' Suburban Buses	AC Transit: Procure 38 replacement 40-foot suburban buses	2013 TIP Development - Update RTP-ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA130002	94526	AC Transit	AC Transit: Procure (27) 60' Artic Hybrid Buses	AC Transit: Purchase 27 60-foot diesel-electric hybrid articulated buses with dual-side doors for BRT service to replace older 60-foot articulated buses	2013 TIP Development - Amend a new exempt project into the TIP using \$27M in FY13 CON Prop 1B and \$2.7M in FY13 CON Other Local funds	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Alameda	ALA130003	240227	Oakland	Oakland Bay Trail to Lake Merritt Bike/Ped Bridge	Oakland: Over Embarcadero and UPRR tracks between Estuary park and Lake Merritt: Construct ADA accessible bicycle pedestrian bridge to link Bay Trail to Lake Merritt.	2013 TIP Development - Amend a new exempt project into the TIP using \$2M in Local funds	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA130004	240381	Oakland	Oakland 19th Street Uptown Bike Station	Oakland: Adjacent to 19th St BART: construct a street level bicycle station. (Safe Routes to Transit RM2 project. RM2#20.43)	2013 TIP Development - Amend a new exempt project into the TIP using \$531K in FY14 CON RM2 and \$75K in FY13 PE Sales-tax funds	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA130007	240196	BART	BART to Livermore Extension - Develop EIR	BART - Develop Draft Environmental Impact Report (DEIR) for the BART to Livermore Extension Project (Proposed Project).	2013 TIP Development - Amend in an exempt multi-phase project totaling \$14.799M to develop the DEIR for the BART to Livermore extension	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Alameda	ALA977038	240745	Caltrans	San Francisco-Oakland Bay Bridge	In San Francisco-Oakland: Bay Bridge: East Span Replacement Project; Near Toll Plaza Building: Reconstruct maintenance facilities	2013 TIP Development - Update RTP ID	1.19 - EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Alameda	ALA990052	240382	AC Transit	AC Transit Paratransit Van Depreciation	AC Transit: Amortized cost of replacing vans used for AC Transit paratransit service. Vans are operated and replaced by paratransit contractor. FTA funds programmed annually in lieu of programming for replacing vans at end of their useful life.	2013 TIP Development - Update RTP ID; Update the project title and description to better reflect the scope of the project which is to finance the cost of replacing paratransit vans	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Alameda	ALA990054	240386	Alameda	Tinker Avenue Reconfiguration	Alameda: On Tinker Avenue btw Webster St and 5th St; Reconfigure intersection including the construction of a 4 Ln. extension to Tinker Ave, install signals, and modify Webster St Tube off-ramp.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	5.01 - EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
Alameda	ALA990076	240382	AC Transit	AC Transit: ADA Paratransit Assistance	AC Transit: ADA Paratransit Operating Subsidy.	2013 TIP Development - Update RTP ID	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Alameda	ALA990077	94527	LAVTA	LAVTA: ADA Paratransit Operating Subsidy	LAVTA: ADA Paratransit Operating Subsidy	2013 TIP Development - Update RTP ID	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Alameda	ALA990091	240381	Caltrans	Bay Trail (Union City Segment)	In Union City: - Bay Trail; Construct Union City Segment of Bay Trail.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA991070	94526	AC Transit	AC Transit: Preventive Maintenance Program	AC Transit: Preventive maintenance for agency fleet and related equipment.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040

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Alameda	ALA991077	240381	Alameda County	E. 14th St/Mission Blvd Streetscape	Alameda County: On East 14th St./Mission Blvd between Thrush St and Rufus Court; Construct "bulb-outs" in conjunction with larger streetscape improvement in redevelopment area. HPP #308	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update funding plan to remove RTP-LRP funds and reprogram \$548K in PE HPP from FY11 to FY14 and \$2M in Other Local funds	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-010021	240365	BART	Richmond Transit Village Transit & Ped Imps	Richmond: Richmond Transit Village; Construct pedestrian path & transit improvements at Transit Village. (Project Sponsor is BART and Richmond). MTC Housing Incentive Program (HIP) project.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing and update the Plan Bay Area RTP ID	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Contra Costa	CC-030011	230693	Richmond	Dornan Drive/Garrard Blvd Tunnel Rehabilitation	Richmond: Dornan Drive/Garrard Blvd tunnel 1/4 mile south of Cutting Blvd; Repair tunnel and install post-construction monitoring system.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan; Retain in the TIP for informational purposes as the project is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-030025	21017	WCCTA	WCCTA: Preventive Maintenance Program	WestCat: Operating assistance to aid agency with preventive maintenance activities of its fleet.	2013 TIP Development - retain in the TIP as the program is ongoing	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Contra Costa	CC-030034	94558	CCCTA	CCCTA: Preventive Maintenance Program	CCCTA: Preventive maintenance program of agency fleet.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Contra Costa	CC-030035	21017	ECCTA	Tri-Delta: ADA Operating Assistance	Tridelta: Operating assistance to fund ADA Set Aside requirement.	2013 TIP Development - Update RTP ID	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Contra Costa	CC-030037	21017	ECCTA	ECCTA: Preventive Maintenance Program	TriDelta: Preventive Maintenance Program for agency fleet.	2013 TIP Development - Update RTP ID	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Contra Costa	CC-050002	21214	Antioch	Antioch - Wilbur Ave Bridge Widening	HBP: Antioch: BRIDGE No. 28C0054, On Wilbur Ave., over BNSF, Amtrak, and UP RR, 0.25 Miles east of Minaker Drive; Widen from 2 to 4 lanes, rehabilitate bridge & upgrade bridge railings.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project construction is ongoing.	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-050010	230596	CCCTA	Pacheco Transit Hub	Pacheco Transit Hub: Construct Bus Transfer Station and expanded park and ride facility	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram \$93K in TFCA, \$507K in Other Local and \$800K in Prop 1B funds from FY11 to FY13	5.06 - EXEMPT (40 CFR 93.127) - Bus terminals and transfer points	2040
Contra Costa	CC-050029	21017	ECCTA	Tri-Delta: Park and Ride Facility Land Purchase	Antioch: southeast corner of Delta Fair Blvd and Standard Oil Ave: Purchase & develop land for park and ride facility.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	5.06 - EXEMPT (40 CFR 93.127) - Bus terminals and transfer points	2040
Contra Costa	CC-050074	21210	WCCTA	Hercules Intermodal Station Improvements	Hercules: Intermodal Station along the capitol corridor: Various passenger and station improvements.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Contra Costa	CC-050075	240386	Danville	Crow Canyon/Camino Tassajara Intersection Imps	Danville: Camino Tassajara, fr Sycamore Valley Rd to Eastern Town limits & Crow Canyon, fr Camino Tassajara to Southern town limits: pavement rehab incl. signal, drainage, spot Sidewalk, curb/gutter & improv. for ped/bike. Project will be done in phases.	2013 TIP Development - Update RTP ID	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-050076	22355	Richmond	I-80/Central Avenue Interchange Modification	At I-80/Central Ave; Modifications and reconfiguration to interchange (Ph 1, federal funded) and connecting Pierce & San Mateo streets south of Central Ave. (Ph 2, local funded) plus some traffic improvements on Central Ave to ease traffic congestion.	2013 TIP Development - Update funding plan to reflect schedule delay	5.04 - EXEMPT (40 CFR 93.127) - Changes in vertical and horizontal alignment	2020
Contra Costa	CC-070013	230249	Brentwood	Lone Tree Way Undercrossing	Brentwood: On Lone Tree Way at the UPRR track; Construct 6-lane grade separation undercrossing.	2013 TIP Development - Update funding plan to reprogram CON phase funds to FY13	1.01 - EXEMPT (40 CFR 93.126) - Railroad/highway crossing	2040
Contra Costa	CC-070020	21225	CC County	Carquinez Scenic Drive, SF Bay Trail Segment	On Carquinez Scenic Drive between Martinez and Port Costa: Repair and reconstruct 1.7 mile trail and construct a Class I multi-use bicycle/pedestrian trail.	2013 TIP Development - Retain in the TIP for informational purposes as the project is on-going	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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Contra Costa	CC-070024	22388	Concord	SR 242 / Clayton Road Interchange Improvements	Concord. Construct NB on-ramp and SB off-ramp at the SR242/Clayton Rd Interchange	2013 TIP Development - Update RTP ID and funding plan to reprogram ENV phase to FY13, PSE phase funds to FY16, ROW phase funds to FY18 and CON phase funds to FY19	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2020
Contra Costa	CC-070033	21225	EB Reg Park Dis	Conta Costa Parks Bike/Ped Trail Improvements	Contra Costa County: Various County Parks; Various bicycle and pedestrian trail improvements.	2013 TIP Development - Update RTP ID; Update the regional air quality description from Non-Exempt to "EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities" to better reflect the project scope	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-070035	22360	San Pablo	Reconstruct I-80/San Pablo Dam Rd Interchange	San Pablo: At the I-80/San Pablo Dam Rd interchange and adjacent interchanges; Upgrade and improve interchange including provisions for bicyclists and pedestrians. Project will be constructed in multiple phases.	2013 TIP Update - Phase 1 construction delayed from FY15 to FY16. LRP and other Local funds on Phase 2 delayed to FY19. Funding breakdown between phases also revised. Toll credits used in lieu of	5.04 - EXEMPT (40 CFR 93.127) - Changes in vertical and horizontal alignment	2020
Contra Costa	CC-070046	230218	El Cerrito	Del Norte Area TOD Bike/Ped/Transit Access Imps	Del Norte Intermodal Station: Transit Oriented Development and access improvements (transit connections include BART, bus, express bus, bicycle, and pedestrian).	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram ENV to FY13, PSE to FY14, ROW to FY15 and CON to FY16 and FY19 and change the fund	5.06 - EXEMPT (40 CFR 93.127) - Bus terminals and transfer points	2020
Contra Costa	CC-070067	21225	CCTA	Mokelumne Trail Bike/Ped Overcrossing	Brentwood: Construct a pedestrian and bicycle overcrossing near the Mokelumne Trail at State Route 4 in Brentwood.	2013 TIP Development - Update funding plan to reduce total project cost by \$500K and clarify fund sources	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-070074	240365	El Cerrito	San Pablo Avenue Streetscape	El Cerrito: Along San Pablo Avenue (SR 123) from the Southern City limit to Northern City limit; Development of pedestrian, transit stop, and streetscape improvements (TLC).	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Contra Costa	CC-070084	21225	Pittsburg	Bailey Road Transit Access Improvements	Pittsburg: Bailey Road/BART/Maylard Road area; Pedestrian crossing improvements to BART station including sidewalk widening, security lighting.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-070085	240365	Martinez	Martinez - Marina Vista Streetscape	Martinez: On Marina Vista Ave; Add bicycle lane, pedestrian crossings, bulbouts, brick sidewalks, pedestrian scale streetlights and street trees (TLC).	2013 TIP Development - Retain in the TIP for informational purposes until final payment is received.	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Contra Costa	CC-070087	21225	CC County	Montalvin Manor Ped & Transit Access Imps	Contra Costa County: Improve safety and accessibility to school by extending sidewalk up Kay Rd from San Pablo Ave to Rachel Rd and construct sidewalk, drainage improvements, bike lanes and bus shelters on San Pablo Ave from Shamrock Dr to Kay Rd	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram funds between years and phases and add \$513K in Other Local; Retain in the TIP for	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-070092	21017	ECCTA	ECCTA: Transit Bus Replacements	Tri-Delta Transit: Replace 42 transit bus with similar buses.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-090001	230693	Danville	Diablo Road Imps. - Green Valley to Avenida Neuva	On Diablo Road: add EB left turn pocket at Clydesdale Dr; drainage improvements; replacement of 1300 LF retaining wall between Green Valley Rd and Clydesdale Dr; overlay; replace guardrail.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram CON to FY17	5.01 - EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
Contra Costa	CC-090004	22402	Danville	San Ramon Valley Bus Program	In San Ramon Valley: Operate a school bus program starting in FY 2010 in the peak hours to relieve congestion near schools in the San Ramon and Danville area	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040

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Contra Costa	CC-090005	21225	Martinez	Martinez - Court Street Overcrossing, Phase 1	Construct a 19-foot wide bicycle, pedestrian, and emergency vehicle Overcrossing to span DiMaggio Drive, the four tracks of UPRR and Marina Vista to connect North Court St. in the Waterfront Park, with Court St. at Escobar St.	2013 TIP Development: Update the funding plan to reprogram ENV to FY13, PSE to FY14, and ROW and CON to FY19 and change the fund source for ROW and CON to RTP-LRP	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-090018	230084	Richmond	Marina Bay Parkway Grade Separation	Richmond: Marina Bay Parkway between Regatta Boulevard and Meeker Avenue: construct a roadway undercrossing in place of an existing grade crossing	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram ROW to FY13 and change the fund source for \$10.9M in ROW and CON funds from Other	1.01 - EXEMPT (40 CFR 93.126) - Railroad/highway crossing	2040
Contra Costa	CC-090035	22425	MTC	Regional Planning Activities and PPM - CC County	Contra Costa: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Contra Costa	CC-090039	21017	ECCTA	Tri-Delta: Install Clipper Fareboxes	Tri Delta Transit: Clipper Compatible fare boxes for new buses	2013 TIP Development - Retain in the TIP for informational purposes as the project is on-going	2.05 - EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Contra Costa	CC-090063	21225	BART	BART Community Information Wayfinding	Contra Costa County: Multiple BART Stations: Wayfinding kiosks that provide destination maps at BART stations and other key locations.	2013 TIP Development - Retain in the TIP for informational purposes as the project is on-going	2.07 - EXEMPT (40 CFR 93.126) - Construction of small passenger shelters and information kiosks	2040
Contra Costa	CC-090064	21225	Lafayette	Lafayette - Pleasant Hill Road South Bike/Ped Imps	Lafayette: Both sides of Pleasant Hill Road between Condit Road and Olympic Blvd: Construct multi-purpose pathways and bike lanes by narrowing the travel lanes.	2013 TIP Development- Retain in TIP as project is on-going	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-090065	21225	Hercules	Hercules (Bio-Rad) Bay Trail	As an element of the Hercules Intermodal Transit Center, construct 0.53-miles of SF Bay Trail in Hercules behind Bio-Rad facility at the end of Alfred Nobel Drive. the project will require the construction of retaining wall and culvert.	2013 TIP Development - update funding plan	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-090066	21225	El Cerrito	Moeser & Ashbury Ped/Bike Corridor Improvements	El Cerrito: Ashbury Ave: construct new sidewalk, Class II and III bikeways, and intersection improvements; Moeser Lane: construct new sidewalk, Class II and III bikeways and retaining wall	2013 TIP Update. Update project schedule & funding to add \$10K in PSE Other Local in FY 2010 to cover design costs and add \$78K of CON Other Local in FY13 to cover awarded construction contract.	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-090067	21225	Concord	Monument Corridor Pedestrian and Bikeway Network I	In Concord: Construct 12-foot wide, asphalt-paved Class I Bikeway from the Monument Blvd/Mohr Ln intersection to Victory Ln at Linden Dr, then continues across Victory Ln until Mayette Ave; including Signage and striping on these and adjacent streets.	2013 TIP Development - Update RTP ID and update the funding plan	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-110005	240365	El Cerrito	El Cerito Central Ave & Liberty St Streetscape Imp	El Cerrito: On Central Ave, San Pablo Av to the Ohlone Greenway Trail & Plaza BART Sta, and on Liberty St, Central Ave to Fairmount Ave. Streetscape Improvements	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update project schedule and funding plan to add \$160K of CON Other Local in FY13. Clarify expanded description to reference	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-110006	240365	Lafayette	Lafayette Downtown Bike/Ped Imp & Streetscape	Downtown Lafayette: Mt. Diablo Blvd. from Oak Hill Rd. to Mtn. View Dr., including Happy Valley Rd. Renovate/widen SW; install bike racks, enhanced crosswalks, curb bulbs, ped. scale lights, streetscape, striping & signs. Project is phased.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes.	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Contra Costa	CC-110007	240365	Richmond	Richmond Transit Village: Nevin Imps BART-19th	On Nevin Ave bet 19th St and the BART Station, ped and bicycle street enhancements incl reconstruction of east entrance to the BART station, wide sidewalk, curb ramps, enhanced crosswalks, lighting, signage, trees, stairway, elevator and pedestrian plaza.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Revise project title	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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Contra Costa	CC-110009	230693	Brentwood	Brentwood 2012 Pavement Management Program	Brentwood: Sellers Ave between Chestnut St and South City limit; Sand Creek Rd between UPRR and 1900' W of Fairview Ave and O'Hara Ave between Sand Creek Rd and 2nd St, and Lone Tree Way between Gann St and UPRR: Grind, overlay and upgrade of curb ramps	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-110010	230693	Concord	Concord Blvd Pavement Rehabilitation	Concord: on Concord Boulevard from Sixth Street to Bailey Road: Grind and replace the top 2.50 inches of asphalt concrete. Two recent sidewalk projects from Sixth Street to Sattler Drive have installed a portion of necessary ADA improvements.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-110011	230693	Antioch	Antioch Various Streets Pavement Rehab	In Antioch: On Hillcrest Avenue from Larkspur to Davison, Putnam from G to Gentrytown Drive and Contra Loma Drive from Long view to James Donlon Drive: Pavement rehab	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan; Retain in the TIP for informational purposes as the project is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-110012	230693	Pittsburg	Pittsburg Railroad Avenue Pavement Rehab	In Pittsburg: On Railroad Ave from Linscheid Dr. to the southern City limit, pavement rehab, upgrade of curb ramps, replacement of pavement markings and traffic loops, adjustment of manholes and valve boxes and other utilities.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-110013	230693	Walnut Creek	Walnut Creek Various Arterials & Collectors Rehab	In Walnut Creek: On San Luis Rd(Larkey to Main), Montego(Ygnacio Valley to Tampico), California Blvd(Mt. Diablo to Botelho), California Blvd(Ygnacio Valley to Pringle) and Newell Ave(Main to Broadway); Provide HMA paving, restore sidewalks and striping.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-110015	240365	Hercules	Hercules New Town Center Complete Street	Hercules: Build pedestrian and bike facilities including landscaping, lighting, and other streetscape enhancements; Eastward from the existing pair of SR-4 freeway ramps to and including a new roundabout intersection at Palm Avenue.	2013 TIP Development - update funding plan to reprogram all phases to FY20	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Contra Costa	CC-110016	240365	Richmond	Richmond Transit Village: Nevin Imps 19th-27th	Richmond: On Nevin Ave bet 19th and 27th Streets, ped/bicycle improvements, traffic circle, lighting, curb ramps, upgrades to traffic signals, signage	2013 TIP Development. Update project funding plan and change project name	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Contra Costa	CC-110017	21225	Pittsburg	Pittsburg N. Parkside Dr. Bike Lanes and Sidewalks	Pittsburg: North Parkside Drive, from Railroad Avenue to Range Road, and Willow Pass Road, from Range Road to Loftus Road/Seasons Drive: Widen to add bike lanes and sidewalks.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-110018	21225	Richmond	Richmond Barrett Avenue Bicycle Lanes	In Richmond: On Barrett Avenue between Garrard Boulevard and San Pablo Avenue: construct a class II and III bicycle facility along both sides of Barrett Avenue.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-110019	21225	Concord	Concord Monument Corridor Shared Use Trail	In Concord: Parallel to SR242 from Mayette Avenue/May Court to Meadow Lane: Construct a ½ mile shared use trail. The trail will be an alternate route for pedestrians and bicyclists traveling along Monument Boulevard, a major arterial.	2013 TIP Development - Update the funding plan; Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-110031	240367	Richmond	SR25 - Nystrom, Coronado, Highland, Wilson & Wash.	In Richmond: In the vicinities of Nystrom, Coronado, Highland, Wilson, and Washington Elementary Schools: Implement engineering changes to pedestrian and bicycle routes to enhance the safety of students walking to and from these schools.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-110048	21225	Orinda	Moraga Way Pedestrian Pathway	In Orinda: on Moraga Way between Ivy Drive south and El Camino Moraga, construct pedestrian pathway and improve crosswalks.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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Contra Costa	CC-110049	240367	Pleasant Hill	Central-East County SR2S Program	In various jurisdictions in Central-East Contra Costa County: SR2S outreach and education program	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	4.02 - EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Contra Costa	CC-110050	240367	Danville	San Ramon Valley Street Smarts SR2S Program	In various Contra Costa jurisdictions: Provide traffic safety education to students in grades K-12, better equipping them to make sound decisions when walking or bicycling to school. Deliver campaigns encouraging students to walk or bike to school.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	4.02 - EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Contra Costa	CC-110051	240367	Pleasant Hill	Lisa Lane Sidewalk Project	In Pleasant Hill: Lisa Ln between Marcia Dr. and Fair Oaks Elementary School: Construct new concrete sidewalk along the north side of Lisa Lane, as well as new Class II bike lanes along both sides of Lisa Lane	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-110052	240367	Brentwood	Brentwood Area Schools Bike/Ped Access Imps	Bentwood: Near three schools in the City of Brentwood: Improve pedestrian safety and access by providing safer crosswalk access across streets that serve three area schools	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area and update the funding plan	5.02 - EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Contra Costa	CC-110055	240365	Moraga	Moraga Way Streetscape	Moraga: Streetscape and safety improvements; sidewalk gap closures, safety enhancements, bus shelters, lighting, street tree planting and street furniture (including bike racks) on Moraga Way bet. Moraga Rd and Camino Ricardo.	2013 TIP Development - Retain in the TIP for informational purposes as the project is on-going	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-110057	21017	WCCTA	WCCTA: Replace (5) 1999 35' Revenue Vehicles	WCCTA: Replace (5) 35' vehicles with (5) new 35' low floor vehicles	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-110058	21017	WCCTA	WCCTA: Purchase of non revenue Service Vehicle	WCCTA: Purchase of non revenue service vehicle for Operations staff	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes	2.02 - EXEMPT (40 CFR 93.126) - Purchase of support vehicles	2040
Contra Costa	CC-110061	94558	CCCTA	CCCTA - Replace 10 40' buses - Hybrid	CCCTA: Replace 10 2000 40' hybrid buses that have reached the end of their useful life.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-110062	94558	CCCTA	CCCTA: Replace 4 LINK Vans	CCCTA: Replace 4 2004 cut-away vans	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing 2013 TIP Development - Project is ongoing - Keep in TIP	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-110063	94558	CCCTA	CCCTA: Replace 4 Minivans	CCCTA: Replace 4 2004 mini-vans used for paratransit operations.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-110064	94558	CCCTA	CCCTA: Maintenance Facility Rehabilitation	CCCTA Maintenance Facility: Replace and repair facility including replacement of in-ground and mobile lifts, door replacement, and maintenance exhaust system upgrade.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Contra Costa	CC-110065	94558	CCCTA	CCCTA: Inventory Asset Management System	CCCTA: Update the asset management software.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.04 - EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040
Contra Costa	CC-110066	22400	CCTA	SR 239 - New State Highway Study	SR 239 between SR4 in Brentwood and I-205 in Tracy: Conduct environmental and design studies to create a new alignment for SR239 and develop corridor improvements from Brentwood to Tracy.	2013 TIP Development - Update funding plan to add RTP-LRP funds in 2019 to increase project cost to RTP amount and changed all the phases to PE.	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Contra Costa	CC-110080	21017	ECCTA	ECCTA - Capital Maintenance-Fuel	ECCTA - Fuel costs as capital maintenance costs	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040

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Contra Costa	CC-110082	240457	BART	Walnut Creek BART TOD Access Improvements	Walnut Creek: In the vicinity of the Walnut Creek BART Station: construct public access improvements that are part of the proposed transit-oriented development	2013 TIP Development - Update RTP ID	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2030
Contra Costa	CC-110083	94558	CCCTA	Replace Diesel Trolleys with Electric TrolleyBuses	CCCTA: Replace four diesel trolleys with electric trolleys and install the associated infrastructure	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-110084	21225	CC County	Canal Road Bicycle and Pedestrian Facilites	CC County: Canal Rd from Bailey Rd to Loftus Rd: Construct east and west bound bike lanes and close sidewalk gaps (2,350 ft in total length) on the north side of Canal Rd, other improvements include curb ramps, speed feedback signs, and road striping	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the expanded description to include a reference to RTP ID 22423	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-110092	21017	WCCTA	WCCTA Replace (8)1988 40' transit buses	WCCTA: Replace (8) 1988 40' vehicles with new 40' low floor Gillig vehicles.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-110093	21017	WCCTA	WCCTA: Replace (1) 2003 40' transit buses	WCCTA - Replace (1) 2003 40' Gillig phantom with a 40' Gillig low floor diesel vehicle	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-110094	21017	WCCTA	WCCTA - Replace (1) 40 foot diesel transit vehicle	WCCTA: Replace (1) 40' (2003) vehicle with (1) 45' over the road coach	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-110095	94558	CCCTA	CCCTA: Replace 7 30' Buses	CCCTA:Replace 7 30' buses that have reached the end of their useful life.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-110096	94558	CCCTA	CCCTA - Replace 6 22' Paratransit Vans	CCCTA: Replace 6 paratransit vans that have reached the end of their useful life	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-110097	94558	CCCTA	CCCTA - Replace 4 Paratransit Minivans	CCCTA: Replaces 4 paratransit minivans.	2013 TIP Development - Update RTP ID; Update the project description to reduce the number of paratransit minivans being purchased from 6 to 4	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-110098	94558	CCCTA	CCCTA - Purchase and Install 40 Elec. Cooling Fans	CCCTA: Purchase 40 electric cooling fans and install them on diesel buses currently in the fleet.	2013 TIP Development - Update RTP ID	2.05 - EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Contra Costa	CC-110099	94558	CCCTA	CCCTA - Replace 15 40' Buses	CCCTA: replace 15 40' Heavy Duty Diesel Transit Buses.	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-110100	94558	CCCTA	CCCTA - Replace 18 40' Buses	CCCTA: Replace 18 40' Heavy Duty Diesel Over the Road Buses that have reached the end of their useful life.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Contra Costa	CC-110101	21011	MTC	Local PDA Planning - Contra Costa	Contra Costa County Various Agencies: Planning assistance pass through to local jurisdictions to support transportationinvestments and improve their performance in Priority Development Areas (PDAs)	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040

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Contra Costa	CC-110102	22423	Richmond	Easy Go Richmond	In Richmond, expand Easy Go KIDS CAB and Bicycle Program using STP/CMAQ funds	2013 TIP Development - Update RTP ID	3.01 - EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2040
Contra Costa	CC-130001	21225	CC County	Bailey Road-State Route 4 Interchange	In Bay Point: At the Bailey Road-State Route 4 interchange; modify ramps to improve bicycle and pedestrian circulation.	2013 TIP Development - Amend in a new exempt multi-phase project totaling \$8.9M	5.03 - EXEMPT (40 CFR 93.127) - Interchange reconfiguration projects	2040
Contra Costa	CC-130003	21225	CC County	Bailey Road Bike and Pedestrian Improvements	The project calls for undergrounding of overhead utilities, reconstruct sidewalk, installation of bike lanes, and landscaping for community enhancement and beautification. (We will be seeking additional future funding for each of the project phases)	2013 TIP Development - Amend in a new exempt multi-phase project totaling \$12.76M	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-990045	21017	WCCTA	WCCTA: ADA Paratransit Operating Subsidy	WCCTA: ADA Paratransit Operating Subsidy	2013 TIP Development - Update RTP ID	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Contra Costa	CC-99T001	94558	CCCTA	CCCTA: ADA Paratransit Assistance	CCCTA: ADA Paratransit Assistance to transit agency.	2013 TIP Development - Update RTP ID	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Marin	MRN010006	230105	Marin County	Tennessee Valley Bridge	Marin: Tennessee Valley Bridge; Reconstruct bridge no additional travel lanes. (Also See MRN990028 for PSE & ENV).	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	1.19 - EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Marin	MRN010035	94572	GGBHTD	ACIS Radio Communications System	GGBHTD: Replace radio communications system on agency's bus fleet.	2013 TIP Development - Update RTP ID	2.05 - EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Marin	MRN030010	94572	GGBHTD	GGBHTD: Fixed Guideway Connectors	Golden Gate Ferry: This project will replace/rehab fixed guideway connectors such as floats, floating barges, ramps, and gangways throughout the system.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Marin	MRN030011	94572	GGBHTD	GGBHTD: Ferry Major Components Rehabilitation	Golden Gate Ferry: Rehab, replace major ferry components like propulsion & navigation systems, dry-dock, hull, interior and other components.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Marin	MRN050012	240714	Caltrans	US 101 - Golden Gate Botanical Area Revegetation	Golden Gate Botanical Management Area: along US 101 from Golden Gate Bridge to Rodeo Ave; Native plant revegetation.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.09 - EXEMPT (40 CFR 93.126) - Plantings, landscaping, etc	2040
Marin	MRN050014	240552	TAM	Central Marin Ferry Access Improvements	Central Marin: From the southern terminus of the Cal Park Hill path connecting to the east/west path adjacent to E. Sir Francis Drake Blvd.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN050015	94572	GGBHTD	4 Replacement Express Buses	GGBHTD: Replace 4 Express Buses.	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Marin	MRN050018	21012	GGBHTD	Golden Gate Bridge Seismic Retrofit, Phase 3B	SF/Marin County: Golden Gate Bridge; Seismic retrofit of the Golden Gate Bridge - construction of suspension span, south pier and fender.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan	1.19 - EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2020
Marin	MRN050019	230712	GGBHTD	Golden Gate Bridge - Suicide Deterrent System	Golden Gate Bridge: Build suicide deterrent system. Including design & Environmental analysis, plus analysis of alternatives & wind tunnel tests to ensure the feasibility of designs and build deterrent system	2013 TIP Development - Update RTP ID and delete CON phase funding to make it consistent with the scope in the TIP and RTP	1.03 - EXEMPT (40 CFR 93.126) - Safer non-Federal-aid system roads	2040
Marin	MRN050020	240727	FHWA	Stinson Beach Access Road	Marin County: Stinson Beach; Rehabilitate entry road and North and Central parking area.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040

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Marin	MRN050025	94572	GGBHTD	GGBHTD: Facilities Rehabilitation	GGBHTD: Rehabilitate agency's maintenance and operating facilities and replace heavy duty operating and maintenance equipment.	2013 TIP Development - Update RTP ID and update funding plan to reprogram FY13 funds to FY14	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Marin	MRN050033	240678	Marin County	Non-motorized Transp. Pilot Program - Marin County	Marin County; Various locations; Lump sum Non-motorized Transportation Pilot Program. Project is consistent with 40 CFR Part 93.126, 127, 128, Exempt Tables 2 & 3.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN070001	240723	MCTD	Marin county: Bus Stop Improvements	MCTD: Improvements including bus stops, enhanced shelters, accessible pathways, bicycle racks and other passenger amenities.	2013 TIP Development - Update RTP ID	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Marin	MRN070002	240714	Mill Valley	Mill Valley - Miller Avenue Rehabilitation	Mill Valley: Miller Avenue: Pavement resurfacing, reconstruction of bicycle lanes, modifications to traffic islands, and improvements to sidewalk facilities.	2013 TIP Development - Update RTP ID	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Marin	MRN070003	240678	TAM	Marin Bike/Ped Facility North of Atherton Ave.	Marin County: Along US 101 from north of Atherton Avenue to the south of Petaluma River bridge; Construct bicycle-pedestrian facility.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN070008	94572	GGBHTD	San Rafael Transit Center Improvements	GGBHTD: San Rafael; Transit connectivity enhancement including public information facility, wayfinding improvements and signage.	2013 TIP Development	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Marin	MRN070009	240678	San Rafael	San Rafael - Non-motorized Transport Pilot Program	San Rafael: Construct infrastructure, network planning, & educational programs to ascertain whether bicycling and walking can result in greater share of overall trips and reduce SOV usage.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN070012	240678	Sausalito	Sausalito - Non-motorized Transp. Pilot Program	Sausalito: Construct infrastructure, network planning, & educational programs to ascertain whether bicycling and walking can result in greater share of overall trips and reduce SOV usage.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN070014	240678	Fairfax	Fairfax - Non-motorized Transp. Pilot Program	Fairfax: Construct infrastructure, network planning, & educational programs to ascertain whether bicycling and walking can result in greater share of overall trips and reduce SOV usage.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN070015	240678	Larkspur	Larkspur - Non-motorized Transpo. Pilot Program	Larkspur: Doherty Dr. between downtown and Readwood HS: Construct infrastructure, network planning, & educational programs to ascertain whether bicycling and walking can result in greater share of overall trips and reduce SOV usage.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN070017	240678	TAM	TAM - Non-motorized Transportation Pilot Program	Marin County: Construct infrastructure, network planning, & educational programs to ascertain whether bicycling and walking can result in greater share of overall trips and reduce SOV usage.	2013 TIP Development - Retain this project in the TIP for informational purposes as it is ongoing - No change	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN070018	94572	GGBHTD	Larkspur Ferry Terminal Parking Improvements	GGBHTD: Larkspur; Improvements and enhancement at the ferry terminal.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040

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Marin	MRN070019	230105	Marin County	Marin Parklands Visitor Access, Phase 2	Marin Parklands: Pacific Way bridge at Big Lagoon: Reconstruct bridge and widen to add bike lanes. No added motor-vehicle capacity	2013 TIP Development - Update RTP ID and funding plan to reprogram CON funds to FY15	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN070020	240678	Mill Valley	Mill Valley - Non-motorized Transp. Pilot Program	Mill Valley: Construct infrastructure, network planning, & educational programs to ascertain whether bicycling and walking can result in great share of overall trips and reduce SOV usage.	2013 TIP Development - Update RTP ID and retain this project in the TIP for informational purposes as it is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN090008	240714	Various	Marin County: Major Roads Rehabilitation	Marin County: Rehab. on major roads of countywide significance	2013 TIP Development - update RTP ID and reprogram RTP-LRP funds to FY19	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Marin	MRN090012	94572	GGBHTD	Golden Gate Transit Station Bicycle Improvements	Bicycle improvements include adding secure, user-friendly bicycle racks and signage in Marin County.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN090020	22425	MTC	Regional Planning Activities and PPM - Marin	Marin: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2013 TIP Development - Update RTP ID	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Marin	MRN090025	94572	GGBHTD	GGBHTD: Replacement of Ferry Propulsion Systems	Golden Gate Transit: Replacement of power distribution systems, propellers, engines and generators for Golden Gate Ferry vessels.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Marin	MRN090033	94572	GGBHTD	Golden Gate Transit: ADA Paratransit Assistance	Golden Gate Transit: ADA Paratransit Assistance	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Marin	MRN090034	94572	GGBHTD	GGBHTD: Replace 30 - 1997 45' MCI Buses	GGBHTD: Replace 30 - 1997 45' MCI Buses at the end of their useful life. Buses no. 601-630.	2013 TIP Development - Update RTP ID and funding plan to reprogram all funds to FY15	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Marin	MRN090035	94572	GGBHTD	GGBHTD: Replace 7 - 2005 Paratransit Vans	GGBHTD: Replace 7 - 2005 cutaway paratransit vans that have reached the end of their useful life with 7 cutaways. Vans to be replaced: unit nos. 60-66.	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Marin	MRN090036	94572	GGBHTD	GGBHTD: Bus Stop Improvements	GGBHTD: Upgrade GGBHTD bus stops with standard signs, schedules, information cases, system maps, red curbs, route information, benches, etc.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Marin	MRN090049	240678	Marin County	Non-motorized Transp. Projects - Marin County	Marin County; Various locations; Bicycle & pedestrian improvement projects	TIP Development - No Change	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN090050	240678	Marin County	Sir Francis Drake Boulevard Westbound Bike Lane	Marin County: On Sir Francis Drake Blvd. from Baywood Canyon to the top of White's Hill (Mile Post 9.75): reconstruct and in some locations, widen the westbound portion of the shoulder to provide bicycle safety improvements	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN090052	240714	Mill Valley	Mill Valley - Sycamore Ave Pedestrian Facilities	New pedestrian sidewalk and adjacent Class I bike path, lighting, high visibility school zone crosswalk markings, street furniture, striping, and markings, and landscaping along Sycamore Avenue between Camino Alto and Bay Front Park.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Marin	MRN090053	240714	Marin County	Marin County: Southern Marin Roads Rehab	Project will rehabilitate portions of Laurel Grove Avenue, Ricardo Road, and Panoramic Highway.	2013 TIP Development - Retain this project in the TIP for informational purposes as it is ongoing - No change	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Marin	MRN110003	240714	Caltrans	US-101 Mission Bell Installation	Install historic Mission Bells on US-101 in Marin and Sonoma Counties.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040

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Marin	MRN110004	21017	MCTD	Local Bus Stop Revitalization in Marin County	Marin County: Various Locations: Bring outdated local bus stops into compliance with current accessibility and passenger amenity standards	2013 TIP Development - Update implementing agency and RTP ID	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Marin	MRN110006	240678	Marin County	Strawberry Point School Pedestrian Imps	Marin County: On Strawberry Drive: From Strawberry Point School at the mid block crosswalk on the west side of Strawberry Dr.; construct a 330 ft. sidewalk with driveway approaches and ADA-compliant curb ramps	2013 TIP Development - Retain this project in the TIP for informational purposes as it is ongoing - No change	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN110007	240678	Marin County	Marinwood, Greenbrae, Strawberry & Marin City Imps	Marin County: Project will improve bicycle and pedestrian access within Marinwood, Greenbrae, Strawberry, and Marin City PDAs.	2013 TIP Development - Retain this project in the TIP for informational purposes as it is ongoing - No change	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Marin	MRN110008	240714	San Rafael	San Rafael Citywide Street Resurfacing	In San Rafael: Various city streets: Resurface streets.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing - No Change	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Marin	MRN110009	240714	Mill Valley	Mill Valley - Edgewood Avenue Resurfacing	Mill Valley: Edgewood Avenue from Molino Avenue (start of Edgewood) to Marion Avenue: Resurface street	2013 TIP Development - Update RTP ID and retain this project in the TIP for informational purposes as it is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Marin	MRN110010	240678	Sausalito	Sausalito - Bridgeway/US 101 Off Ramp Bicycle Imps	Sausalito: Highway 101 Off Ramp/Bridgeway/Gate 6 Intersection: Improve bicycle traffic	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN110015	240714	Marin County	Novato Boulevard Resurfacing	In unincorporated Marin County: Novato Boulevard between Novato City Limits and Point Reyes-Petaluma Road including associated improvements.	2013 TIP Development - Retain this project in the TIP for informational purposes as it is ongoing - No change	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Marin	MRN110016	240678	Marin County	Venetia Valley School SR2S Pedestrian Access Imps	Marin County: Near Venetia Valley School: on the south side of North San Pedro Road: close a sidewalk gap; At the two school driveways: crosswalk improvements	2013 TIP Development - Retain this project in the TIP for informational purposes as it is ongoing - No change	1.06 - EXEMPT (40 CFR 93.126) - Highway Safety Improvement Program implementation	2040
Marin	MRN110027	94572	GGBHTD	GGBHTD - Replace 2 - 1998 45' Over-The-Road Buses	GGBHTD: Replace 2 - 1998 45' over-the-road buses that have reached the end of their useful life.	2013 TIP Development - Update RTP ID and funding plan to reprogram all funds to FY14	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Marin	MRN110028	94572	GGBHTD	GGBHTD - Replace 3 - 2005 Paratransit Vans	GGBHTD: Replace 3 - 2005 paratransit vans that have reached the end of their useful life.	2013 TIP Development - Update RTP ID and funding plan to reprogram all funds to FY14	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Marin	MRN110029	240678	San Rafael	San Rafael: Sidewalk along East Francisco Blvd	City of San Rafael: Along East Francisco Boulevard from Vivian Way to Grand Avenue; Sidewalk improvements	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN110030	230252	MCTD	Capital Improvements For Muir Woods Shuttle	Marin County: Purchase Three 35 foot XHF Vehicles, Implement a Real Time Bus Arrival System, and Upgrade Passengers Facilities for Muir Woods Shuttle. These vehicles replace vehicles that are being leased.	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Marin	MRN110033	240678	Marin County	Miller Creek Road Bike Lanes and Ped Improvements	In Marin County: On Miller creek road, Add Class 2 Bicycle Lanes by restriping road and intersection improvements at Miller Creek and Marinwood Avenue to enhance pedestrian and cyclist safety	2013 TIP Development - Update RTP ID and update the funding plan	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN110034	240729	TAM	Highway 101 Landscaping for Gap Closure Project	In Marin County, On Highway 101, Landscaping for the Gap Closure Project.	2013 TIP Development - Update RTP ID and update the funding plan	4.09 - EXEMPT (40 CFR 93.126) - Plantings, landscaping, etc	2040
Marin	MRN110039	21011	MTC	Local PDA Planning - Marin	Marin County Various Agencies: Planning assistance pass through to local jurisdictions to support transportation investments and improve their performance in Priority Development Areas (PDAs)	2013 TIP Development - Update RTP ID and update the funding plan	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040

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Marin	MRN110040	240723	MCTD	MCTD Preventive Maintenance	Marin Transit: Systemwide: Bus Transit Preventive maintenance	2013 TIP Development - Update RTP ID	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Marin	MRN110041	240723	MCTD	Marin Transit Low Income Youth Pass Program	Marin Transit: Provide low-income youth free bus passes. Other local funds are made available for this project by applying STP funding available through the TPI program to MRN110040	2013 TIP Development - Update RTP ID	3.01 - EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2040
Marin	MRN110042	21017	MCTD	Marin Transit Replace Four Local Buses	Marin Transit: Replace four local buses	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Marin	MRN110043	21017	MCTD	Marin Transit Seven Local Buses	Marin Transit: Replace seven local buses	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Marin	MRN110044	240723	MCTD	Marin Transit - Replace 13 Paratransit Vehicles	Marin Transit: Replace 13 Paratransit vehicles	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Marin	MRN110045	94572	GGBHTD	GGBHTD - Replace 7 - 40' Diesel Buses	GGBHTD: Replace seven (7) 40' Diesel Buses	2013 TIP Development - Update RTP ID and funding plan to reprogram all funds to FY14	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Marin	MRN110046	94572	GGBHTD	GGBHTD - Replace 14 - 45' OTR Coaches	GGBHTD: Replace fourteen (14) 45' Over-The-Road coaches	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Marin	MRN110047	21017	MCTD	MCTD- ADA Paratransit Assistance	MCTD: ADA Paratransit Assistance to transit agency.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Marin	MRN130002	240714	Marin County	Sir Francis Drake Blvd. MP 20.70 Slide Repair	This project is in unincorporated Marin County on Sir Francis Drake Blvd. adjacent to County Mile Post paddle 20.83 between Platform Bridge Road and Highway 1. The project will install an estimated 210 foot long CIDH retaining wall with tiebacks.	Amend in a new exempt project funded with \$560K in Emergency Relief funds	1.12 - EXEMPT (40 CFR 93.126) - Emergency relief (23 U.S.C. 125)	2040
Marin	MRN130003	240714	Marin County	Muir Woods Road MP 0.49 Slide Repair	This project is in unincorporated Marin County on Muir Woods Road at Mile Post 0.49 between Panoramic Highway and Highway 1 near Muir Woods. The project will install an estimated 95 foot long cast in drilled hole retaining wall.	Amend in a new exempt project funded with \$930.45K in Emergency Relief funds	1.12 - EXEMPT (40 CFR 93.126) - Emergency relief (23 U.S.C. 125)	2040
Marin	MRN970016	21012	GGBHTD	Golden Gate Bridge Seismic Retrofit, Ph: 1-3A	San Francisco /Marin Counties: Golden Gate Bridge; Seismic retrofit of the Golden Gate Bridge - construction on north and south approach viaducts, and Ft. Point Arch.	2013 TIP Development - Update RTP ID, update the funding plan and retain in the TIP for informational purposes as the project is ongoing	1.19 - EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2020
Marin	MRN990017	94572	GGBHTD	Ferry channel & berth dredging.	Golden Gate Ferry: From San Francisco to Marin County; Dredge ferry channel and berth.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Napa	NAP010002	94075	Caltrans	Design of SR 12/29 /Airport Blvd Grade Separation	Napa: SR 12/29 (Airport Blvd) Intersection; Grade Separation. (Environmental Only)	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is on-going	4.05 - EXEMPT (40 CFR 93.126) - Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action	2020
Napa	NAP030004	21017	NCTPA	NCTPA: ADA Operating Assistance	Napa: ADA operating assistance for paratransit service	2013 TIP Development - Update RTP ID	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040

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Napa	NAP030005	21017	NCTPA	Napa: Bus Stop Improvements	Napa Vine: Various bus stop improvements throughout the Napa County transit service areas. Add City/County Bus Passenger Amenities especially ADA Bus Stop Improvements.	2013 TIP Development - Update RTP ID	2.07 - EXEMPT (40 CFR 93.126) - Construction of small passenger shelters and information kiosks	2040
Napa	NAP090002	22425	MTC	Regional Planning Activities and PPM - Napa	Napa: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2013 TIP Development - Update RTP ID	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Napa	NAP090005	21017	NCTPA	NCTPA: Replace Rolling Stock	NCTPA: Replace rolling stock for fixed-route, paratransit, and community shuttle fleet.	2013 TIP Development - Update RTP ID and the funding plan to add \$1.985M in FY12 CON RM2 funds and retain in the TIP for informational purposes as the project is ongoing	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Napa	NAP090006	240612	Yountville	Yountville - Napa County Bicycle Path Extension	Napa County: North Yountville; Bike Route and Sidewalk Extension	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Napa	NAP090007	22417	American Canyon	American Canyon Napa Junction Elementary Ped Imps	American Canyon: Napa Junction from Napa Junction Elementary School to Highway 29 with minor portions on Theresa Ave and Lombard St: Construct 1,500 feet of public sidewalk.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2020
Napa	NAP090008	21017	NCTPA	NCTPA Equipment Replacement and Upgrades	NCTPA: Replacement and upgrades to equipment.	2013 TIP Development - Update RTP ID	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Napa	NAP110006	21011	American Canyon	American Canyon PDA Development Plan	American Canyon: Develop and implement a strategic Plan to focus on significant transit service improvements and define associated land use patterns and development Plans in the PDA consistent with Regional goals.	2013 TIP Development - update RTP ID and reprogram RTP-LRP funds to FY19	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Napa	NAP110007	230695	American Canyon	American Canyon: Theresa Ave Sidewalk Imp Phase 3	American Canyon: On Theresa Ave from the recently completed Theresa Avenue Phase 1 project south to Eucalyptus Drive: Replace substandard curb, gutter and sidewalk and construct missing sections of curb, gutter and sidewalk. Project length is approx. 450'	2013 TIP Development - Update RTP ID and retain this project in the TIP for informational purposes as it is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Napa	NAP110008	230695	Napa	Napa (City): 2011 Cape Seal Pavement Rehab	Napa City: California Blvd. from Laurel to Second; Jefferson from Trancas to Sierra; West Pueblo from Redwood to Rancho; Trower from Linda Vista to Solano; Wine Country from Linda Vista to Hwy 29: Cape seal	2013 TIP Development - Update RTP ID and retain this project in the TIP for informational purposes as it is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Napa	NAP110009	230695	Napa County	Napa County: Silverado Trail Paving Phase F	County of Napa: On Silverado Trail from Zinfandel Ln to Skellenger Ln (Phase F): County Local Roads Paving	2013 TIP Development - Update RTP ID and retain this project in the TIP for informational purposes as it is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Napa	NAP110011	240612	Napa	Napa:Lincoln Ave Bike Lane - Jefferson to Railroad	Napa City: Lincoln Avenue between Jefferson St and the railroad tracks; Restriping to provide Class II bike lanes.	2013 TIP Development - Update RTP ID and retain this project in the TIP for informational purposes as it is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Napa	NAP110012	240747	NCTPA	NCTPA: Napa County SRTS Program Expansion	In Napa County: Countywide: Expand existing SRTS program from 6 to 15 schools and enhance program offerings. Non-infrastructure only including marketing, education, and outreach activities.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Napa	NAP110013	240612	Napa	Napa City North/South Bike Connection	Napa City: California Blvd in section along the project limits of Pueblo and Permanente Way: Widen in order to provide Class II bike lanes along the entire corridor.	2013 TIP Development - Update RTP ID and funding plan and retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Napa	NAP110014	240612	NCTPA	Napa Valley Vine Trail Design and Construction	Napa County: Various locations: Design and construction of individual segments of Vine Trail.	2013 TIP Development - Update RTP ID and update the funding plan	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Napa	NAP110015	230695	Napa	Napa City - Linda Vista Pavement Overlay	In Napa: On Linda Vista Ave between Trower and Redwood; Rehabilitate roadway including, repair sidewalk and install ADA ramps.	2013 TIP Development - Update RTP ID and retain this project in the TIP for informational purposes as it is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Napa	NAP110022	230695	American Canyon	American Canyon - Napa Square Pavement Rehab.	In American Canyon: On Lena and Stenson Drive between Patricia and Marla Drive, Road rehabilitation.	2013 TIP Development - Update RTP ID and update the funding plan	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040

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Napa	NAP110023	230695	Napa County	Silverado Trail Phase G and H Rehab	County of Napa: On Silverado Trail from Howell Mountain to Zinfandel (Phase G) and from Dunawear to Larkmead (Phase H); rehabilitate roadway retaining existing Class II bicycle lanes	2013 TIP Development - update the funding plan	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Napa	NAP110024	22423	NCTPA	Napa County Community Based Transportation Plan	In Napa County, Update to the Napa Community Based Transportation Plan to identify barriers to the mobility needs of the County.	2013 TIP Development - Update RTP ID	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Napa	NAP110025	21011	MTC	Local PDA Planning - Napa	Napa County Various Agencies: Planning assistance pass through to local jurisdictions to support transportation investments and improve their performance in Priority Development Areas (PDAs)	2013 TIP Development - Update RTP ID and update the funding plan	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Napa	NAP970010	21017	NCTPA	Napa Vine Operating Assistance	Napa Vine: Operating assistance to support transit routes and services.	2013 TIP Development - Update RTP ID	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
San Francisco	SF-010004	240534	SF DPW	4th St Bridge Seismic Retrofit & Rehab	San Francisco: On 4th St over Mission Channel waterway; Repair, seismic retrofit, and rehabilitation of 4th St. bridge.	2013 TIP Development - Update funding plan to add \$12.1M in HBRR funds for the lawsuit settlement in FY13.	1.19 - EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
San Francisco	SF-010028	21627	Caltrain	Caltrain Electrification	Caltrain: From San Francisco to Gilroy: Electrification of the caltrain corridor from San Francisco to Tamien, including catenary poles, wires, power supply, track and signals, and Electric Multiple Units (EMU's).	2013 TIP Development - Update scope and funding plan to include the procurement of 98 Electric Multiple Units (EMU's) to the scope.	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2020
San Francisco	SF-030004	94636	SFMTA	Misc Security Improvements & Graffiti Prevention	Muni: Security improvements for facilities, vehicles and equipment. Includes, but not limited to, CCTV, fencing, gates, lighting, electronic signage, and prompt graffiti cleanup to secure Muni assets and deter vandalism.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the contact information; Retain in the TIP for informational purposes	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
San Francisco	SF-030013	94636	SFMTA	SFMTA: Wayside Fare Collection Equipment	Muni: Replacement of life-expired fare collection equipment.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes	2.05 - EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
San Francisco	SF-050014	94525	BART	BART/MUNI Direct Connection Platform	BART/MUNI; Embarcadero & Civic Center Stations; Provide a direct connection platform between the BART & MUNI at both stations.	2013 TIP Development - Update funding plan to reprogram CON phase funds to FY15. BART and Muni are now coordinating at the Powell Street Station due to the Central Subway Project.	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-050024	94636	SFMTA	SFMTA:Train Control & Trolley Signal Rehab/Replace	SFMTA: Rehabilitate or replace elements of the Wayside/Central Train Control & trolley Signal Systems.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	2.09 - EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
San Francisco	SF-050026	94636	SFMTA	SFMTA: Escalator Rehabilitation	SFMTA: Replace 28 escalator at 7 stations in the Muni Metro System.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
San Francisco	SF-050034	94636	SFMTA	Light Rail Vehicle Overhaul Program	Muni: Systematic overhaul of all light rail vehicles components in agency fleet.	2013 TIP Development & Update RTP-ID	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
San Francisco	SF-050039	240471	SFMTA	Glen Park Intermodal Facility	Muni: Glen Park Facility; Transit connectivity enhancements to improve connections between Muni and BART.	2013 TIP Development - Update project milestones, contact information and funding plan	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
San Francisco	SF-050042	240486	SF DPW	Citywide:San Francisco Street Improvements	San Francisco: Citywide; implement street improvement program, including greening, streetscape and sidewalk reconstruction. Project will be constructed in phases	2013 TIP Development - Update RTP ID	4.09 - EXEMPT (40 CFR 93.126) - Plantings, landscaping, etc	2040

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San Francisco	SF-070007	94636	SFMTA	Central Control - Facility Replacement	SFMTA: Transit Central Control Facility: Reconstruct and modernize the facility and systems; Project is phased	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to remove \$38M in Prop-1B and change the source for \$6.8M from Prop-1B to Salestax; Update	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Francisco	SF-070009	240471	Port of SF	Embarcadero Corridor Transportation Improvements	San Francisco: Embarcadero corridor (China Basin & Fisherman's Wharf); Improvements to transit services including signage, parking management strategies, bike/ped improvements & other outreach projects.	2013 TIP Development - Update RTP ID and funding plan to reprogram RTP-LRP funds to FY19	4.11 - EXEMPT (40 CFR 93.126) - Directional and informational signs	2040
San Francisco	SF-070010	22512	Port of SF	San Francisco Downtown Ferry Terminal	San Francisco: Downtown Ferry Terminal; Transit improvements including new intermodal transfer areas, ferry facilities, bike/ped improvements, passenger amenities and P.I. provisions.	2013 TIP Development - Update funding plan to reprogram RTP-LRP funds to FY19	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2020
San Francisco	SF-070012	230581	Port of SF	Fishermans Wharf Ferry Terminal Improvements	San Francisco: Fisherman Wharf at Pier 41 to Pier 45; Implement transit improvements structural improvements, new intermodal transfer areas, ferry facilities, bike/ped improvements etc.	2013 TIP Development - Update RTP ID and funding plan to reprogram RTP-LRP funds to FY19	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2020
San Francisco	SF-070025	240493	SF DPW	SR 1 - 19th Avenue Median Improvements	In San Francisco: Median landscaping improvements along the 19th Avenue Corridor from Lincoln Way to Wawona Street.	2013 TIP Development - Retain this project in the TIP for informational purposes as it is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
San Francisco	SF-070027	230555	SF County TA	Yerba Buena Island (YBI) Ramp Improvements	San Francisco: On east side of the Yerba Buena Island Tunnel at SFOBB; Rehabilitate existing deficient bridges on the west side of the Island.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	5.03 - EXEMPT (40 CFR 93.127) - Interchange reconfiguration projects	2020
San Francisco	SF-070029	21342	TBJPA	Transbay Transit Center - TIFIA Loan Debt Service	San Francisco, Transbay Transit Center: TIFIA Loan debt service for Phase 1 & 2. Update annual debt service amounts based on TIFIA loan agreement.	2013 TIP Development - Update funding plan	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2020
San Francisco	SF-070030	98593	SFMTA	SFGO-Corridor Management	Focused on the US 101 /Van Ness and Market Street corridors; Install new communications network and advanced traffic signal control systems with elements citywide.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	5.07 - EXEMPT (40 CFR 93.128) - Traffic signal synchronization projects	2030
San Francisco	SF-070036	240486	SFMTA	San Francisco Bicycle Route Improvements	San Francisco: Develop and implement preferred designs for closing existing gaps in the San Francisco Bicycle Route Network.	2013 TIP Development	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-070037	21320	GGBHTD	Golden Gate Bridge - Moveable Median Barrier	Marin/San Francisco Counties: Golden Gate Bridge; Install moveable median barrier on the Golden Gate Bridge to provide a physical separation between opposing directions of traffic.	2013 TIP Development - Update funding plan	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-070040	240344	SFMTA	SF Downtown Parking Pricing	San Francisco: Downtown: Implement variable pricing program study and assess options for implementing a residential parking pricing pilot and develop transferable technical specifications for SF park	2013 TIP Development - Update RTP ID	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2020
San Francisco	SF-070045	94636	SFMTA	SFMTA: Trolley Coach Replacement	SFMTA: Replace 60, 1994 60' articulated Trolley Coaches with either Motor Coaches or Trolley Coaches.	2013 TIP Development - update the funding plan	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Francisco	SF-070046	240541	SFMTA	SFMTA: Rehab 170 Neoplans	SFMTA: Rehabilitate 170 Neoplans to extend the useful life.	2013 TIP Development - Retain this project in the TIP for informational purposes as it is ongoing; Update the delivery milestones and to update funding.	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040

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San Francisco	SF-090011	240557	SF County TA	Oakdale Caltrain Station	Planning, preliminary engineering, and environmental work for a new Caltrain station at Oakdale near Palou and transit service adjustments to serve station.	2013 TIP update: Update scope and funding plan to include planning, preliminary engineering, and environmental only and remove CON phase completely	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2020
San Francisco	SF-090029	240543	SFMTA	San Francisco - Various Pedestrian Signal Upgrades	In San Francisco: Installation of accessible pedestrian signals (APS) and pedestrian countdown signals for safety and access improvement.	2013 TIP Development: project completed, pending close out & final payment; keep in the TIP for informational purposes	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-090030	22425	MTC	Regional Planning Activities and PPM - SF County	San Francisco: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2013 TIP Development - Update RTP ID	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
San Francisco	SF-090031	94636	SFMTA	SF Muni - Preventive Maintenance	SF Muni - Preventive Maintenance	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Francisco	SF-090035	94636	SFMTA	SFMTA: Paratransit Vehicle Replacements	SFMTA: Paratransit service across San Francisco; preserve service and replace 67 paratransit vehicles	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Francisco	SF-090036	240533	SF DPW	San Francisco - Arelious Walker Stairway Imps.	In San Francisco: Arelious Walker Stairway Improvement Project - will include leveling of stairway landings and individual stairs, repair or replace handrails, sidewalk repair and vegetation removal.	2013 TIP Development - Update RTP ID	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
San Francisco	SF-090037	240486	SFMTA	Phelan Loop Pedestrian and Street Beautification	In San Francisco: Phelan Loop at Ocean Ave, Geneva Ave and Phelan Ave. Pedestrian and Street Beautification; Construct new sidewalks, ped signals, accessible ramps, textured crosswalks, landscape. Relocate existing bus terminal.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-090038	240490	SF DPW	San Francisco Point Lobos Streetscape	In San Francisco: Construct new median, clearing and installation of trees, low level shrub planting & irrigation in median and along sidewalk.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-090039	240486	SFMTA	San Francisco Bicycle Parking	In San Francisco: Various Locations: Up to 1,186 bicycle parking spaces will be installed using a variety of bicycle storage facilities including but not limited to on-street corrals and off-street racks.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-090040	94525	BART	Balboa Park Station Eastside Walkway Project	Enhance the Balboa Park Station providing major accessibility and safety improvements.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing and to update funding.	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
San Francisco	SF-090041	240488	SFMTA	Church and Duboce Bike/Ped Enhancements	San Francisco: Church Street at Market Street and on Noe Street between Duboce Avenue and 14th Street: Install and construct pedestrian and bicycle safety improvements including: curb cuts and signal modifications, curb bulb outs and bicycle racks.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-090042	240486	SFMTA	Sunset Boulevard Ped Safety and Education	San Francisco: On a two-mile stretch of Sunset Boulevard between Irving Street and Ocean Avenue: Install 4 ped signals, countdown features and accessible pedestrian signals (APS) for visually impaired users.	2013 TIP Development - Update the funding plan to add \$389K in FY13 CON and \$55K in FY11 PSE Salestax funds	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-090043	94636	SFMTA	SFMTA: Replace 45 NABI Motor Coaches & 17 Gilligs	SFMTA: Replace 45 NABI standard motor coaches and 17 Gillig Buses that are at the end of their useful life.	2013 TIP Development - Update RTP-ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040

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San Francisco	SF-090051	94525	BART	24th Street/Mission BART Plaza Pedestrian Imps.	San Francisco: 24th St BART Station: Plaza improvements, a bus bulb-out on Mission Street at the SW BART plaza, and raised crosswalks on 24th Street at intersecting alleys.	2013 TIP Development - update funding plan and updated sponsor to BART	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
San Francisco	SF-110005	240490	SF DPW	Great Highway Restoration	Implement a solution to restore and stabilize the Great Highway, stop bluff slides, and protect City infrastructure.	2013 TIP Development - Update RTP ID and funding plan to reprogram RTP-LRP funds to FY19	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
San Francisco	SF-110007	240490	SF DPW	San Francisco - Folsom Streetscape and Rehab	San Francisco: On Folsom Street from 19th Street to Cesar Chavez: Streetscape and pedestrian improvements; and pavement rehabilitation	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing.	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
San Francisco	SF-110008	98593	SFMTA	Second St Phase 1 - SFgo Signal Rehab and Upgrade	San Francisco: On 2nd St. between Market and Bryant: Design and install upgraded replacement underground interconnect conduits, pull boxes, fiber cables, and signal controllers	2013 TIP Development - Project is ongoing, included for informational purposes.	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2030
San Francisco	SF-110009	240490	SF DPW	San Francisco - Broadway Streetscape and Rehab	San Francisco: Streetscape and pedestrian improvements Kearny Street to Montgomery Street; and pavement rehabilitation on Broadway Street from Kearny Street to Battery Street.	2013 TIP Development - Project is ongoing, listed for informational purposes only.	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
San Francisco	SF-110010	240541	SFMTA	SFMTA Transportation Asset Management System	San Francisco: SFMTA will implement an Enterprise Asset Management (EAM) system to inventory all of its major assets. By using an EAM system, SFMTA will be able to store data on age, condition, and needs of different asset types.	2013 TIP Development - update screening criteria information and retain in the TIP for informational purposes as the project is ongoing	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Francisco	SF-110011	240681	SF County TA	Integrated Public-Private Partnership TDM Program	San Francisco: Implement pilot TDM strategies: (a) parking cash-out programs and TDM related approaches, and (b) Muni Partners shuttle coordination and expansion. Includes program evaluation.	2013 TIP Development: update Other Local funding, milestones, and contact information	3.01 - EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2040
San Francisco	SF-110012	240490	SF DPW	South of Market Alleyways Improvements, Phase 2	In San Francisco: Six alleyways in the South of Market neighborhood: Streetscape improvements include items such as new raised crosswalks, traffic chicanes, textured asphalt paving, new landscaping, and new street lights.	2013 TIP Development - Update RTP ID	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
San Francisco	SF-110013	240488	SF DPW	San Francisco - Marina Green Bicycle Trail Imps.	In San Francisco: Between Lyon Street and Laguna Street: Design and construct improvements to the multi-use Marina Green Trail	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-110014	240486	Port of SF	San Francisco Cargo Way Bay Trail Bike Lanes	In San Francisco: On Cargo Way from Third Street to Jennings Street: Construct an on-street Class I bicycle facility, including a physical barrier, signage, striping, lane demarcations and signal modifications	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing with updated funding plan	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-110015	240747	SFDPH	San Francisco SR25 - Education and Outreach	In San Francisco: Countywide: Expansion of the existing San Francisco SR25 education and outreach program.	2013 TIP Development - Retain in the TIP for informational purposes as it is in-process	4.02 - EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
San Francisco	SF-110016	240486	SFMTA	San Francisco Market & Haight St. Transit/Ped Imps	San Francisco: Haight St. between Laguna and Market St: Convert to two way for transit operations, this includes work on the overhead wires, traffic signals, and streetscape/pedestrian improvements.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
San Francisco	SF-110029	240486	SFMTA	Sunset and AP Giannini SR25 Improvements	In San Francisco: On neighborhood streets near Sunset Elementary School and AP Giannini Middle School; Construct a bike lane and pedestrian safety & traffic calming improvements.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-110037	240681	SFMTA	Linked Priced Electric Bikes sharing	Apply ITS technology and differential pricing with the colocation of shared electric bicycles within City CarShare's existing systems, at high demand parking locations in San Francisco and select Bay Area cities.	2013 TIP Development - Update RTP ID and update the funding plan	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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San Francisco	SF-110038	240476	SF County TA	San Francisco Parking Pricing and Regulation Study	San Francisco: Develop and evaluate parking-based approaches for the management of areawide traffic congestion in San Francisco.	2013 TIP Development - Update RTP ID	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Francisco	SF-110039	240493	SFMTA	SF Ped Safety and Encouragement Campaign	San Francisco: City-wide: 18-month pedestrian safety and encouragement campaign	2013 TIP Development - Update RTP ID and update the funding plan	4.02 - EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
San Francisco	SF-110040	240488	SFMTA	SF Crosswalk Conversion	San Francisco: At 12 uncontrolled crosswalks: Implement continental crosswalks and advance yield lines; At 21 signal or STOP controlled intersections: Implement continental crosswalks	2013 TIP Development - Update RTP ID; Update the funding plan to reprogram \$19.5K in Other Local from FY12 PE to FY14 CON and add \$13K in FY14 CON Other Local	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-110043	240526	SFMTA	SFMTA: Mission Customer First Program	San Francisco: on Mission Corridor: implement enhancements to transit including but not limited to the following: Colorizing existing dedicated transit lanes, Transit Signal Priority, Vehicle Branding, and Enhanced stop identification	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the regional air quality description to "NON-EXEMPT" to better reflect the project scope	5.02 - EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2020
San Francisco	SF-110044	94525	BART	Regional Real-Time Transit Information at BART	In downtown Oakland and downtown San Francisco: at six key intermodal BART stations: add additional real time transit information displays	2013 TIP Development - Update RTP ID	4.11 - EXEMPT (40 CFR 93.126) - Directional and informational signs	2040
San Francisco	SF-110047	21011	SFMTA	Local PDA Planning - San Francisco	San Francisco City/County: Planning assistance to support transportation investments and improve performance in Priority Development Areas (PDAs)	2013 TIP Development - Update RTP ID and update the project sponsor to SFMTA	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Francisco	SF-110048	94525	BART	BART 24th Street Train Control Upgrade Project	BART: 24th St. Station: Upgrade train control capability, including turn back facilities, to provide operational flexibility	2013 TIP Development - Update RTP ID	2.09 - EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
San Francisco	SF-110050	94636	SFMTA	SFMTA: Replace 58 40' Neoplan Buses	SFMTA: Replace 58 40' Neoplan Buses originally in service in 2002 with 58 40' hybrid buses.	2013 TIP Development - Update the RTP-ID and update the funding plan	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Francisco	SF-110051	94636	SFMTA	SFMTA: Replace 26 60' Neoplan Buses	SFMTA: Replace 26 60' Neoplan Buses diesel buses originally in service in 2002 with 26 60' hybrid buses. Manufacturer to be determined. Included in RTP and agency Transit Fleet Management Plan; has reasonable cost estimates.	2013 TIP Development - Update the RTP-ID and funding plan	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Francisco	SF-110052	240526	SFMTA	SFMTA - Free Muni for Youth Program	SFMTA - Implement a Pilot Program to provide free Muni to low and moderate income youth in San Francisco between the ages of 5 and 17	2013 TIP Development - Update RTP ID	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2020
San Francisco	SF-110053	21017	WETA	WETA: Replace Ferry Vessels	WETA: Fund the replacement of all existing ferry vessels for WETA when the vessels reach the end of their useful life of 25 years.	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Francisco	SF-130008	240523	SF County TA	HOV Lanes on US 101 in SF - Project Development	San Francisco: US 101 from SF county line to Cesar Chavez: Planning, Preliminary Engineering, and Environmental to convert one existing lane in each direction to HOV lanes	2013 TIP Development - Amend a new exempt project into the TIP using \$2M in Other Local funds	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Francisco	SF-130009	240525	SF County TA	HOV Ramps: I-280/6th St Ramps- Project Development	San Francisco: I-280/6th St. I/C: Planning only for dedicated ramp for high-occupancy vehicles	2013 TIP Development - Amend a new exempt project into the TIP using \$2M in Other Local funds	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Francisco	SF-130010	240546	SF County TA	Construct Treasure Island Bus Terminal Facility	San Francisco: Treasure Island: Construct Treasure Island Bus Terminal Facility	2013 TIP Development - Amend a new exempt project into the TIP with \$2.79M in Other Local funds	5.06 - EXEMPT (40 CFR 93.127) - Bus terminals and transfer points	2020
San Francisco	SF-95037B	94636	SFMTA	SF Muni Rail Replacement Program	SFMTA: Systemwide - Phased design and replacement of trackway and related systems serving light rail and cable car lines.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	2.09 - EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040

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San Francisco	SF-970073	94636	SFMTA	SFMTA: Cable Car Vehicle Renovation Program	San Francisco: Rehabilitate up to four Cable Car vehicles in one year - two undergoing reconstruction, one in major overhaul, and one in minor overhaul.	2013 TIP Development - Update RTP ID	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
San Francisco	SF-970170	94636	SFMTA	SFMTA: Trolley Overhead Recon. Program	San Francisco: LRT: Phased design and replacement of the overhead wires and related traction power system serving light rail and trolley coach lines.	2013 TIP Development - Update RTP ID	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
San Francisco	SF-990003	240536	SFMTA	Global Positioning System	Muni: Global Positioning System, Central Control, and Radio system replacement project.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
San Francisco	SF-990022	94636	SFMTA	SFMTA: ADA Paratransit operating support	Muni: ADA Paratransit Operating Subsidy.; provides funding for increased van/taxi services to people with disabilities who are prevented from using Muni's fixed route services.	2013 TIP Development - Update RTP ID	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
San Francisco	SF-99T002	94636	SFMTA	Cable Car Traction Power & Guideway Rehab	SFMTA: Cable Car Traction Power and Guideway Rehab; Repair various guideway and infrastructure & make improvements to the cable car system.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	2.09 - EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
San Francisco	SF-99T005	94636	SFMTA	SFMTA: Historic Rail Car rehabilitation	SFMTA: San Francisco; Rehabilitation of historic light rail vehicles for operation.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
San Mateo	SM-010002	21893	SMCTA	SR 92 Shoulder Widening & Curve Correction	Half Moon Bay: Rte 92 btw eastern city limits and Pilarcitos Creek; Widen shoulders, straighten curves and improve vertical sight distances. No additional travel lanes.	2013 TIP Development - Update RTP ID and funding plan to increase PE phase funds by \$300K, decrease CON phase by \$300K and reprogram CON phase funds to FY19	1.04 - EXEMPT (40 CFR 93.126) - Shoulder improvements	2040
San Mateo	SM-010047	21606	SMCTA	US 101 / Willow Road Interchange Reconstruction	Menlo Park: US 101 at Willow Road Interchange; Reconstruct and reconfigure interchange (No additional travel lanes).	2013 TIP Development - Update RTP-ID	5.04 - EXEMPT (40 CFR 93.127) - Changes in vertical and horizontal alignment	2020
San Mateo	SM-010054	22481	Caltrain	San Mateo Bridges Replacement	City of San Mateo: Caltrain Corridor - Reconstruct existing Poplar, Santa Inez, Monte Diablo and Tilton railroad grade separation structures, including replacing the bridge decks, project is phased	2013 TIP Development - Update RTP ID, update the funding plan, clarify the project scope and add a note that the project is phased	1.01 - EXEMPT (40 CFR 93.126) - Railroad/highway crossing	2040
San Mateo	SM-030010	22481	Caltrain	Caltrain: Systemwide Security	Caltrain: Security enhancements such as fencing, the installation of panic buttons, fire alarms, surveillance/communication equipment and site hardening of facilities along the Caltrain Corridor.	2013 TIP Development - Update RTP ID and funding plan to add in \$939,246 in FY13 PROP-1B-CTSGP funds	2.04 - EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040
San Mateo	SM-030023	94666	SamTrans	SAMTRANS: Preventive Maintenance	SamTrans: Preventative maintenance program for agency fleet.	2013 TIP Development - Update RTP ID	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
San Mateo	SM-050005	94525	BART	BART: Preventive Maintenance	BART: Systemwide; Preventive Maintenance	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
San Mateo	SM-050040	22481	Caltrain	Caltrain: ADA Operating Set-aside	Caltrain: ADA Paratransit Operating assistance set-aside	2013 TIP Development - Update funding plan	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
San Mateo	SM-050046	21011	Daly City	SR 82 Daly City-Mission St. Pedestrian Imps.- Ph I	Daly City: Corner of Mission St. & John Daly Blvd & on Mission St. from John Daly Blvd to Alp St.: Construct transit & ped improvements including crossing & real time transit info (TLC/HIP).	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-050051	94666	SamTrans	SR 82 - El Camino Real Grand Boulevard Initiative	El Camino Real Corridor: Ped. & transit facility enhancements, streetscape improvements including medians, wider sidewalks, bike routes & improved linkages to transit hubs & downtown.	2013 TIP Development - update project description and transfer cost savings from Millbrae's share to the PE stage of the Complete Streets project.	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040

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San Mateo	SM-050052	22261	Pacifica	SR1 San Pedro Creek Bridge Replacement	Pacifica: On State Route 1 at San Pedro Creek; Replace bridge and roadway approaches within Caltrans right of way. No new travel lanes.	2013 TIP - Update RTP ID, update the funding plan and update expanded description to add "CMAQ funds are for bike/ped portion of bridge only."	1.19 - EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
San Mateo	SM-050053	240143	Millbrae	US 101 Millbrae Ave Bike/Ped Bridge	Millbrae: Across US 101 north of and adjacent to the existing Millbrae Avenue bridge; Construct a new 10-ft wide Class 1 mixed-use bike/ped overcrossing.	2013 TIP Development - Project schedule delayed. Reprogram PE phase from FY11 to FY16 and CON phase funds from FY 15 to the FY 19.	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2020
San Mateo	SM-070002	22274	CCAG	San Mateo Countywide ITS Improvements	San Mateo County: County-wide; ITS improvements at various locations in San Mateo County.	2013 TIP Development - Update RTP ID	1.07 - EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization projects	2040
San Mateo	SM-070004	230592	East Palo Alto	Bay Rd Improvement Phase II & III	E. Palo Alto: On Bay Rd btw University & Fordham (Ph II) & btw Clarke/Illinois & Cooley Landing Ph. III; Improvements including resurface, streetscape, bike lanes, & other improvements. HPP #706 (remainder programmed in SM050019)	2013 TIP Development - Update funding plan	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
San Mateo	SM-070006	21607	East Palo Alto	US 101 University Ave Overpass Bike/Ped Facility	E. Palo Alto: On University Ave across US 101 btw Woodland Ave and Donahoe St; Construct Bike Lane. HPP #3769	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-070029	21612	CCAG	Dumbarton Bridge to US101 Connection Study	East Palo Alto: Dumbarton Bridge at US 101; Study of connection between the Dumbarton Bridge and Highway 101. SAFETEA Earmark HPP #3062 (\$400K)	2013 TIP Development - Update funding plan	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2030
San Mateo	SM-070030	94525	BART	Daly City BART Station Improvements	At the Daly City BART station: improve wayfinding signage, bicycle access improvements, and shuttle stop enhancements.	2013 TIP Development - Retain in the TIP for informational purposes as the project is on-going	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
San Mateo	SM-070031	21011	San Bruno	SR 82 El Camino Real: Grand Boulevard Initiative	San Bruno: Along El Camino Real & along San Bruno Ave; Install or upgrade landscaping and add irrigation systems in the medians plus other beautification enhancements.	2013 TIP Development - Project funds are allocated. Project is not closed out. Save for information purposes only.	4.09 - EXEMPT (40 CFR 93.126) - Plantings, landscaping, etc	2040
San Mateo	SM-070032	22481	Caltrain	VMS-PA Systems Integration	Caltrain: Develop integrated visual messaging signs (VMS) and a public address (PA) system.	2013 TIP Development. Retain in TIP for informational purposes as project is ongoing.	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
San Mateo	SM-070037	22274	CCAG	San Mateo County Traffic Incident Management	In San Mateo County: Implement traffic incident management strategies by deploying Intelligent Transportation System (ITS) elements.	2013 TIP Development - Update RTP ID; Update the regional air quality description to "EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization projects" to better	1.07 - EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization projects	2040
San Mateo	SM-070049	94666	SamTrans	Facility/Equipment Rehabilitation/Replacement	Operating/maintenance facility/equip rehabilitation/replacement, including the provision of facility improvements for administration, maintenance, and operations at the Central Administrative facility, the Brewster Depot, and the North and South Bases	2013 TIP Development - Update funding plan	2.05 - EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
San Mateo	SM-090001	22481	Caltrain	Narrow Banding Project	Caltrain: Develop a project strategy plan to identify Caltrain's radio equipment that cannot be modified/reprogrammed to narrow bridge banding and to produce a master voice systems plan.	2013 TIP Development. Retain in TIP for informational purposes as project is ongoing.	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
San Mateo	SM-090021	240064	Caltrain	Caltrain Grade Separation Program	Along the Caltrain line, provide grade separations of existing crossings at San Bruno, San Mateo, and Angus Avenues in San Bruno and the demolition of the existing San Bruno Station, and reconstruct it between San Bruno and San Mateo Avenues.	2013 TIP Development. Retain in TIP for informational purposes as project is ongoing and to update funding.	1.01 - EXEMPT (40 CFR 93.126) - Railroad/highway crossing	2040
San Mateo	SM-090023	240745	Caltrans	San Mateo County: Install TMS Elements	In San Mateo County, from Santa Clara County line to San Francisco county line. Install TMS Elements.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	1.06 - EXEMPT (40 CFR 93.126) - Highway Safety Improvement Program implementation	2040

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San Mateo	SM-090024	22425	MTC	Regional Planning Activities and PPM - San Mateo	San Mateo: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Mateo	SM-090041	230430	Brisbane	Bayshore Corridor North South Bikeway	Installation for Phase II of a Class II Bikeway which requires AC paving, restriping, and installation of signage. A small segment of the bikeway will require construction of a center concrete barrier.	2013 TIP Development - Retain in the TIP for informational purposes as the project is on-going	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-090054	22274	San Mateo	Smart Corridor Initial Implementation Project	In the City of San Mateo - install PTZ and closed circuit television cameras, flush plans, upgraded traffic signal controllers, trailblazers signs (TBS), arterial system detection station and upgrade communications network.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	1.07 - EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization projects	2040
San Mateo	SM-110004	240511	Caltrans	I-280 Wildlife Connectivity Research	Research wildlife connectivity on the I-280 Corridor	2013 TIP Development - Update RTP ID	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Mateo	SM-110005	94666	SamTrans	Making the Last Mile Connection TDM Program	Redwood City: Implement TDM strategies including: carshare pods at Redwood city Caltrain station and downtown sites, short-distance vanpools, telework and flex-schedules, and residential and employer/employee marketing.	2013 TIP Development - Retain in the 2011 and 2013 TIP for informational purposes as the project is ongoing	3.01 - EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2040
San Mateo	SM-110006	94666	SamTrans	GBI: Removing Barriers to Livable Communities	Daly City: El Camino Real: Develop strategies for removing barriers to livable communities includes five focus areas: (1) street design, (2) economic development and housing, (3) infrastructure, (4) multimodal transportation and (5) civic engagement.	2013 TIP Development - update funding plan to reprogram all funds to FY14	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-110009	21011	Daly City	Daly City - Citywide Accessibility Improvements	Daly City: Various locations throughout the City: Project includes accessibility enhancements	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-110010	21011	San Mateo	El Camino Real Phase I Improvement	El Camino Real (SR82)between 28th & 31st Ave - Grand Blvd Initiative improvements	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
San Mateo	SM-110011	21011	San Bruno	San Bruno Street Medians and Grand Blvd Imps	San Bruno: El Camino Real (SR 82), San Bruno Avenue, Sneath Lane and other Arterials - Median enhancements	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
San Mateo	SM-110012	21011	San Bruno	San Bruno Transit Corridor Ped Connection Imps	San Bruno: El Camino Real from San Bruno Avenue to Sneath Lane, San Bruno Avenue from El Camino Real to Huntington Avenue and Huntington Avenue from San Bruno Avenue to Sneath Lane. Streetscape improvements.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
San Mateo	SM-110014	230697	Menlo Park	Menlo Park 2010/11 Resurfacing of Federal Aid Rtes	Menlo Park: Marsh Road, Middlefield Road, Middle Avenue and Sand Hill Road, pavement rehabilitation.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
San Mateo	SM-110019	230697	San Carlos	San Carlos Pavement Rehab Program	San Carlos: Howard Avenue between Old County Road and Industrial Road, Elm Drive between San Carlos Avenue and Magnolia Avenue (excluding the part that was recently resurfaced), and all of Club Drive: Rehabilitate roadway	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
San Mateo	SM-110022	230550	CCAG	San Mateo County SR2S Program	San Mateo County: Countywide: Provide modularized safe routes to school programs and projects that focuses on education, encouragement, evaluation and enforcement components to all interested schools.	2013 TIP Development - Update RTP ID	4.02 - EXEMPT (40 CFR 93.126) - Grants for training and research programs	2030
San Mateo	SM-110023	230430	SSF	South San Francisco: Regional Gap Closure Project	South San Francisco: Various locations: Install class II bike lanes and sharrows throughout the City, as well as provide pavement repairs on the bike lane roadway segments.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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San Mateo	SM-110024	230430	San Mateo Co	CSRT South of Dam Conversion	San Mateo County: 4,480-foot section of existing SFPUC service road: Convert to Crystal Springs Regional Trail South of Dam Project.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-110025	230430	Redwood City	Bair Island Bay Trail Facility and Improvements	Redwood City: From the U.S. 101 auxiliary lane bike path (Class I) terminating at Whipple Avenue, to the existing Class II bike lanes of Bair Island Road: Provide a gap closure in the bike path	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-110027	230430	Half Moon Bay	Highway 1 Bicycle/Pedestrian Trail	In Half Moon Bay: On State Route 1 between Kehoe Avenue and Roosevelt Boulevard: Construct a paved bicycle/pedestrian trail	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-110028	21011	San Carlos	East Side Community Transit Connectivity Imps	In San Carlos, on Old County Road between Brittan Ave and Belmont City Limits and on East San Carlos Ave between Old County Rd and Industrial Rd, provide pedestrian and bicycle enhancements, streetscaping, and stormwater treatment.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
San Mateo	SM-110035	230697	San Mateo Co	Resurfacing of Pescadero Creek Road	In Pescadero: On Pescadero Creek Road between Hwy 1 and Cloverdale Road; Rehabilitate roadway including replacement of striping and pavement markings.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
San Mateo	SM-110047	21613	San Mateo	SR92/EI Camino Real (SR82) Ramp Modifications	San Mateo: At the SR92/EI Camino Real (SR82) interchange: Modify existing on/off rampsto improve the ingress and egress of the interchange.	2013 TIP Development - Update RTP ID	5.03 - EXEMPT (40 CFR 93.127) - Interchange reconfiguration projects	2030
San Mateo	SM-110053	94666	SamTrans	SAMTRANS: Advanced Communication System Upgrades	SAMTRANS: Upgrade Advanced Communication System (ACS). ACS is a set of interrelated radio and computer components deployed at SamTrans dispatch centers and onboard vehicles	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
San Mateo	SM-110054	94666	SamTrans	Reconfiguration of San Carlos Transit Center	San Carlos Transit Center: Reconfigure and rehabilitate the current transit center to facilitate improved safety and connections between SamTrans fixed-route bus service, Caltrain commuter rail, local shuttles, and pedestrians and bicyclists.	2013 TIP Development - Update funding plan	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
San Mateo	SM-110062	94666	SamTrans	Samtrans - Replace 62 1998 Gillig Buses	Samtrans: Replace 62-40' 1998 Gillig Buses, which have exceeded their useful life.	2013 TIP Development - Update funding plan	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Mateo	SM-110063	230430	San Mateo Co	CSRT South of Hwy 92 Conversion	In Unincorporated San Mateo County, Crystal Springs Regional Trail, Between Hwy 92 and Ralston Bike Trail on Cañada Rd; convert service road to multi-use trail for pedestrian, cyclist, and equestrians.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-110064	22423	San Mateo	North Central Pedestrian Improvement Program	North Central San Mateo: Various locations south of Cypress Avenue: pedestrian infrastructure improvements including new curb ramps, crosswalks, curb extensions, lighting, and advanced stop bars	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-110065	22423	Redwood City	Middlefield Rd and Woodside Rd Intersection Improv	In Redwood City: At the intersection of Middlefield Rd and Woodside Rd; modify intersection to provide pedesrtrain facilities.	2013 TIP Development - Update RTP-ID	5.01 - EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
San Mateo	SM-110067	21011	MTC	Local PDA Planning - San Mateo	San Mateo County Various Agencies: Planning assistance pass through to local jurisdictions to support transportationinvestments and improve their performance in Priority Development Areas (PDAs)	2013 TIP Development - Update RTP ID	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Mateo	SM-110068	94666	SamTrans	SamTrans - Replacement of Articulated Bus Fleet	SAMTRANS: Replace up to 55 2002 60' NABI diesel articulated buses that have exceeded their useful life.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040

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San Mateo	SM-110069	94666	SamTrans	Replacement of 19 2007 Cutaway Buses	Samtrans: Replace 19 2007 22' diesel powered cutaway buses that have exceeded their useful life with 19 22' gasoline powered buses	2013 TIP Development & Update RTP-ID and funding plan to delete \$459,428 in Sales Tax funds, add \$376,398 in Prop-1B-PMTISEA funds and \$83,030 in Other Local funds	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Mateo	SM-110070	94666	SamTrans	SAMTRANS: Replacement of 14 2009 Minivans	SAMTRANS: Replace 14 2009 para-transit minivans that have exceeded their useful life.	2013 TIP Development - Update funding plan.	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
San Mateo	SM-110073	230697	Pacifica	FY 2014-15 Linda Mar Boulevard Pavement Rehab	In Pacifica: On Linda Mar Boulevard, Pavement Rehabilitation, from the Linda Mar Shopping Center to Adobe Drive.	2013 TIP Development - Update RTP ID	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
San Mateo	SM-130001	21013	MTC	Dumbarton Bridge Seismic Retrofit	San Francisco Bay Area: Dumbarton Bridge: Upgrade the Dumbarton Bridge to meet all current seismic and safety design standards	2013 TIP Development - Amend in a new exempt project totaling \$33.6M	1.19 - EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
San Mateo	SM-990026	94666	SamTrans	SAMTRANS: ADA Paratransit Operating Subsidy.	SamTrans: ADA Paratransit Operating Subsidy.	2013 TIP Development - Update RTP ID	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Santa Clara	ALA050042	21017	ACE	ACE: ADA Operating Set-aside	ACE: ADA Operating Set-aside	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Santa Clara	SCL010019	230201	VTA	I-880 Coleman Avenue I/C Reconfiguration.	In San Jose: I-880@Coleman; Reconst. Coleman Ave. bridge & realign, reconst. all ramps accessing I-880; add new direct connector ramp to SB I-880 from Airport & Newhall plus landscaping (Garvee SCL030012).	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	5.04 - EXEMPT (40 CFR 93.127) - Changes in vertical and horizontal alignment	2040
Santa Clara	SCL010040	230294	VTA	SR-152/SR-156 Interchange Improvements.	SR-152/SR-156: WB SR-152 to SB-SR-156; Construct a flyover and other improvements at the interchange. Perform PA/ED studies for capacity improvements needed for the 152/156 interchange. HPP earmark Nos. 1759 & 1793	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	5.04 - EXEMPT (40 CFR 93.127) - Changes in vertical and horizontal alignment	2020
Santa Clara	SCL030008	240745	Caltrans	SR 87 Guadalupe Freeway Corridor Landscaping	In San Jose: On SR-87 from Julian St to route 101; Landscaping along new corridor improvements (Also see SCL990041).	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.09 - EXEMPT (40 CFR 93.126) - Plantings, landscaping, etc	2040
Santa Clara	SCL030012	240742	VTA	Garvee Debt. Srv. - SCL010019, SCL990030-31	Santa Clara County: Garvee Debt Service Payment for issue of bonds for the State Route 87 HOV projects (SCL990031 and SCL010019 & SCL990030), and I-880/Coleman.	2013 TIP Development - Update RTP ID	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Santa Clara	SCL050001	94610	VTA	VTA - Standard & Small Bus Replacement	VTA: Standard and Small Bus Replacement	2013 TIP Development - Update RTP ID and funding plan to increase total project cost by \$4M in Prop-1B funds	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Santa Clara	SCL050002	94610	VTA	VTA - Rail Replacement Program	VTA: Rail Replacement Program throughout the Light Rail system (no rail expansion).	2013 TIP Development - Update RTP ID	2.09 - EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
Santa Clara	SCL050013	21722	Caltrans	US 101 / SR 87-Trimble Road Landscaping	San Jose: US 101 from 0.8 km south of the SR-87/US-101 separation to 0.4 km north of Trimble Rd; Landscape Mitigation.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.09 - EXEMPT (40 CFR 93.126) - Plantings, landscaping, etc	2030
Santa Clara	SCL050039	240508	San Jose	Almaden Expressway Pedestrian Bridge	San Jose: Near Almaden Expressway: Develop a trail connection to link Guadalupe Creek to nearby trails and the Almaden Light Rail Station	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to reprogram RTP-LRP funds to FY19	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL050044	94610	VTA	Replace Bus Fareboxes	VTA: Purchase new "Next Generation" validating bus fare collection system to replace existing fareboxes.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.05 - EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040

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Santa Clara	SCL050045	94610	VTA	VTA: ADA Bus Stop Improvements	VTA: Various Locations: Construct ADA bus stop improvements. Improvements include wheelchair access improvements and improved lighting and signage. [Transit Enhancement]	2013 TIP Development - Update RTP ID	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Santa Clara	SCL050046	94610	VTA	VTA: ADA Operating Set Aside	VTA: ADA operating assistance set aside.	2013 TIP Development - Update RTP ID	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Santa Clara	SCL050049	94610	VTA	VTA: Rail Substation Rehab/Replacement	VTA: Guadalupe Light Rail Corridor; Rehabilitate electrical elements (such as disconnect switches, DC breakers, etc.) of traction power substations.	2013 TIP Development - Update RTP ID	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Santa Clara	SCL050079	240494	San Jose	Silicon Valley TIMC	San Jose: Transportation Incident Management Center: Construct subregional hub for traffic management activities including arterial traffic, incident management and travel information. HPP#2017.	2013 TIP Development - Update RTP ID	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Santa Clara	SCL050081	240508	San Jose	Lower Guadalupe River Trail	In San Jose: From I-880 to Bay Trail; Construct 7.5 miles of trails including pavement, gateways, seating, signage, etc.HPP# 1943	2013 TIP Development - Update funding plan to reflect actual FHWA obligations and subsequent de-obligations	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL050082	240508	San Jose	Bay Trail Reach 9 & 9B	In San Jose: Near Gold Street to the existing San Tomas Aquino Creek Trail; Designa and construct 1.2 miles of commuter/transportation trail, pedestrian bridge, and underpasses with safety and enhancement improvements. HPP # 2084	2013 TIP Development - Update RTP ID and funding plan to reprogram PE phase funds to FY08 to match obligation, ROW phase funds to FY15 and CON phase funds to FY19.	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL050083	240508	San Jose	Coyote Creek Trail	In San Jose: from Highway 237 to Story Road; Master plan, design and construction of a trail.	2013 TIP Development - Update the funding plan to reprogram \$6M in CON RTP-LRP funds from FY15 to FY19 and add \$19.71M in RTP-LRP funds to CON phase	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL050091	230385	Palo Alto	Citywide Traffic Signal upgrade	In Palo Alto: Replace the City's existing traffic signal central system and up to 35 traffic signal field controllers with associated communications gear.	2013 TIP Development - Update RTP ID	1.07 - EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization projects	2040
Santa Clara	SCL070050	240427	Saratoga	Highway 9 Safety Improvements	In Saratoga: Install pedestrian pathways on one side of Highway 9. (This project also references RTP ID 240746)	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	1.09 - EXEMPT (40 CFR 93.126) - Guardrails, median barriers, crash cushions	2020
Santa Clara	SCL090002	230210	Santa Clara Co	San Tomas Expressway Box Culvert Rehabilitation	In Santa Clara:Design, environmental clearance, and construction for rehabilitating the box culvert under San Tomas Expressway.	2013 TIP Development - Update RTP ID	1.19 - EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Santa Clara	SCL090031	240744	VTA	Santa Clara Grade-Separated Pedestrian Crossing	In Santa Clara: Construct a grade-separated pedestrian crossing at the Santa Clara Caltrain station.	2013 TIP Development - Update the funding plan to reprogram \$7.2M in CON Sales-tax funds from FY12 to FY14 and increase total project cost to \$11.384M	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL090035	22425	VTA	Regional Planning Activities and PPM - Santa Clara	Santa Clara: Regional Planning Activities and Planning, Programming and Monitoring	2013 TIP Development - Update RTP ID	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Santa Clara	SCL090036	230466	San Jose	Branham Ln/Monterey Hwy Grade Crossing Design	In San Jose: Branham Lane/Monterey Highway Intersection in San Jose. Complete preliminary design. The City has completed conceptual engineering for a below grade intersection at this location.	2013 TIP Development - Retain this project in the TIP for informational purposes as it is ongoing.	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2020
Santa Clara	SCL090041	94610	VTA	VTA: Renewable Energy Conversion Project	In Mountain View: North Bus Operating Division; Convert to solar power. The photovoltaic system will offset 100 percent of the electricity use at this facility.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Santa Clara	SCL090043	94610	VTA	VTA: San Jose High Volume Bus Stop Upgrade	In San Jose: VTA bus stops; Expand and enhance existing and/or construct new bus stops at high-volume locations.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.11 - EXEMPT (40 CFR 93.126) - Construction of new bus or rail storage/maintenance facilities categorically excluded in 23 CFR part 771	2040

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Santa Clara	SCL090044	94610	VTA	VTA: TP OCS Rehab & Replacement	VTA: Rehabilitate and replace overhead catenary system (OCS) and associated components	2013 TIP Development - Update RTP ID; Update the regional air quality description to "EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems" to better reflect	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Santa Clara	SCL090046	240508	San Jose	Lower Guadalupe River Trail-Tasman Drive Underpass	In San José: along the Lower Guadalupe River Trail beneath Tasman Drive referred to Tasman Drive Underpass.	2013 TIP Development - Update RTP ID and update the funding plan	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Santa Clara	SCL110001	240508	San Jose	San Jose: Alameda - A Plan for The Beautiful Way	In San Jose: Along Alameda from Stockton Ave to Fremont St.; improve pedestrian mobility with improved facilities including enhanced crosswalks, sidewalks and signage.	2013 TIP Development - Update RTP-ID and retain this project in the TIP for informational purposes as it is ongoing and remove all RTP-LRP funds	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL110016	230550	San Jose	Innovative Bicycle Detection System	San Jose: Test technologies on San Fernando Street and William/Bollinger streets, identify "best" technology, implement on additional city bikeways.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Reduced FY10 CON Other Local by \$19K and update delivery milestones	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2030
Santa Clara	SCL110028	240508	Campbell	Campbell Avenue Portals Bike/Ped Facilities	In Campbell: Cambell Avenue: Add pedestrian- and bicycle-friendly enhancements.	2013 TIP Development - Update the funding plan to reprogram CON phase from FY15 to FY19 and add \$2.17M in FY19 CON RTP-LRP funds.	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL110029	240508	San Jose	San Jose: Los Gatos Creek Reach 5 Bridge Crossings	In San Jose: Los Gatos Creek Tail between San Carlos St. and Montgomery Ave: Construct Los Gatos Creek Trail (Reach 5b/c).	2013 TIP Development - Update RTP ID and funding plan to reprogram ROW phase funds to FY16 and some CON phase funds to FY17 and FY19.	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL110032	240508	Gilroy	Gilroy New Ronan Channel and Lions Creek Trail	In City of Gilroy: On Ronan channel levee from Sixth St to Leavesley Rd and Lions Creek levee from Kern to Tapestry Dr. build bicycle pedestrian trails.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL110033	240508	San Jose	San Fernando Street Enhanced Bikeway & Ped Access	In San Jose: along San Fernando Street between Cahill Street and 10th Street: enhance pedestrian and bicycle accessibility along San Fernando Street between Cahill Street and 10th Street including AC pavement work	2013 TIP Development - Update RTP ID	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Santa Clara	SCL110034	240508	San Jose	San Jose - San Carlos Multimodal Phase 2	In San Jose: Along the south side of San Carlos Street between Second Street and Market Street. The proposed project encompasses pedestrian-oriented improvements along the south side of San Carlos Street between Second Street and Market Street.	2013 TIP Development - Update RTP ID	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Santa Clara	SCL110051	240747	Santa Clara Co	SR25 for Santa Clara County	Santa Clara County: Provide a comprehensive Safe Routes to Schools education and awareness program, countywide outreach, and a teen-centered middle/high school project.	2013 TIP Development: Update contact info. Project retained in TIP for informational purposes because the project is in construction.	1.06 - EXEMPT (40 CFR 93.126) - Highway Safety Improvement Program implementation	2040
Santa Clara	SCL110057	240747	San Jose	San Jose Walk N Roll - Safe Access	35 schools in San Jose: Encourage and promote pedestrian and bicycle safety along SRTS by installing low cost enhancements.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL110099	94610	VTA	VTA: Light Rail Bridge and Structure - SG Repair	Various Locations: Light rail bridge and structure defect investigation and repair. Stabilization measures to address Hamilton structure settlement.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.09 - EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
Santa Clara	SCL110100	94610	VTA	VTA: Kinkisharyo LRV Overhaul Program	VTA: Scheduled overhaul of Kinkisharyo Light Rail Vehicles.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Santa Clara	SCL110101	94610	VTA	VTA: LRV Body Shop Dust Separation Wall	At the Guadalupe Operations Division: Install a dust separation wall in the light rail vehicle body shop.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.04 - EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040
Santa Clara	SCL110102	94610	VTA	VTA: LRV Maintenance Shop Hoist	VTA: In the LRV Maintenance shop, add an in-floor light rail vehicle hoist. The hoist will supplement existing hoist for additional capacity.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.04 - EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040

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Santa Clara	SCL110103	94610	VTA	VTA: Update Santa Teresa Interlock Signal House	VTA: Update Santa Teresa Interlock Signal House to facilitate train movements.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Santa Clara	SCL110104	94610	VTA	VTA: Light Rail Track Crossovers and Switches	VTA: In the light rail system: Add light rail crossovers and switches to priority areas where crossovers are not currently available to enhance operational flexibility.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.09 - EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	2040
Santa Clara	SCL110105	94610	VTA	VTA: LR Signal Assessment / SCADA Replacement	VTA: On the Guadalupe Light Rail Operating Division; Light Rail Signal Assessment / SCADA System Replacement.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Santa Clara	SCL110106	94610	VTA	VTA: Diridon Tunnel Radio Replacement	VTA: In the Diridon Tunnel; Replace radio equipment as mandated by Federal Communications Commission.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Santa Clara	SCL110107	240740	San Jose	San Jose: Road Rehab and Ped. Facilities	In San Jose, On various streets, Rehabilitate roadway and construct pedestrian facilities.	2013 TIP Development - Update RTP ID	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Santa Clara	SCL110108	240748	Santa Clara Co	Isabel Bridge Replacement (37C0089)	In Santa Clara County: Isabel Bridge (Bridge No. 37C0089) on San Antonio Valley Road, 8.3 miles east of Kincaid Rd: Replace existing one lane bridge with a two-lane bridge	2013 TIP Development - Update RTP ID	1.02 - EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Santa Clara	SCL110116	240376	Campbell	Hacienda Ave Streetscape and Bicycle Imps	In Campbell: On Hacienda Avenue between Winchester Boulevard and Virginia Avenue: Construct bike lanes, on-street parking, accessibility ramps, park strip with street trees & shrubbery, sidewalk in-fill, curbs & gutters, and energy-efficient streetlights	2013 TIP Development - Update RTP ID	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Santa Clara	SCL110117	240508	San Jose	Park Avenue Multi-Modal Improvements	In San Jose: Improve pedestrian and bicycle facilities along Park Avenue between Hedding and Montgomery Streets.	2013 TIP Development - Update RTP ID and update the funding plan	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL110118	240508	San Jose	St. John Street Multi-Modal Improvements - Phase 1	In San Jose: Improve bicycle and pedestrian facilities along St John Street between North Market Street and North Almaden Boulevard.	2013 TIP Development - Update RTP ID and update the funding plan	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL110119	94610	VTA	VTA:Light Rail Transit Signal Priority Improvement	In Santa Clara County: implement a real-time, reliable transit signal prioritization and light rail vehicle detection system.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes; Update the funding plan to reduce FY12 CON Other Local by \$607	1.07 - EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization projects	2040
Santa Clara	SCL110120	22423	VTA	Together We Ride One-Call/One-Click Centers	In Santa Clara County: Build or expand local One-Call/One-Click Centers in Santa Clara County to improve access to a wide array of transportation services available for veterans, military personnel and their families.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	2.04 - EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040
Santa Clara	SCL110121	22423	Santa Clara Co	East San Jose Pedestrian Improvements	East San Jose: Various Roads: Fill in sidewalk gaps and provide ADA enhancements within existing rights-of-way	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL110125	240744	MTC	Local PDA Planning - Santa Clara	Santa Clara County Various Agencies: Planning assistance pass through to local jurisdictions to support transportation investments and improve their performance in Priority Development Areas (PDAs).	2013 TIP Development - Update RTP ID and update the funding plan	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Santa Clara	SCL110126	22423	VTA	SCVTA: Low Income Fare Pilot Project	In Santa Clara County: SCVTA - Pilot project to promote transit ridership among low-income clients not currently eligible for transportation assistance and evaluate the success of pilot program in addressing this need and its applicability region-wide.	2013 TIP Development - Update RTP ID	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Santa Clara	SCL110131	22481	Caltrain	South Terminal Wayside Power	In San Jose: At Diridon Station: Replace the existing power substation, replace the wayside power cabinets on existing platforms with new cabinets, install new power cabinets on the two new platforms. Design was conducted as part of JPB991001	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Santa Clara	SCL990046	94610	VTA	VTA: Preventive Maintenance	VTA: Preventive Maintenance of agency's fleet.	2013 TIP Development - Update RTP ID	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040

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Solano	SOL010006	21017	F-S Transit	Fairfield-Suisun Transit: Operating Assistance	Fairfield-Suisun Transit: Operating Assistance to support transit operations.	2013 TIP Development - Update RTP ID and update the funding plan	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Solano	SOL010007	21017	Vacaville	Vacaville Transit: Operating Assistance	Vacaville Transit: Operating Assistance	2013 TIP Development - Update the RTP ID and update the funding plan	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Solano	SOL030015	240600	FHWA	San Pablo Bay Entrance Rehabilitation	Solano County; San Pablo Bay: Rehabilitate entrance road 0.6 miles.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Solano	SOL050003	240594	Caltrans	I-80/I-680 Aux Lanes Improvement Landscaping	Fairfield: I-80/I-680 Connector improvements and auxiliary lanes landscaping.	2013 TIP Development - Update RTP ID	4.09 - EXEMPT (40 CFR 93.126) - Plantings, landscaping, etc	2040
Solano	SOL050006	240748	Caltrans	Suisun Valley Rd Bridge Replacement 23C0077	Suisun City: Suisun Valley Rd at Bridge over Suisun Creek .4 miles West of June Williams Rd; Replace one lane bridge with 2 lane bridge.	2013 TIP Development - Update RTP ID and funding plan to match obligation	1.02 - EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Solano	SOL050048	98212	Vallejo	Vallejo: Downtown Streetscape	Vallejo: Sacramento Street (Georgia - Maine), Virginia Street (Sonoma - Sacramento), Marin Street (Virginia - Georgia); Pedestrian enhancements including traffic calming, restriping, parking, signs, lighting, brick pavers, street furniture, art	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Solano	SOL070012	240600	Solano County	Cordelia Hills Sky Valley	Cordelia Hill: Transportation enhancements including upgrade of pedestrian and bicycle corridors including open space acquisition along Cordelia Hill Sky Valley and McGary Road. Project is predominantly ROW acquisition	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the funding plan to add \$40K in Other Local CON funds	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL070014	240594	Caltrans	I-80/I-680 Mitigation Landscaping	Fairfield: On Route 80 between Green Valley Road and Cordelia Truck Weigh Station; Landscape Mitigation.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.09 - EXEMPT (40 CFR 93.126) - Plantings, landscaping, etc	2040
Solano	SOL070021	240720	Solano County	Travis AFB: South Gate Improvement Project	Fairfield: Petersen Road by Travis Air Force Base; Between Walters Road to Travis AFB. Widen roadway to standard lane width, including shoulder and other safety improvements (truck stacking). No new travel lanes (HPP earmark #3220)	2013 TIP Development - Update RTP ID	1.19 - EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Solano	SOL070026	98212	Vacaville	Ulatis Creek Bike Path - Ulatis to Leisure Town	In Vacaville: Ulatis Creek Bike Path from Ulatis Drive to Leisure Town Road; Construct Class I bike path.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL070032	94683	SolTrans	SolTrans: Preventive Maintenance	SolTrans: Preventive maintenance of vehicles and equipment necessary for the maintenance of federally funded assets.	2013 TIP Development - Update RTP ID	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Solano	SOL090006	22425	MTC	Regional Planning Activities and PPM - Solano	Solano: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Solano	SOL090008	21017	Fairfield	Fairfield - Fareboxes Purchase & Implementation	City of Fairfield - GFI Fareboxes Purchase & Implementation	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Solano	SOL090015	240596	Solano County	Redwood-Fairgrounds Dr Interchange Imps (Study)	Near Vallejo: Btw SR 37 & Carquinez Bridge; Conduct study to determine the feasibility of constructing expanded I-80 Redwood St./Fairgrounds Dr. Interchange and parkway improvements. PSE, PE and Env. Phase only.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Solano	SOL090028	94683	SolTrans	SolTrans: AVL Technology	SolTrans: Upgrade communication devices, such as AVL, GPS and other.	2013 TIP Development - Update RTP ID	2.05 - EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Solano	SOL090033	94683	SolTrans	SolTrans: Bus Maintenance Facility Renovation	SolTrans: Bus Maintenance Facility Renovation	2013 TIP Development - Update RTP ID	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040

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Solano	SOL090034	94683	SolTrans	Bus Replacement (Alternative Fuel)	SolTrans: Replace (3) 45" MCI commuter coaches as they reach their useful life.	2013 TIP Development - Update RTP ID and update the funding plan	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Solano	SOL090035	98212	Solano County	Vacaville-Dixon Bicycle Route (Phase 5)	Vacaville and Dixon: On both sides of Hawkins Road from Leisure Town Road (western terminus) to Pitt School Road (eastern terminus); Class 2 bicycle lanes. Phase 1 from Pitt School to Fox Rd. Remaining phases from Fox to Leisure Town Rd.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL110008	22985	Benicia	Benicia Indust. Park Multi-Modal Transit Area Plan	In Benicia: on Benicia Industrial Park area near railway; develop a specific plan for a new transit stop and accompanying multi-modal facilities.	2013 TIP Development - Update the funding plan to add \$1.125M in RM2 funds and reprogram RM2 funds to FY14	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Solano	SOL110012	98212	Suisun City	Grizzly Island Trail - Phase 1	In Suisun City: On State Route (SR) 12 between Grizzly Island Road and Marina Boulevard; Design and construct a Class I Path, then south along Marina Boulevard to Driftwood Drive.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL110019	240605	STA	Solano Safe Routes to School Program	In Solano County, Countywide: Implement Countywide Solano Safe Routes to School Program, including Planning, Education, and Encouragement events and materials.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing and update the RTP ID	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Solano	SOL110020	240602	STA	Eastern Solano / SNCI Rideshare Program	Eastern Solano Air Basin (Sacramento Valley Air Basin - Solano/Napa Commuter Info): Encourage ridesharing activities within the Eastern Solano County Region.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	3.01 - EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2040
Solano	SOL110024	240600	STA	Dixon West B. St Bike/Pedestrian Undercrossing	Dixon: Under UPRR between SR-113 and West A Street: Build a grade-separated bicycle/pedestrian crossing - relocate utilities, build ADA compliant ramps and tunnel under railroad tracks connecting West B Street on both sides of the tracks	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL110025	94683	SolTrans	SolTrans: ADA Paratransit Operating Subsidy	SolTrans: ADA Paratransit Operating Subsidy	2013 TIP Development - Update RTP ID	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Solano	SOL110027	21017	Fairfield	Transit Vehicle Replacement	City of Fairfield: replace buses in its fleet that are beyond their useful lives with Americans with Disabilities Act (ADA) and California Air Resource Board (CARB) compliant vehicles.	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area; Update the project sponsor from Fairfield-Suisun Transit to Fairfield and update the funding plan	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Solano	SOL110033	94683	SolTrans	SolTrans: Capital Maintenance - Fuel	SolTrans: Fuel allowance project through the FTA "Fuel as Capital Maintenance" program	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Solano	SOL110034	22423	Vacaville	Vacaville Transit - Curb Ramps	Vacaville Transit: Construct approximately 16 curb ramps near transit routes.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL110035	240600	Vallejo	Vallejo Downtown Streetscape - Phase 3	Downtown Vallejo: Sacramento St between Georgia St and Virginia St; and Georgia Street between Santa Clara St and Sacramento St: Streetscape improvements and pavement rehabilitation	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Solano	SOL110036	240600	Solano County	Roadway Preservation in Solano County	Solano County: Various streets: Pavement resurfacing and/or rehabilitation including: Overlay, widen pavement surface with no added capacity, stripe and add signs	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Solano	SOL110038	94683	SolTrans	SolTrans: Technology Enhancements	SolTrans: System-wide: technology enhancements to be used for farebox upgrades, video security cameras, communications system, and IT equipment.	2013 TIP Development - Update RTP ID	2.05 - EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040

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Solano	SOL110039	21011	MTC	Local PDA Planning - Solano	Solano County Various Agencies: Planning assistance pass through to local jurisdictions to support transportation investments and improve their performance in Priority Development Areas (PDAs)	2013 TIP Development - Update RTP ID and update the funding plan	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Solano	SOL110040	94683	SolTrans	SolTrans: Operating Assistance	Solano County Transit: Operating Assistance	2013 TIP Development - Update RTP ID and update funding plan	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Solano	SOL110041	21017	F-S Transit	Fairfield Transit: 1 Gillig Bus Replacement	Fairfield-Suisun Transit: Replace a 1996 Gillig bus with a new 40' transit hybrid bus	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Solano	SOL110042	21017	Vacaville	Vacaville Transit : Procure 3 Fixed Route Buses	Vacaville Transit: Procure three (3) additional 35 foot, low-floor, Compressed Natural Gas (CNG) buses.	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Solano	SOL110043	230693	Vacaville	Vacaville Street Preservation	In Vacaville: Various Roads: Pavement preservation	2013 TIP Development - Update the RTP reference to reflect Plan Bay Area	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Solano	SOL950024	21017	Vacaville	Vacaville: Bus maintenance facility upgrades	Vacaville: Bus maintenance & facility upgrades.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Solano	SOL97AM70	21017	Vacaville	Vacaville: Purchase bus shelters	Vacaville: Purchase bus shelters	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.07 - EXEMPT (40 CFR 93.126) - Construction of small passenger shelters and information kiosks	2040
Solano	SOL991032	22629	WETA	North Bay Operations and Maintenance Facility	Vallejo: Mare Island Naval Shipyard at Building 165; Construct new maintenance facility for Vallejo Baylink ferry service.	2013 TIP Development - Update RTP-ID and funding plan to add in \$20.4M in Prop 1B funds.	2.11 - EXEMPT (40 CFR 93.126) - Construction of new bus or rail storage/maintenance facilities categorically excluded in 23 CFR part 771	2040
Solano	SOL991099	21017	Vacaville	Purchase Transit Equipment - Fareboxes and Tools	Vacaville: Operating assistance to insure all equipment, including electronic fare boxes, and tools are maintained in a safe & efficient manner. Equipment includes, wrenches, power tools, and all mechanic tools.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.04 - EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040
Sonoma	SON030005	21017	Son Co Transit	Sonoma Co Transit :Preventive Maintenance Program	Sonoma County Transit: Preventive maintenance program for agency fleet.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Sonoma	SON030012	21017	Santa Rosa Bus	Santa Rosa City Bus: Transit Enhancements	Santa Rosa: Various Locations: Upgrade and improve transit facilities including amenities, accessibility, ADA compliance, pedestrian and bicycle access	2013 TIP Development - Update RTP ID	2.07 - EXEMPT (40 CFR 93.126) - Construction of small passenger shelters and information kiosks	2040
Sonoma	SON050002	240651	Caltrans	Son 101 HOV - Santa Rosa Bike/Ped Beautification	Santa Rosa: Along US 101 from Earle Street to Bicentennial Way; Widen sidewalk, construct new underpass and other streetscape and lighting improvements.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON050017	240651	Healdsburg	Healdsburg Foss Creek Bicycle/Ped Pathway	Healdsburg: Foss Creek Pathway from North side of West Grant St. to Grove St: Construct 4.1 mile long Class 1 and Class II bicycle and pedestrian facility.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON050021	21017	Son Co Transit	Sonoma County Transit: Bus Stop Improvement	Sonoma County Transit: Throughout the service area: Acquire and install new bus stop shelters plus other improvements to bus stops	2013 TIP Development - Update RTP ID	2.07 - EXEMPT (40 CFR 93.126) - Construction of small passenger shelters and information kiosks	2040
Sonoma	SON070005	240651	Windsor	Windsor - Old Redwood Hwy Pedestrian Linkages	Windsor: Old Redwood Highway; Ped Linkages project will construct sidewalk and streetscape, pathway and crossing enhancements (TLC Project).	2013 TIP Development - Update RTP-ID and retain in the TIP for informational purposes as the project is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040

*Projects with conformity analysis years 2040 reference programmatic projects or project with a completion date after 2030 in Plan Bay Area.

Final List of 2013 TIP Projects by County

Appendix B

County	TIP ID	RTP ID	Sponsor	Project	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Sonoma	SON070008	240651	Son Co Reg Park	Bodega Bay Trail Segments 1B and 1C	Bodega Bay: Segments 1B and 1C parallel to Highway 1 from Salmon Creek Village to the southwest boundary; Construct bicycle and Pedestrian Trail (TLC Project).	2013 TIP Development - Update the funding plan to reprogram \$535K in CON Other Local from FY10 to FY14	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON070012	21017	SantaRosa Bus	Downtown Transit Mall Connectivity Improvements	Santa Rosa: Downtown Transit Mall; Various improvements including NextBus LED signage, maps, real-time transit information, kiosks, concessions, improved lighting, benches and public art, and ADA upgrades.	2013 TIP Development & Update RTP-ID	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Sonoma	SON070013	22006	NBFS	Ferry Service to Port Sonoma	SW Sonoma County; Port Sonoma; Construct multi-modal transit facility linking Ferry service to passenger rail, bus service, and auto traffic (Env. Phase Only).	2013 TIP Development - Update RTP ID and exemption code to change it from a non-exempt project to Planning and Technical studies as it is design phase only	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Sonoma	SON070020	21017	SantaRosa Bus	Hybrid Electric Bus Purchase (Replacement)	Santa Rosa CityBus: Purchase about 5 Hybrid Electric Replacement Buses to replace fixed route buses.	2013 TIP Development - Update RTP ID	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Sonoma	SON070024	21017	Son Co Transit	Sonoma County Transit: Replacement Bus Purchase	Sonoma County Transit: Replace three 40' Orion V CNG transit coaches with three 40' CNG Low-Floor transit coaches.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Sonoma	SON070026	22490	Caltrans	Rehab King Ridge Bridge over Austin Crk 20C0433	In Sonoma County: On King Ridge Road, 2.3mi North of Fort Ross Road; rehabilitate one-lane bridge to 2 lanes and scour countermeasure	2013 TIP Development - Update RTP ID	1.02 - EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2020
Sonoma	SON090001	22490	Sonoma County	Replace Geysers Bridge over Sulpher Crk 20C0005	In Sonoma County: Bridge replacement: single lane bridges in Sonoma County with two lane bridge (Geysers Road Bridge 20C0005)	2013 TIP Development - Update RTP ID	1.02 - EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2020
Sonoma	SON090007	21017	SantaRosa Bus	Automated Vehicle Location System	Santa Rosa CityBus: Procure comprehensive Automated Vehicle Location System (AVL) for agency fleet.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.05 - EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Sonoma	SON090008	22425	MTC	Regional Planning Activities and PPM - Sonoma	Sonoma: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2013 TIP Development - Update RTP ID	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Sonoma	SON090009	21017	Petaluma	Petaluma Transit: Preventive Maintenance	Petaluma: Petaluma Transit: Preventive Maintenance	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Sonoma	SON090023	21017	SantaRosa Bus	Santa Rosa CityBus: Operating Assistance	Santa Rosa CityBus: Operating Assistance to Transit Agency.	2013 TIP Development - Update RTP ID	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Sonoma	SON090024	21017	SantaRosa Bus	Santa Rosa CityBus: Preventative Maintenance	Santa Rosa CityBus: Preventative Maintenance program for agency fleet.	2013 TIP Development - Update RTP ID	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Sonoma	SON090025	22490	Sonoma County	Replace Chalk Hill Bridge over Maacama Crk 20C0242	In Sonoma County - Replace existing bridge no. 20C0242, on Chalk Hill Rd, Over Maacama Creek, 1 Mi S of HWY (spandrel arch bridge with approach spans with new bridge)	2013 TIP Development - Update RTP ID and funding plan to add in \$41,529 in FY98 HBRR funds	1.02 - EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2020
Sonoma	SON090026	22490	Sonoma County	Replace Lambert Bridge over Dry Creek 20C0248	HBP: In Sonoma: Replace existing through truss bridge (Bridge No. 20C0248, Lambert Bridge Road, Over Dry Creek,0.4 Mi W of Dry Creek Rd.), that is in poor condition and has seismic deficiencies with new bridge.	2013 TIP Development - update funding plan to reflect obligations and to add in \$100K in FY98 HBRR funds	1.02 - EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2020
Sonoma	SON090027	22490	Sonoma County	Replace West Dry Creek Bridge over Pena Ck 20C0407	In Sonoma: Replace existing four span T-beam concrete bridge (Bridge No. 20C0407, West Dry Creek Rd, Over Pena Creek, 0.7 Mi NW Yoakim Br Rd.) that is one-lane, seismically deficient and in poor condition with new multi-span flat slab concrete bridge.	2013 TIP Development - Update RTP ID and update the funding plan	1.02 - EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2020
Sonoma	SON090029	21017	Petaluma	Petaluma Paratransit: Replace 2 Vans	In Petaluma: Purchase (2) replacement paratransit vans for Petaluma Paratransit.	2013 TIP Development - Update RTP ID and funding plan to add in \$45,235 in FY11 CON Other Local funds and remove all FY13 TDA funds. Retain for informational purposes.	2.03 - EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040

*Projects with conformity analysis years 2040 reference programmatic projects or project with a completion date after 2030 in Plan Bay Area.

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Appendix B

County	TIP ID	RTP ID	Sponsor	Project	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Sonoma	SON090030	21017	Petaluma	Petaluma Transit: Electronic Fareboxes	In Petaluma: Purchase and install electronic validating fareboxes on all vehicles in Petaluma Transit fixed route fleet.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.05 - EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Sonoma	SON090032	240651	Rohnert Park	Copeland Creek Bike Path Reconstruction	In Rohnert Park: Along Copeland Creek; reconstruct 3915 LF of existing deteriorated Class I bike/ped path and replace 740 LF concrete sidewalk with new asphalt path. Replace non-native vegetation with native vegetation.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON110002	240745	Caltrans	Watershed Awareness Signs	Install Watershed Awareness Signs on highways in Sonoma Co.	2013 TIP Development - Retain in the TIP for informational purposes as the project is ongoing	4.11 - EXEMPT (40 CFR 93.126) - Directional and informational signs	2040
Sonoma	SON110003	21017	Son Co Transit	Sonoma County Transit: Bus Yard Rehab.	Sonoma County Transit: Rehabilitate bus yard and parking areas to a state of good repair.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Sonoma	SON110004	21017	Petaluma	Petaluma Transit Maintenance Facility Rehab: Ph 1	Petaluma: Transit Maintenance Facility: increase the clearance height and length of the southern bay of the existing facility to accommodate maintenance operations for the larger buses. Additional safety and security features may be installed.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Sonoma	SON110007	230700	Cotati	Downtown Specific Plan Area Revitalization	In Cotati: On Old Redwood Highway between La Plaza and Gravenstein Highway; Pedestrian, bicycle enhancements and corridor beautification.	2013 TIP Development - Update RTP ID	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Sonoma	SON110012	230700	Windsor	Hembree Lane Resurfacing	Windsor: On Hembree Lane between Jensen Lane and Foothill Drive; Rehabilitate roadway including restriping for class II bike lane and updating pedestrian curb ramps.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Sonoma	SON110013	240651	Son Co Reg Park	SMART Trail-Hearn Avenue to Joe Rodota Trail	Sonoma County: From Hearn Avenue to the Joe Rodota Trail: Construct a 1.3 mile Class I bike path including a bicycle/pedestrian bridge at Colgan Creek, asphalt paved surface, grading, drainage, striping and signage.	2013 TIP Development	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON110014	230700	Petaluma	Sonoma Mountain Parkway Rehabilitation	In Petaluma: Sonoma Mountain Parkway between Wyndham Way and Riesling Road: Pavement Rehabilitation	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Sonoma	SON110016	240709	Sonoma County	Countywide Safe Routes to Schools Program	Sonoma County: Countywide: Comprehensive safe routes to schools program to shift mode away from single family vehicular trips to bicycle/pedestrian/carpooling.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.03 - EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2030
Sonoma	SON110017	240651	Santa Rosa	SMART Bicycle and Pedestrian Path	Santa Rosa: Within or adjacent to the SMART railroad ROW from College Ave to 8th St: Construct a Class I bike path	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON110018	240651	Santa Rosa	Chanate Rd Pedestrian and Transit Improvements	In Santa Rosa: Chanate Road from Parker Hill to east of Glen Echo Drive: pedestrian pathway; Various Locations: upgrade ADA pedestrian ramps and install bus shelters and benches	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	4.12 - EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Sonoma	SON110024	22490	Sonoma County	Replace Bohan Dillon Bridge over Gualala 20C0435	In Sonoma: Bridge No.20C0435, Bohan Dillon Road over South Fork Gualala River, 0.1 Mi N Fort Ross Road. Replace existing one-lane bridge with a new two-lane bridge	2013 TIP Development - Update RTP ID	1.02 - EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2020
Sonoma	SON110025	22490	Sonoma County	Replace Hauser Bridge over Gualala River 20C0240	In Sonoma: Bridge No.20C0240, Hauser Road Bridge over over South Fork Gualala River, 5 Mi east of Seaview Road. Replace existing one-lane bridge with a new two-lane bridge	2013 TIP Development - Update RTP ID	1.02 - EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2020
Sonoma	SON110026	22490	Sonoma County	Replace Freestone Flat Bridge over Salmon 20C0440	In Sonoma: Bridge No.20C0440, Freestone Flat Road Bridge over Salmon Creek, 0.2 Mi E. Bohemian Way. Replace existing one-lane bridge with a new two-lane bridge	2013 TIP Development - Update RTP ID	1.02 - EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2020

*Projects with conformity analysis years 2040 reference programmatic projects or project with a completion date after 2030 in Plan Bay Area.

Final List of 2013 TIP Projects by County

Appendix B

County	TIP ID	RTP ID	Sponsor	Project	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Sonoma	SON110028	230700	Sonoma County	2011/12 Asphalt Overlay Program	In Sonoma County: Various County roads: Repair and overlay Calistoga Road, Main Street in Penngrove, Fulton Road and Lakeville Highway.	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	1.10 - EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Sonoma	SON110032	21017	Petaluma	Petaluma Transit - Communications Equipment	In Petaluma: at dispatch and/or on board fixed route and paratransit vehicles: deploy advanced communications systems	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.04 - EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040
Sonoma	SON110033	21017	Petaluma	Petaluma Transit Maintenance Facility Rehab: Ph 2	City of Petaluma: Rehabilitation of the maintenance facility (Phase II).	2013 TIP Development - Update RTP ID	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Sonoma	SON110034	230550	MTC	Stewarts Point Rancheria EV Pilot Program	Sonoma County: At 6 locations where the tribal community frequents: install 6 EV charging stations; purchase 4 electric vehicles (project will be managed by the Kashia Band of Pomo Indians)	2013 TIP Development - Update the funding plan to reprogram CON MTC exchange funds from FY12 to FY13	2.06 - EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2030
Sonoma	SON110044	240651	Windsor	ORH at Lakewood Dr. Bike and Ped Facilities	Windsor: Along Old Redwood Highway near the US 101 Central Windsor Interchange: construct a series of interrelated pedestrian, bicycle, roadway, intersection, and aesthetic improvements	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON110045	21017	SantaRosa Bus	SR City Bus - Capital Maintenance - Fuel	Santa Rosa City Bus: purchase fuel as part of FTA's "Fuel as Capital Maintenance" program	2013 TIP Development - Update RTP ID and retain in the TIP for informational purposes as the project is ongoing	2.01 - EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Sonoma	SON110047	21017	SantaRosa Bus	Santa Rosa City Bus: Fast-fill CNG Fueling Station	Santa Rosa: Maintenance Service Center corporation yard: reconstruction of existing maintenance facility to include CNG fast-fill fueling station	2013 TIP Development - Update RTP ID	2.08 - EXEMPT (40 CFR 93.126) - Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)	2040
Sonoma	SON110049	21017	Son Co Transit	Sonoma County Transit: Replacement Bus Purchase	Sonoma County Transit: Replace two 40' Orion V CNG transit coaches with two 40' CNG Low-Floor transit coaches.	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Sonoma	SON110050	22423	Son Co Reg Park	Central Sonoma Valley Trail	In the unincorporated area of Sonoma County, construct 0.42 miles of a Class I bike trail. 1)Larson Park to Flowery Elementary School and 2) along Verano Avenue from Sonoma Creek to Main Street.	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON110051	21017	Petaluma	Petaluma: Replace 2 Paratransit Cutaways FY13	In Petaluma: Replace two (2) paratransit vans for Petaluma Paratransit.	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Sonoma	SON110052	21017	Petaluma	Petaluma: Replace 2 Paratransit Cutaways FY14	In Petaluma: Replace two (2) paratransit vans for Petaluma Paratransit	2013 TIP Development - Update RTP ID	2.10 - EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	2040
Sonoma	SON110053	240744	MTC	Local PDA Planning - Sonoma	Sonoma County Various Agencies: Planning assistance pass through to local jurisdictions to support transportation investments and improve their performance in Priority Development Areas (PDAs)	2013 TIP Development - Update RTP ID and update the funding plan	4.01 - EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Sonoma	SON110054	22423	Healdsburg	Healdsburg Pedestrian Safety and Access Improvmnts	In Healdsburg: Install HAWK signal crossing adjacent to high school on Powell Ave. Install ADA improvements connecting high school and junior high school to library (Powell Ave, Prince St, Piper St).	2013 TIP Development - Update RTP ID	3.02 - EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

*Projects with conformity analysis years 2040 reference programmatic projects or project with a completion date after 2030 in Plan Bay Area.

Appendix C
Travel Forecasting Assumptions (Technical Supplementary Report:
Predicted Traveler Responses)

Summary of Predicted Traveler Responses

July 2013

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1 Introduction

This supplementary report presents selected technical results from the analysis of alternatives performed in support of the Metropolitan Transportation Commission's (MTC's) and the Association of Bay Area Government's (ABAG's) 2013 Plan Bay Area environmental impact report (EIR). A brief overview of the technical methods used in the analysis as well as a brief description of the key assumptions made for each alternative precede the presentation of results.

2 Analytical Tools

To first describe the reaction of travelers to transportation projects and policies and to then quantify the impact of cumulative individual decisions on the Bay Area's transportation networks and environment, MTC maintains and applies an analytical tool known to transportation planners as a "travel model" (or "travel demand model", "travel forecasting model"). MTC's travel model is briefly described here, along with two supporting tools: a population synthesizer and a vehicle emissions model.

Population Synthesizer

MTC's travel model is an "agent-based simulation". The "agents" are individual households, further described by the persons which form each household. The travel model, therefore, attempts to simulate the behavior of individual households and persons who carry out their daily activities in an environment described by input land development patterns and transportation projects and policies. In order to use this type of simulation, each agent must be characterized in a fair amount of detail.

Tools that create lists of households and persons for travel model simulations are known as population synthesizers. MTC's population synthesizer attempts to locate actual households described in the 2000 Decennial Census Public Use Micro-sample (PUMS) data (i.e., those who responded to the old "long forms" used by the Census Bureau to collect detailed household information) in such a way that when looking at the population along specific dimensions spatially (at a level of detail below which the PUMS data is reported), the aggregate totals more or less match those predicted by other Census summary tables (when synthesizing historical populations) or the land use projections made by ABAG and the Bay Area UrbanSim (UrbanSim) model¹ (when forecasting populations). For example, if ABAG/UrbanSim projects that 60 households containing 100 workers and 45 children will live in spatial unit X in the year 2035, the population synthesizer will locate 60 PUMS households in spatial unit X and will select households in such a way that, when summing across households, the number of workers is close to 100 and the number of children is close to 45.

MTC's population synthesizer "controls" (i.e., minimizes the discrepancy between the synthetic population results and the historical Census results or ABAG/UrbanSim's forecasts) along the following dimensions:

¹ A detailed discussion of the land use forecasting procedures are available in the companion supplementary report *Summary of Predicted Land Use Responses*.

1. Household “type”, i.e. individual household unit or non-institutionalized group quarters (e.g., college dorm);
2. Household income category;
3. Age of head of household;
4. Number of persons in the household;
5. Number of children under age 17 in the household;
6. Number of employees in the household; and,
7. Number of units in the household’s physical location (one or more than one, as in an apartment building).

Travel Model

Travel models are frequently updated. As such, a bit of detail as to which version of a given travel model is used for a given analysis is useful. The current analysis uses MTC’s *Travel Model One (version 0.3)*, released in spring 2012, calibrated to a 2000 base year, and validated against both year 2000 and year 2005 observed conditions².

Travel Model One is of the so-called “activity-based” archetype³. The model is a partial agent-based simulation in which the agents are the households and persons who reside in the Bay Area. The simulation is partial because it does not simulate the *individual* behavior of passenger and transit vehicles on roadways and transit facilities (the model system does simulate the behavior of *aggregations* of vehicles and transit passengers). In regional planning exercises such as the work described here, the travel model is used to simulate a typical weekday – when school is in session, the weather is pleasant, and no major accidents or incidents disrupt the transportation system.

The model operates on a synthetic population that includes households and persons which represent each actual household and person in the nine-county Bay Area – in both historical and prospective years. Travelers move through a space segmented into “travel analysis zones”⁴ and, in so doing, burden the transportation system. The model system simulates a series of travel-related choices for each household and for each person within each household. These choices⁵ are as follows (organized sequentially):

² Additional information is available here: <http://analytics.mtc.ca.gov/foswiki/Main/Development>.

³ The term “activity-based” is not the most descriptive label for the travel model, but it has been adopted into transportation planning jargon as a label for the family of travel models of which *Travel Model One* belongs.

⁴ An interactive map of these geographies is available here: <http://geocommons.com/maps/130037>.

⁵ These “choices”, which often are not really choices at all (the term is part of travel model jargon), are simulated in a random utility framework – background information is available here: http://en.wikipedia.org/wiki/Choice_modelling.

1. Usual workplace and school location – Each worker, student, and working student in the synthetic population selects a travel analysis zone in which to work or attend school (or, for working students, one zone to work and another to attend school).
2. Household automobile ownership – Each household, given its location and socio-demographics, as well as each members' work and/or school locations (i.e., given the preceding simulation results), decides how many vehicles to own.
3. Daily activity pattern – Each household chooses the daily activity pattern of each household member, the choices being (a) go to work or school, (b) leave the house, but not for work or school, or (c) stay at home.
4. Work/school tour⁶ frequency and scheduling – Each worker, student, and working student decides how many round-trips they will make to work and/or school and then schedules a time to leave for, as well as return home from, work and/or school.
5. Joint non-mandatory⁷ tour frequency, party size, participation, destination, and scheduling – Each household selects the number and type (e.g., to eat, to visit friends) of “joint” (defined as two more members of the same household traveling together) non-mandatory (for purposes other than work or school) round trips in which to engage, then determines which members of the household will participate, where and at what time the tour (i.e., the time leaving and returning home) will occur.
6. Non-mandatory tour frequency, destination and scheduling – Each person determines the number and type of non-mandatory (e.g., to eat, to shop) round trips to engage in during the model day, where to engage in them, and at what time to leave and return home.
7. Tour travel mode – The tour-level travel mode choice (e.g., drive alone, walk, take transit) decision is simulated separately for each tour and represents the best mode of travel for the round trip.
8. Stop frequency and location – Each traveler or group of travelers (for joint travel) decide whether to make a stop on an outbound (from home) or inbound (to home) leg of a travel tour, and if a stop is to be made, where the stop is made, all given the round trip tour mode choice decision.
9. Trip travel mode – A trip is a portion of a tour, either from the tour origin to the tour destination, the tour origin to a stop, a stop to another stop, or a stop to a tour destination. A separate mode choice decision is simulated for each trip; this decision is made with awareness of the prior tour mode choice decision.
10. Assignment – Vehicle trips for each synthetic traveler are aggregated into time-of-day-specific matrices (i.e. tables of trips segmented by origin and destination) that are assigned via the

⁶ A “tour” is defined as a round trip from and back to either home or the workplace.

⁷ Travel modelers use the term “mandatory” to describe work and school travel and “non-mandatory” to refer to other types of travel (e.g., to the grocery store); we use this jargon to communicate efficiently. We neither assume nor believe that all non-work/school related travel is non-mandatory or optional.

standard static user equilibrium procedures to the highway network. Transit trips are assigned to time-of-day-specific transit networks.

The *Travel Model One* system inherits without significant modification the representation of interregional and commercial vehicle travel from MTC's previous travel model system (commonly referred to as *BAYCAST* or *BAYCAST-90*). Specifically, commercial vehicle demand is represented using methods developed for Caltrans and Alameda County as part of the *Interstate 880 Intermodal Corridor Study* conducted in 1982, and the *Quick Response Freight Manual* developed by the United States Department of Transportation in 1996. When combined, these methods estimate four classes of commercial travel, specifically: "very small" trucks, which are two-axle/four-tire vehicles; "small" trucks, which are two-axle/six-tire vehicles; "medium" trucks, which are three-axle vehicles; and, "combination" trucks, which are four-or-more axle vehicles.

Reconciling travel demand with available transportation supply is particularly difficult near the boundaries of planning regions because little is assumed to be known about the land development patterns – the primary driver of demand – or supply details beyond these boundaries. The typical approach to representing this interregional travel is to first estimate the demand at each location where a major transportation facility intersects the boundary and to then distribute this demand to locations either within the planning region (which results in so-called "internal/external" travel) or to other boundary locations ("external/external" travel). MTC uses this typical approach and informs the process with Census (from the 2000 Decennial Census) journey-to-work flows, which are allocated via a simple method to represent flows to and from MTC's travel analysis zones and 21 boundary locations, as well as the flows between boundary locations.

The travel of air passengers to the Bay Area's airports is represented with static (across alternatives), year-specific vehicle trip tables. These trip tables are based on survey data⁸ collected in 2006 and planning information developed as part of MTC's *Regional Airport Planning Study*⁹.

Vehicle Emissions Model

The MTC travel model generates spatially- and temporally-specific estimates of vehicle usage and speed for a typical weekday. This information is then input into an emissions model to estimate emitted criteria pollutants as well as carbon dioxide (used as a proxy for all greenhouse gases). For the current analysis, MTC used the EMFAC2011 version of the California Air Resources Board emissions factor software¹⁰.

⁸ Additional information is available here: http://mtc.ca.gov/planning/air_plan/2006_Air_Pass_Survey_Final_Report.pdf.

⁹ Additional information is available here: http://mtc.ca.gov/planning/air_plan/.

¹⁰ Additional information is available here: <http://www.arb.ca.gov/msei/msei.htm>.

3 Input Assumptions

In total, nineteen scenarios were simulated and selected results are presented and discussed in the remainder of this document. Four *categories* of scenarios are included, as follows: historical, no action, planned action, and alternative actions. Historical scenarios are labeled by their year and include Year 2005 and Year 2010. The no action alternative is referred to as “No Project”; No Project simulations were performed for 2020, 2035, and 2040. The planned action is referred to as the “Proposed Plan” (often abbreviated as “Plan”) alternative; Proposed Plan simulations were performed for 2015, 2020, 2030, 2035, and 2040. Three separate alternative scenarios are included and are labeled “Transit Priority”, “Enhanced Network of Communities” (occasionally abbreviated henceforth as “Enhanced Communities” or “Enhanced”), and “Environment, Equity, and Jobs” (“EEJ”). Year 2020, 2035, and 2040 simulations were conducted for each of these alternatives. Table 1 below identifies the simulation years for each of the alternatives. The various simulation years serve different purposes: historical years demonstrate the model’s ability to adequately replicate reality¹¹ and provide the reader data for a familiar scenario; the California Air Resources Board established greenhouse gas reduction targets for 2020 and 2035; the transportation plan, as guided by federal regulations, extends to 2040; and, air quality regulations require 2015 and 2030 simulations.

The above scenarios differ across four dimensions, namely: land use, roadway supply, transit supply, and prices. By land use, we mean the locations of households and jobs (of different types). Roadway supply refers to the network upon which automobiles, trucks, transit vehicles, bicycles, and pedestrians travel. Transit supply refers to the facilities upon which transit vehicles travel (the roadway, along with rail lines, ferry routes, and other dedicated infrastructure), as well as the stop locations, route, and frequency of service on each facility. Prices include the monetary fee users are charged to board transit vehicles, cross bridges, operate and park private vehicles and use express (also known as high occupancy toll) lanes.

In the remainder of this chapter, each of the six scenarios (the rows in Table 1) is discussed, organized by these four dimensions; additional notes on “other assumptions” concludes the section. This organization should allow the reader to compare the input assumptions across scenarios.

¹¹ Details of this “validation” process are available here: <http://analytics.mtc.ca.gov/foswiki/Main/Development>.

TABLE 1: SIMULATIONS BY YEAR AND ALTERNATIVE

Alternative	Simulation Year						
	2005	2010	2015	2020	2030	2035	2040
Historical	✓	✓					
No Project				✓		✓	✓
Proposed Plan			✓	✓	✓	✓	✓
Transit Priority				✓		✓	✓
Enhanced Communities				✓		✓	✓
Environment, Equity, and Jobs				✓		✓	✓

Land Use

Detailed information regarding the land development patterns is available in a companion supplementary report, *Summary of Predicted Land Use Responses*, available on www.onebayarea.org. Here, we provide a handful of details regarding the transformation of these land use inputs into the information needed by the travel model.

Prior to executing the travel model, the land development inputs provided by ABAG (control totals and distribution details) and the UrbanSim model (distribution details) are run through the MTC population synthesizer as described above. The journey from control totals through UrbanSim and through the population synthesizer causes minor inconsistencies between the ABAG-estimated regional control totals and the totals implied by the synthetic population (a more detailed discussion of these differences is included as an appendix to the *Summary of Predicted Land Use Responses* supplementary report). These inconsistencies are caused by: (i) UrbanSim, which fails to simulate the development of enough housing opportunities for the expected population (given unlimited time and resources, the model could be tuned to precisely replicate the control totals of developed housing provided by ABAG); (ii) expediency, which limits the time provided to the population travel model's synthesizer software to find the optimal solution, i.e. the synthetic population that best matches the UrbanSim or ABAG distributions; and, (iii) inconsistency, between the zone-specific control totals, as provided by UrbanSim or ABAG, and base year data, as provided by the Census, meaning there may not be a synthetic population that can satisfy all

of the control totals. These inconsistencies are quantified and presented for years 2005, 2010, 2020, and 2040 in Table 2 below – similar inconsistencies exist for the other forecast years. The inconsistencies are very small for the Proposed Plan and Enhanced Alternatives; the distribution of development for these alternatives comes from a simple allocation scheme developed by ABAG. The inconsistencies are a bit larger for the No Project, Transit Priority, and EEJ Alternatives; these alternatives rely on UrbanSim for their distribution.

TABLE 2: DEMOGRAPHIC STATISTICS OF CONTROL AND SIMULATED POPULATIONS

<i>Alternative</i>	<i>Year</i>	<i>Households</i>				<i>Population</i>		
		<i>ABAG Results</i>		<i>Synthetic Population</i>	<i>Percent Difference[†]</i>	<i>ABAG Results</i>	<i>Synthetic Population</i>	<i>Percent Difference</i>
		<i>Households</i>	<i>Group Quarters</i>					
Historical	2005	2,583,077	144,597	2,720,722	-0.3%	7,069,469	7,007,634	-1.3%
Historical	2010	2,608,023	147,683	2,732,722	-0.8%	7,150,741	7,053,334	-1.4%
No Project	2020	2,833,671	93,971	2,894,543	-1.1%	7,718,418	7,696,761	-0.3%
Proposed Plan	2020	2,837,715	93,956	2,925,108	-0.2%	7,718,420	7,697,101	-0.3%
Transit Priority	2020	2,833,671	93,971	2,897,715	-1.0%	7,718,418	7,708,472	-0.1%
Enhanced	2020	2,871,765	93,976	2,960,947	-0.2%	7,820,887	7,799,899	-0.3%
EEJ	2020	2,833,671	93,971	2,896,231	-1.1%	7,718,418	7,698,249	-0.3%
No Project	2040	3,308,120	110,665	3,281,324	-3.0%	9,195,569	8,709,541	-5.3%
Proposed Plan	2040	3,308,111	110,627	3,411,297	-0.2%	9,195,546	9,133,090	-0.7%
Transit Priority	2040	3,308,120	110,665	3,357,898	-1.8%	9,195,569	8,918,832	-3.0%
Enhanced	2040	3,431,742	110,626	3,534,957	-0.2%	9,535,023	9,471,803	-0.7%
EEJ	2040	3,308,120	110,665	3,355,942	-1.8%	9,195,569	8,903,747	-3.2%

† individuals living in group quarters are considered individual households in the synthetic population and, subsequently, the travel model.

A key function of the population synthesizer is to identify each member of the representative populous with one of eight “person type” labels. Each person in the synthetic population is identified as a full-time worker, part-time worker, college student, non-working adult, retired person, driving-age student, non-driving-age student, or child too young for school. The travel model relies on these person type classifications, along with myriad other variables, to predict behavior.

Figure 1 shows the distribution of person types for the historical scenarios and the Proposed Plan alternative, from years 2005 to 2040. Interesting aspects of these distributions, which are driven by assumptions embedded in ABAG’s land use forecasts, are as follows:

- The share of full-time workers peaks in 2020;
- The share of retired workers steadily increases from 2005 to 2040; and,
- The share of non-working adults drops sharply from 2010 to 2020.

Figure 2 shows the distribution of person types across the five forecast year alternatives for year 2040. As noted above, the control totals for the five alternatives are slightly different. When taken through the population synthesizer, one result is that the alternatives derived from UrbanSim (the No Project, Transit Priority, and EEJ alternatives) have a slightly higher share of full- and part-time workers and a slightly lower share of non-workers and college students than the Proposed Plan and Enhanced Alternatives. The shares for the other person types are highly similar.

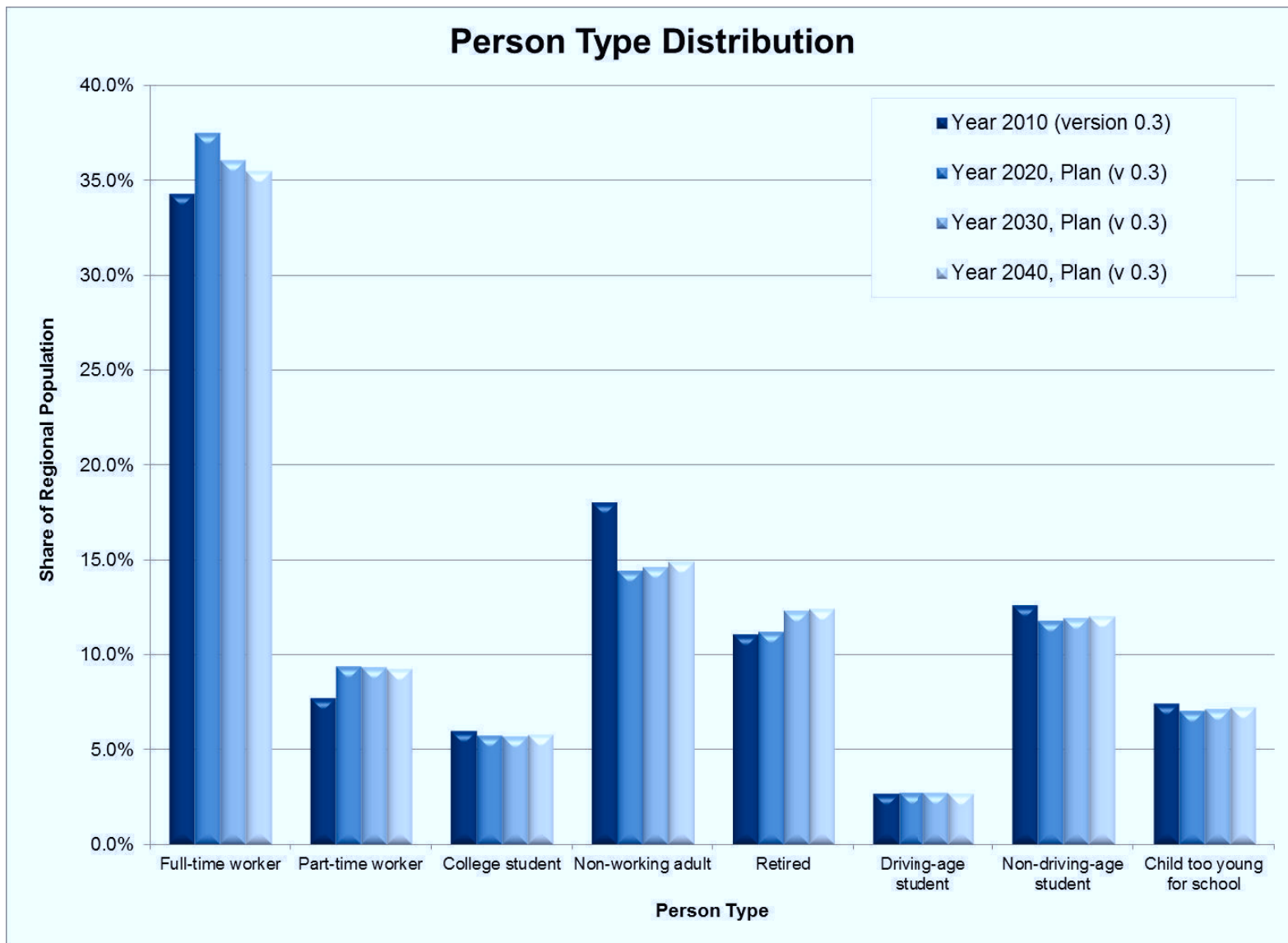


FIGURE 1: HISTORICAL AND FORECASTED PERSON TYPE DISTRIBUTIONS FOR PROPOSED PLAN ALTERNATIVE

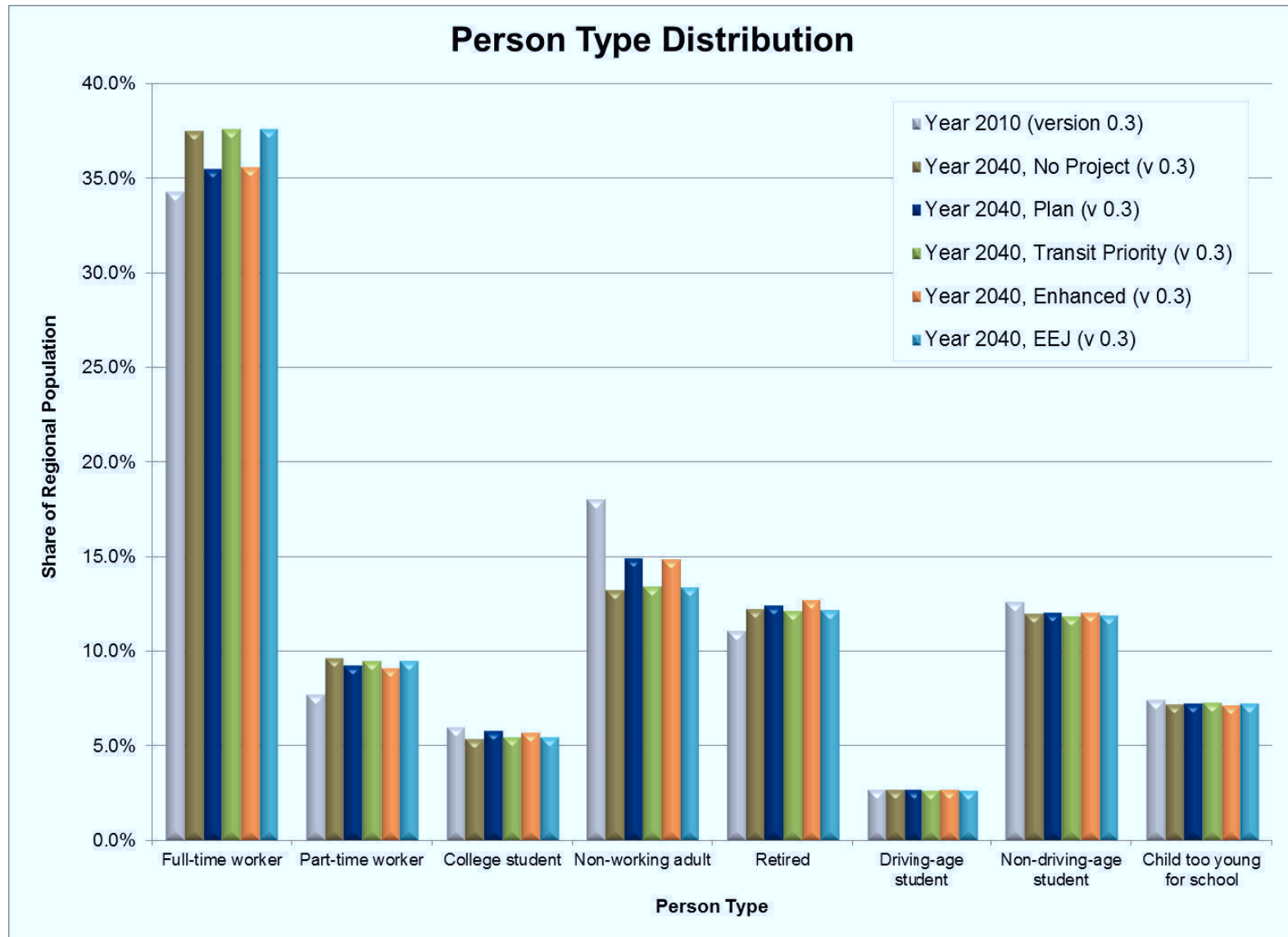


FIGURE 2: YEAR 2040 PERSON TYPE DISTRIBUTIONS

Roadway Supply

Table 3 below summarizes the assumptions made in regards to the roadway network in each of the scenario categories.

The historical scenarios for 2005 and 2010 have a representation of roadways that reflect the 2005 and 2010 infrastructure.

The No Project alternative includes projects that are either in place as of 2013 or are “committed” per MTC *Resolution 4006*. The Proposed Plan alternative includes the projects included in the transportation investment strategy, which is discussed in detail elsewhere.

The Transit Priority alternative roadway networks (for each scenario year) are identical to the Proposed Plan alternative network with one exception: the Regional Express Lane network is reduced. Specifically, the segments of the express lane network on (a) Interstate 80 from the intersection with Interstate 505 to the Yolo County line and (b) Interstate 580 from the Vasco Road interchange to the San Joaquin County line have been eliminated. Please see Figure 3 for a graphical depiction of this change in year 2035. The timing of the express lane build out is the same in the Proposed Plan and Transit Priority alternatives.

The Enhanced Network of Communities alternative has the same roadway network as the Proposed Plan alternative.

The Environment, Equity, and Jobs alternative starts with the No Project alternative roadway network, then adds the Proposed Plan alternative’s bus rapid transit (BRT) infrastructure and freeway performance initiative (FPI) improvements. No other uncommitted roadway projects are included in the EEJ alternative. In the travel model simulation, buses traveling over BRT infrastructure move faster through the roadway network and roadways with FPI treatments (e.g., ramp metering, signal coordination) are assumed to have an increased effective operating capacity, which leads to higher speeds (all else equal) for automobiles and transit vehicles.

TABLE 3: ROADWAY SUPPLY ASSUMPTIONS BY ALTERNATIVE

<i>Alternative</i>	<i>Roadway Assumptions</i>
Historical	As built in the scenario year
No Project	Existing plus committed projects
Proposed Plan	Proposed Plan alternative
Transit Priority	Proposed Plan alternative with reductions to express lane network
Enhanced Communities	Proposed Plan alternative
Environment, Equity, and Jobs	Existing plus committed with Proposed Plan alternative's bus-rapid transit infrastructure and freeway performance initiative improvements

A graphical depiction of the changes in the roadway network is presented in Figure 4 below. The chart shows the change in lane-miles (e.g., a one-mile segment of a four-lane road is four lane-miles) available to automobiles in year 2040 relative to the year 2010. On net, San Francisco County shows a decrease in lane-miles, as some roadway segments are converted to dedicated bus ways. Figure 5 shows the change in lane-miles over time for the Proposed Plan alternative.

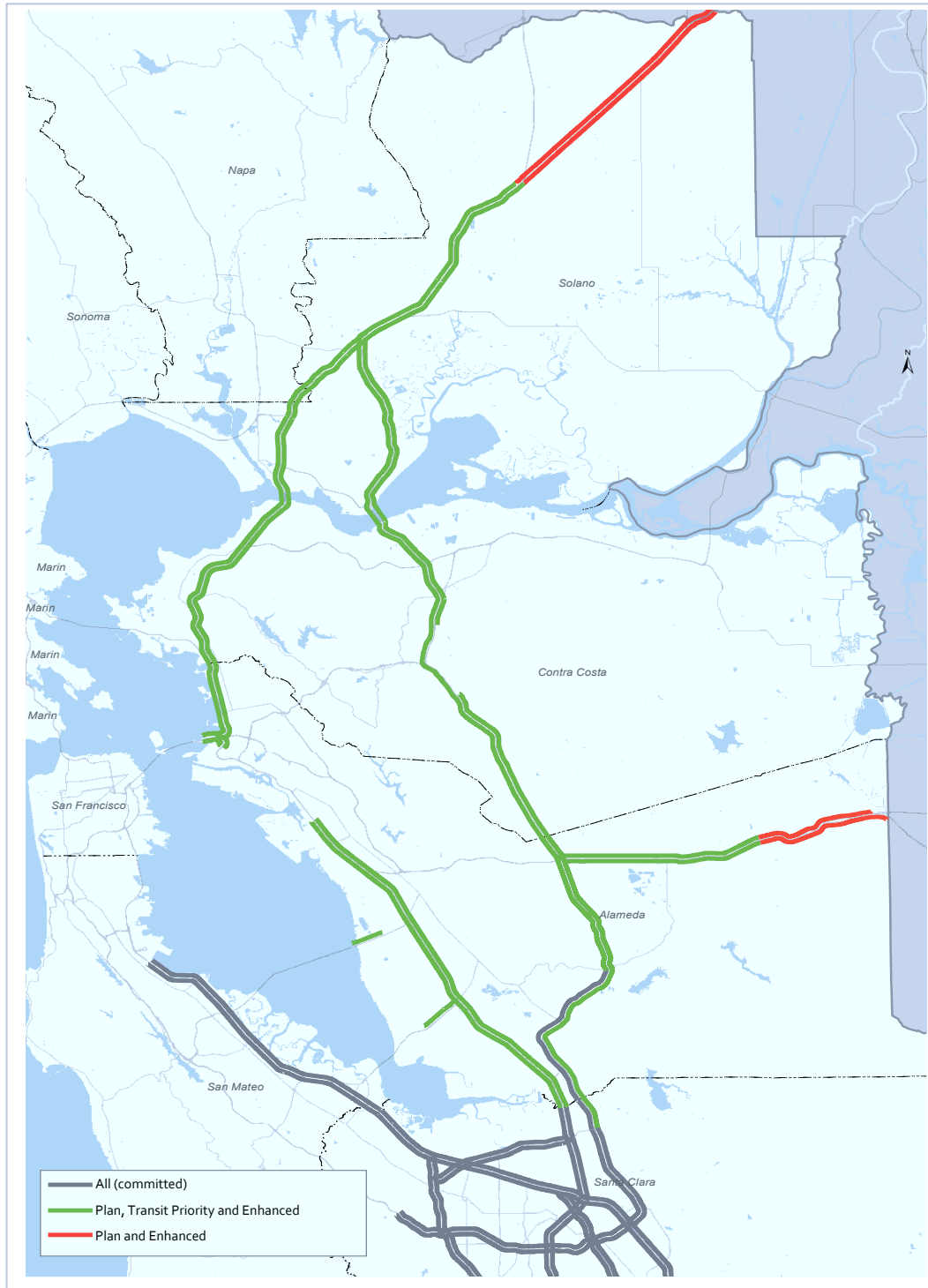


FIGURE 3: YEAR 2035 PROPOSED EXPRESS LANE NETWORKS

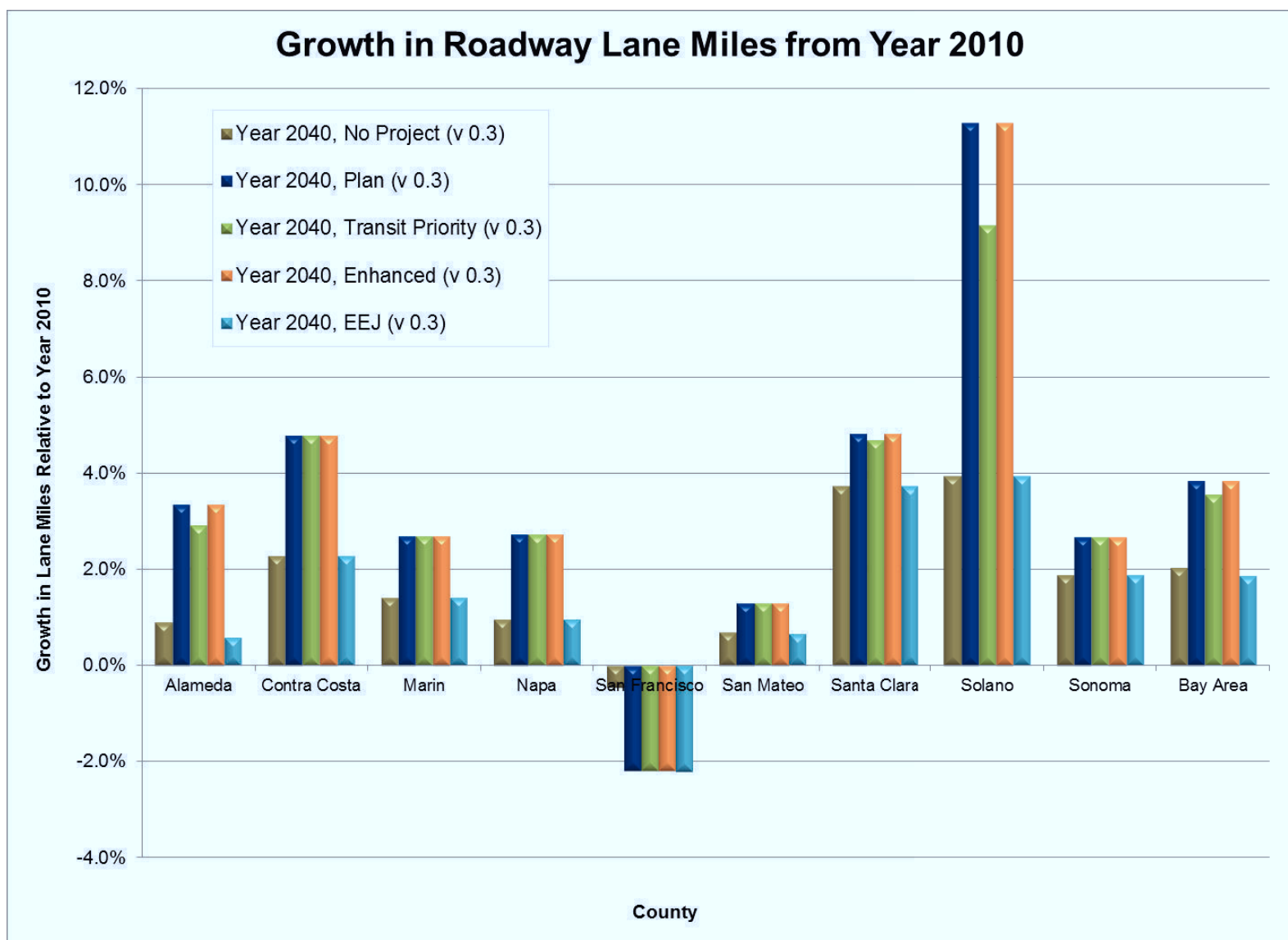


FIGURE 4: YEAR 2040 GROWTH IN ROADWAY LANE MILES AVAILABLE TO AUTOMOBILES RELATIVE TO 2010

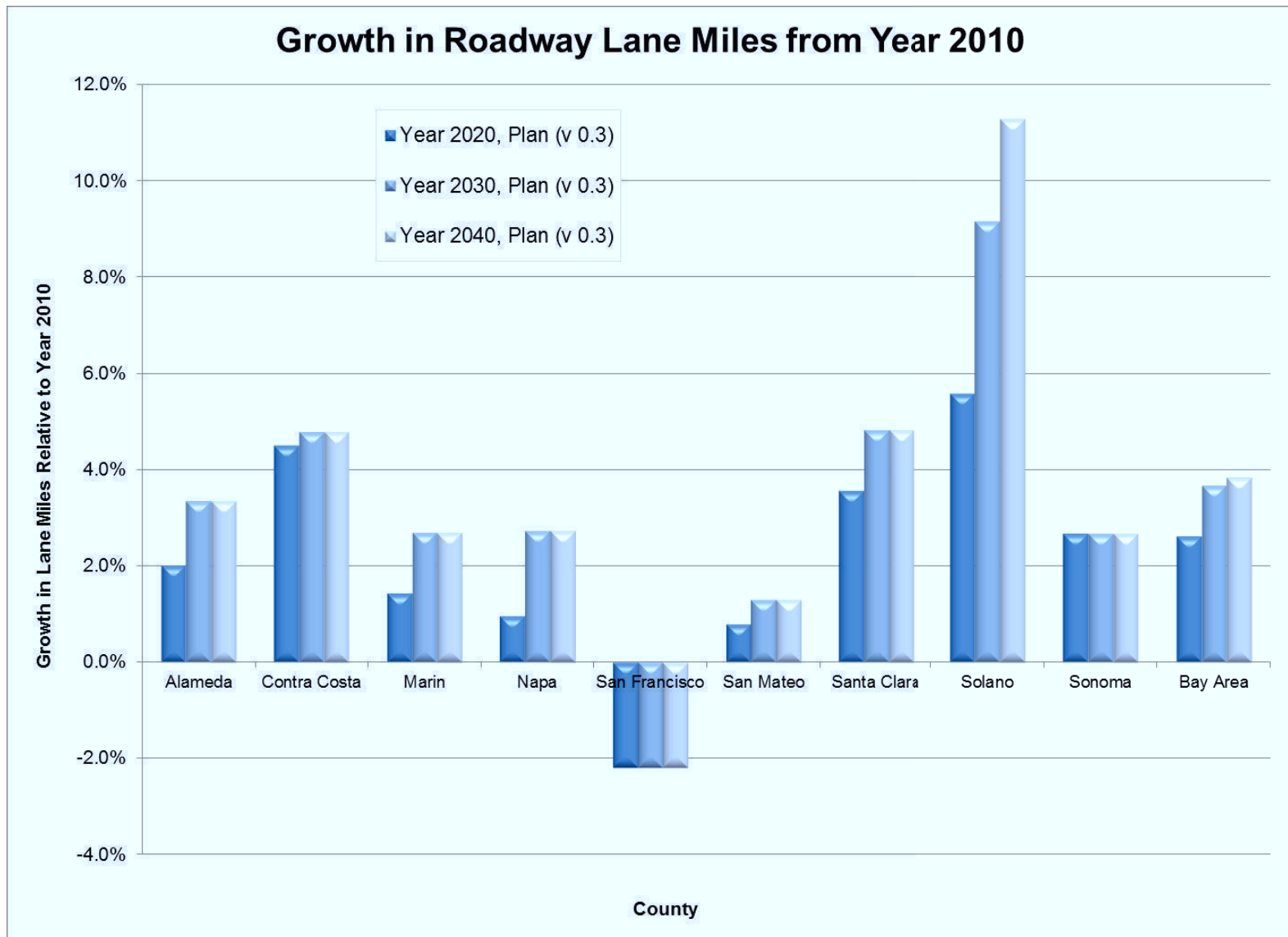


FIGURE 5: GROWTH IN ROADWAY LANE MILES AVAILABLE TO AUTOMOBILES FOR PROPOSED PLAN ALTERNATIVE

Transit Supply

Table 3 and Table 4 below summarize the assumptions made in regards to the transit network in each of the scenario categories.

The historical scenarios for 2005 and 2010 have a representation of transit service that reflect service in 2005 and 2010.

The No Project alternative begins with 2010 service levels and adds in projects that are committed per MTC's *Resolution 4006*. The Proposed Plan alternative also begins with the 2010 service levels and adds in the committed projects as well as the projects included in the transportation investment strategy.

The Transit Priority alternative begins with the Proposed Plan alternative and includes additional service improvements for Alameda/Contra Costa County Transit (AC Transit) and the Bay Area Rapid Transit service (BART) for all simulation years on or after 2020. These changes are summarized in Table 5 and are intended to represent cost effective service changes consistent in nature with the recent service changes made by the Santa Clara Valley Transportation Authority (VTA) following their comprehensive operations analysis. Similar efficiency-focused changes for San Francisco Municipal Railways (Muni) are included in the Proposed Plan alternative.

The Enhanced Network of Communities alternative has the same transit network as the Proposed Plan alternative.

The Environment, Equity, and Jobs alternative begins with the Transit Priority alternative and adds in service improvements for AC Transit, VTA, San Mateo County Transit (SamTrans), Marin Transit, Golden Gate Transit, Livermore Amador Valley Transit Authority (LAVTA), County Connection (Central Contra Costa County), Santa Rosa CityBus, and Sonoma County Transit. These improvements are made for all simulation years on or after 2020 and are summarized in Table 6.

A graphical depiction of the changes in the transit service is presented in Figure 6 below. The chart shows the change in seat-miles (e.g., a one-mile segment of a bus with forty seats is forty-seat miles) in year 2040 relative to the year 2010 across alternatives; Figure 7 shows the change in seat-miles over time for the Proposed Plan Alternative.

TABLE 4: TRANSIT SUPPLY ASSUMPTIONS BY ALTERNATIVE

<i>Alternative</i>	<i>Transit Service Assumptions</i>
Historical	As built in the alternative year
No Project	Year 2010 service plus committed projects
Proposed Plan	Year 2010 service plus projects in the transportation plan
Transit Priority	Proposed Plan alternative plus service aimed at improving the operational efficiency of BART and AC Transit
Enhanced Communities	Proposed Plan alternative
Environment, Equity, and Jobs	Transit Priority alternative plus service aimed at improving the connection between low income communities and jobs

TABLE 5: CHANGES TO AC TRANSIT AND BART SERVICE IN TRANSIT PRIORITY ALTERNATIVE

<i>Operator</i>	<i>Route(s)</i>	<i>Changes</i>
BART	All	Core routes operate at 12-minute frequencies during commute hours and additional short-run routes (Pleasant Hill to Daly City; Berryessa to 24 th St Mission; South Hayward to Daly City) operate during commute hours
AC Transit	11, 12, 14, 18, 20, 21, 22, 25, 31, 40, 45, 46, 49, 51A, 51B, 52, 54, 57, 62, 65, 67, 72R, 73, 74, 76, 85, 86, 97, 98, 99, 210	Improved service frequencies throughout the day

TABLE 6: EEJ ALTERNATIVE TRANSIT FREQUENCY IMPROVEMENTS

<i>Operator & Service</i>	<i>Route(s)</i>	<i>Changes</i>
BART	Same as Transit Priority, as shown in Table 5	
AC Transit Local	Same as Transit Priority, as shown in Table 5	
AC Transit Transbay	FS, J, O, OX, P, SB, U, V, W	Improved service frequencies during commute hours
County Connection	1, 4, 6, 10, 11, 14, 15, 17, 20	Improved service frequencies throughout the day
Golden Gate Transit	70	Improved service frequency during commute hours
LAVTA Local	8, 10, 12, 14, 15	Improved service frequencies throughout the day
LAVTA Express	70	Improved service frequencies throughout the day
Marin Transit	17, 22, 23, 29, 35, 36, 71	Improved service frequencies throughout the day
SamTrans Local	110, 120, 121, 122, 130, 250, 260, 292, 296	Improved service frequencies throughout the day
SamTrans Express	KX	Improved service frequencies throughout the day
Santa Rosa CityBus	1, 9, 10, 14	Improved service frequencies throughout the day
Sonoma County Transit	20, 30, 44/48, 62	Improved service frequencies throughout the day
VTA light Rail	900, 901, 902	Trains operate at 8 minute frequencies during commute hours and 10 minute frequencies during the midday
VTA Local	25, 26, 40, 46, 51, 52, 53, 54, 55, 66, 70, 71, 72, 73, 201	Improved service frequencies throughout the day

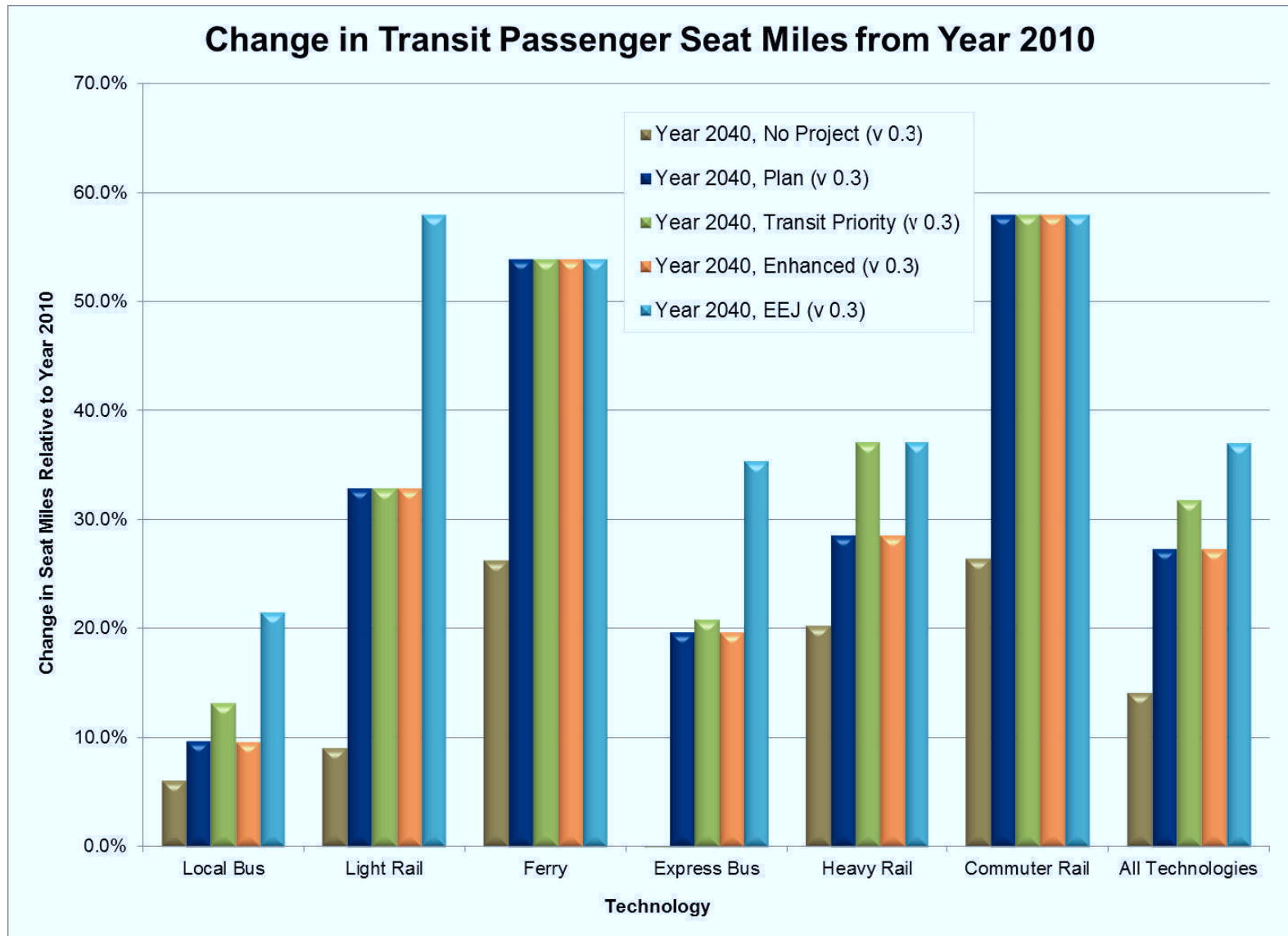


FIGURE 6: YEAR 2040 GROWTH IN TRANSIT PASSENGER SEAT MILES FROM 2010

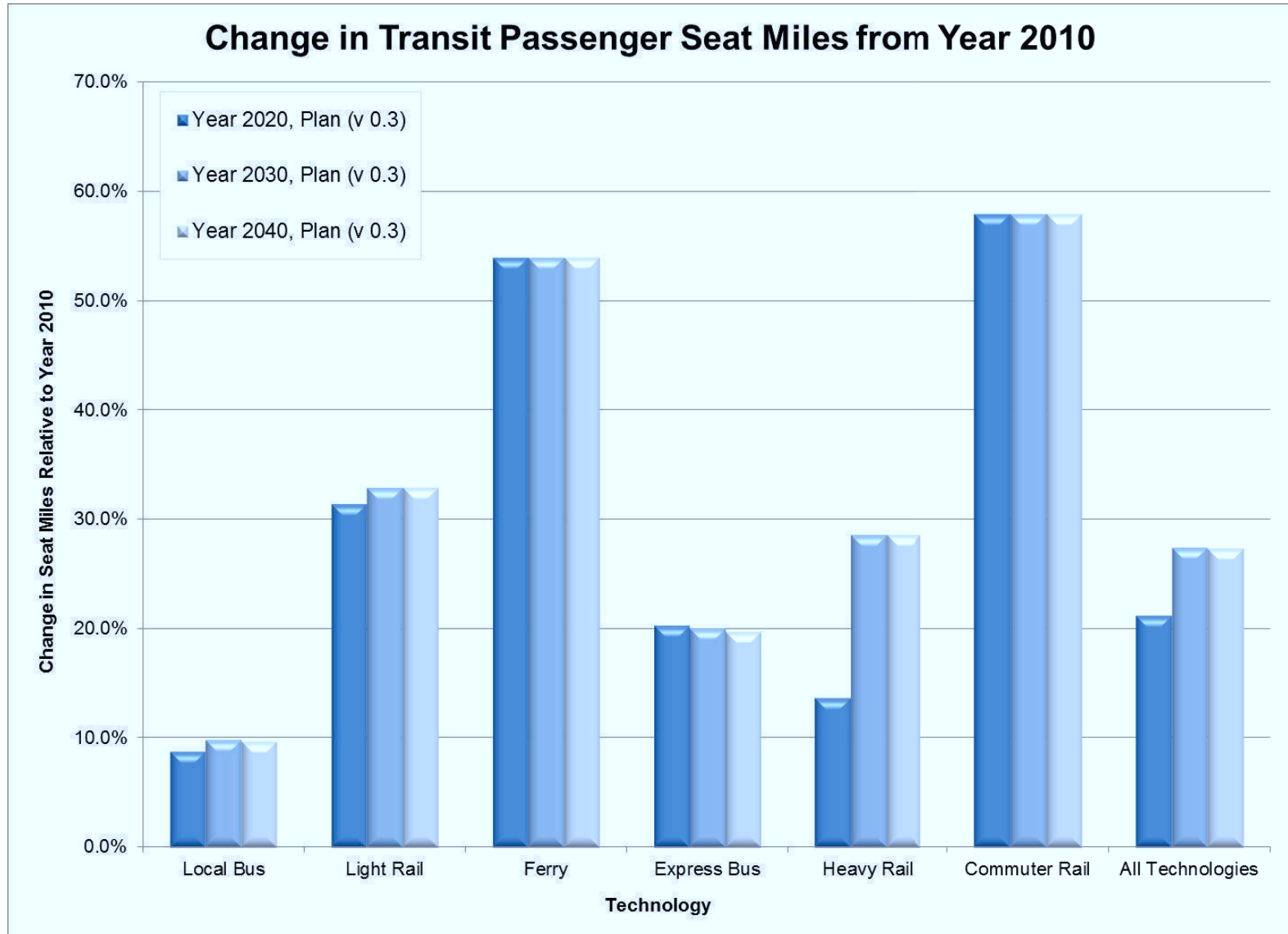


FIGURE 7: GROWTH IN TRANSIT PASSENGER SEAT MILES FOR PROPOSED PLAN ALTERNATIVE

Prices

The travel model system includes probabilistic models in which travelers select the best travel “mode” (e.g., automobile, transit, bicycle, etc.) for each of their daily tours (round trips) and trips. One determinant of this choice is the trade-off between saving time and saving money. For example, a traveler may have two realistic options for traveling to work, as follows: (i) driving, which would take 40 minutes (roundtrip) and cost \$10 for parking; or, (ii) taking transit, which would take 90 minutes (roundtrip) and cost \$4 in bus fare (\$2 each way). The mode choice model structure, as estimated in the early 2000s, includes coefficients that dictate how different travelers in different contexts make decisions regarding saving time versus saving money. These model coefficients value time in units consistent with year 2000 dollars, i.e. the model itself – not an exogenous input to the model – values time relative to costs in year 2000 dollars. Because re-estimating model coefficients is an “expensive” (in terms of staff time and/or consultant resources) process, it is done infrequently, which, in effect, “locks in” the dollar year in which prices are input to the travel model. In order to use the model’s coefficients properly, all prices must be input in year 2000 dollars. In the remainder of this document, prices are presented both in (close to) current year dollars, to give the reader an intuitive sense as to the scale of the input prices, as well as year 2000 dollars, which are the units required by the model coefficients.

Six different types of prices are explicitly represented in the travel model, as follows: (i) bridge tolls; (ii) express lane tolls; (iii) transit fares; (iv) perceived automobile operating cost and vehicle miles traveled tax; (v) parking charges; and (vi) cordon tolls. A brief discussion on how the model determines each synthetic traveler’s value of time is presented next, after which the input assumptions across each of these price categories are presented.

VALUE OF TRAVEL TIME

The model coefficients that link the value of time with the other components of decision utilities remain constant between the baseline and forecast years, with the one exception of the coefficients on travel cost. These coefficients are a function of each synthetic individual’s value of time, a number drawn, in both the historical and forecast year simulations, from one of four log-normal distributions (see Figure 8). The means of these distributions are a function of each traveler’s household income. The value of time for children in a household is equal to two-thirds that of an adult. The means and shapes of these distributions remain constant across forecast years and alternatives.

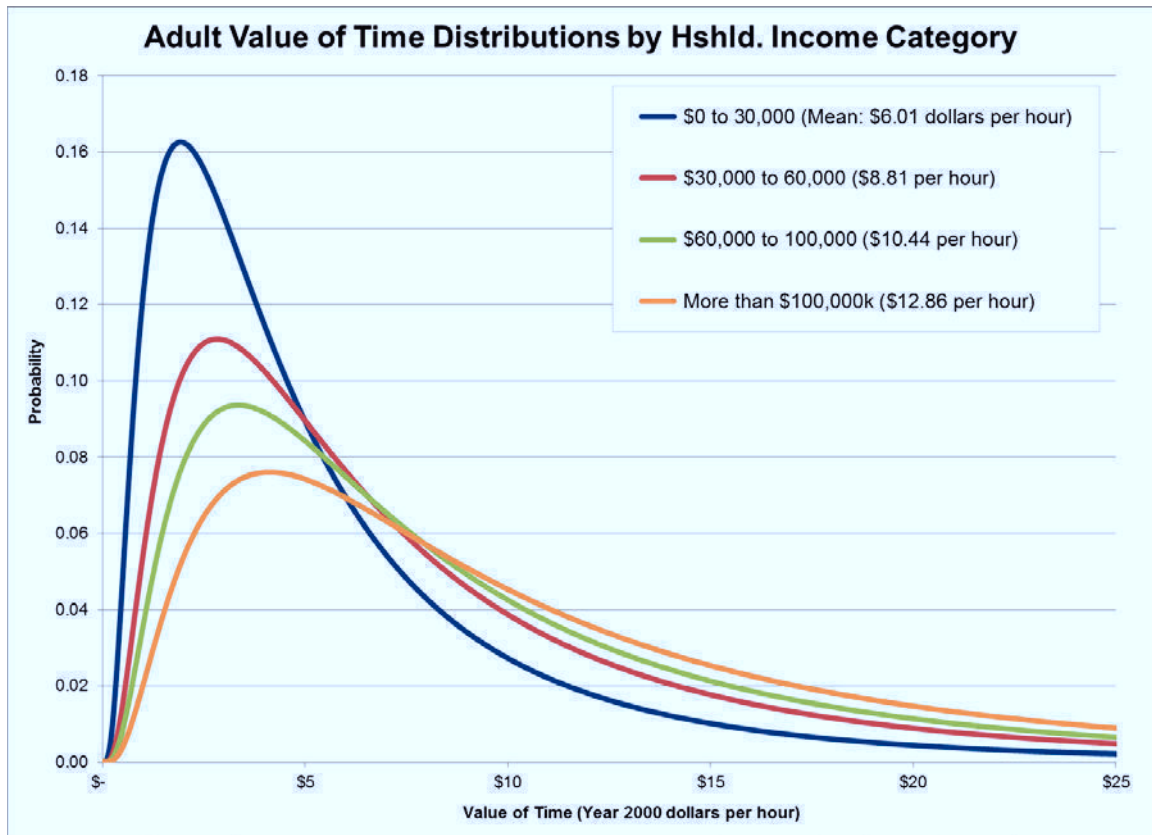


FIGURE 8: ADULT VALUE OF TIME DISTRIBUTION BY HOUSEHOLD INCOME

BRIDGE TOLLS

The historical scenarios for 2005 and 2010 use the bridge toll schedules in place at these historical points in time. Common bridge tolls assumed in the Year 2010 scenario are shown below in Table 7. Please note that Table 7 includes the price of tolls in year 2010 expressed in both year 2000 and year 2010 dollars.

TABLE 7: YEAR 2010 COMMON PEAK PERIOD BRIDGE TOLLS[†]

<i>Bridge</i>	<i>2-axle, single-occupant toll</i>		<i>2-axle, carpool[*] toll</i>	
	<i>\$2000</i>	<i>\$2010</i>	<i>\$2000</i>	<i>\$2010</i>
San Francisco/Oakland Bay Bridge	\$4.82	\$6.00	\$2.01	\$2.50
Antioch Bridge	\$4.02	\$5.00	\$2.01	\$2.50
Benicia/Martinez Bridge	\$4.02	\$5.00	\$2.01	\$2.50
Carquinez Bridge	\$4.02	\$5.00	\$2.01	\$2.50
Dumbarton Bridge	\$4.02	\$5.00	\$2.01	\$2.50
Richmond/San Rafael Bridge	\$4.02	\$5.00	\$2.01	\$2.50
San Mateo Bridge	\$4.02	\$5.00	\$2.01	\$2.50
Golden Gate Bridge	\$4.82	\$6.00	\$2.41	\$3.00

[†] The full toll schedule includes off-peak tolls and tolls for 3- or more axle vehicles. ^{*} Carpools are defined as either two-or-more- or three-or-more-occupant vehicles, depending on the bridge, and only receive a discount during the morning and evening commute periods (source: bata.mtc.ca.gov; goldengatebridge.org).

The No Project and Proposed Plan alternatives assume the toll schedule in place as of July 1, 2012. This schedule is consistent with the year 2010 tolls presented in Table 7, though there are differences in the tolls for multi-axle vehicles, which are not shown in Table 7¹². The toll schedules do not change in the forecast years. By keeping the toll prices constant (when expressed in real dollars), we are explicitly assuming that bridge tolls will be as “expensive” as they are today, when measured relative to parking fees, travel time, and transit fares. Said another way, bridge tolls are assumed to increase with inflation.

The Transit Priority, Enhanced Network of Communities, and Environment, Equity, and Jobs alternatives assume increases in the peak period single-occupant vehicle San Francisco/Oakland Bay Bridge toll. Specifically, these alternatives assume a real increase of \$1 (\$2010) in 2024 and another \$1 in 2029. As such, the peak period Bay Bridge toll increases, when measured in year 2010 dollars, from \$6 to

¹² Complete details are available here: <http://bata.mtc.ca.gov/tolls/schedule.htm>.

\$7 in 2024 and from \$7 to \$8 in 2029. The tolls for all other bridges are the same as in the Proposed Plan alternative.

The Proposed Plan, Transit Priority, Enhanced Network of Enhanced Communities, and Environment, Equity, and Jobs alternatives each assume a new toll of \$5 (\$2010) for passenger vehicles leaving Treasure Island during the morning and evening commute periods. The assumptions for each alternative are summarized in Table 8.

TABLE 8: BRIDGE TOLL ASSUMPTIONS BY ALTERNATIVE

<i>Alternative</i>	<i>Bridge Toll Assumptions</i>
Historical	Per scenario year schedule
No Project	Schedule as of July 1, 2012
Proposed Plan	No Project plus Treasure Island toll
Transit Priority	Proposed Plan plus increased peak period Bay Bridge toll
Enhanced Communities	Proposed Plan plus increased peak period Bay Bridge toll
Environment, Equity, and Jobs	Proposed Plan plus increased peak period Bay Bridge toll

EXPRESS LANE TOLLS

MTC's travel model explicitly represents the choice of travelers to pay a toll to use an express lane (i.e., a high-occupancy toll lane) in exchange for the time savings offered by the facility relative to the parallel free lanes. To exploit this functionality, the analyst must assign a travel price by time of day and vehicle class on each express lane link in the network. To efficiently and transparently simulate the impacts of the express lanes on behavior, we segmented the express lane network in the Proposed Plan alternative into about fifty corridors, with each corridor receiving a time-of-day-specific per mile toll fee. To illustrate the detail involved in this coding, Table 9 presents each corridor's limits, number of lanes, occupancy rules ("3+" means vehicles with three-or-more occupants can use the express lane without paying a toll), and commute period/commute direction per mile fee for the year 2035 simulation. Please note that the prices presented in Table 9 are not optimal – meaning, MTC did not analyze each corridor iteratively to find the price that maximized a pre-defined operational goal. Rather, the prices are adjusted a handful of times in an attempt to keep congestion low and utilization high. Importantly, the prices are held constant over four-hour morning (6 to 10 am) and evening (4 to 7 pm) commute periods. MTC's travel model assumes that congestion is uniform over the entire four-hour commute periods. We know

this is not true, but make this assumption as a simplification. The peak one-hour within the four-hour commute period would require, in most corridors, a higher toll than those listed in Table 9.

Please see the discussion on Roadway Supply for details regarding the limits of the express lane networks across alternatives. The prices listed in Table 9 are applied in each of the year 2035 and 2040 alternatives where the express lanes are operational (prices differ in the year 2010, 2015, and 2020 scenarios).

TABLE 9: YEAR 2035 PROPOSED PLAN ALTERNATIVE EXPRESS LANE TOLL PRICES

<i>Roadway</i>	<i>DIR</i>	<i>From</i>	<i>To</i>	<i>Lanes</i>	<i>Occu- pancy Rules⁺</i>	<i>Cents per mile (\$2000)</i>	<i>Cents per mile (\$2010)</i>
I-80	WB	I-680	Bay Bridge	1	3+	13.5	17.0
	EB	Bay Bridge	I-680	1	3+	7.0	8.8
I-80	WB	Yolo County Line	I-680	1	3+	0.0	0.0
	EB	I-680	Yolo County Line	1	3+	0.0	0.0
I-880	NB	US 101	Oakland International	1	3+	8.0	10.1
	NB	CA 237	Mission Blvd	2	3+	8.0	10.1
	NB	Mission Blvd	Oakland International	1	3+	8.0	10.1
	SB	Oakland International	Mission Blvd	1	3+	12.0	15.1
	SB	Mission Blvd	CA 237	2	3+	12.0	15.1
	SB	CA 237	US 101	1	3+	12.0	15.1
CA-17	NB	CA 85	US 101	1	3+	0.5	0.6
	SB	US 101	CA 85	1	3+	3.0	3.8
US 101	NB	I-880	Santa Clara County Line	2	3+	1.5	1.9
	NB	Santa Clara County Line	Whipple	1	3+	2.0	2.5
	SB	Whipple	Santa Clara County Line	1	3+	0.5	0.6
	SB	Santa Clara County Line	I-880	2	3+	1.5	1.9

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US 101	NB	San Benito County Line	Cochrane	1	3+	0.0	0.0
	NB	Cochrane	I-880	2	3+	0.0	0.0
	SB	I-880	Cochrane	2	3+	0.0	0.0
	SB	Cochrane	San Benito County Line	1	3+	0.0	0.0
CA 85	NB	US 101	I-280	1	3+	0.0	0.0
	NB	I-280	SR 87	2	3+	0.0	0.0
	NB	SR 87	US 101	1	3+	0.0	0.0
	SB	US 101	SR 87	1	3+	0.0	0.0
	SB	SR 87	I-280	2	3+	0.0	0.0
	SB	I-280	US 101	1	3+	0.0	0.0
I-680	SB	I-580	US 101	1	3+	10.0	12.6
	NB	US 101	I-580	1	3+	2.0	2.5
I-680	SB	I-80	I-580	1	3+	6.0	7.6
	NB	I-580	I-80	1	3+	3.7	4.7
I-580	WB	San Joaquin County Line	I-680	1	3+	2.5	3.2
	EB	I-680	Tassajara	1	3+	2.5	3.2
	EB	Tassajara	Vasco	2	2+	0.0	0.0
	EB	Vasco	San Joaquin County Line	1	3+	2.5	3.2
CA 237	WB	I-880	CA 85	1	3+	15.0	18.9
	EB	CA 85	I-880	1	3+	1.0	1.3

CA 87	NB	CA 85	US 101	1	3+	2.0	2.5
	SB	CA 85	US 101	1	3+	1.0	1.3
I-280	WB	US 101	CA 85	1	3+	1.0	1.3
	EB	CA 85	US 101	1	3+	0.5	0.6

TRANSIT FARES

The forecast year transit networks pivot off a year 2010 baseline network, i.e. the alternatives begin with 2010 conditions and add/remove service to represent the various alternatives. The transit fares in 2010 are assumed to remain constant (in real terms) in all of the forecast years. We are, therefore, explicitly assuming that transit fares will keep pace with inflation and that transit fares will be as expensive in the forecast year as they are today, relative to parking prices, bridge tolls, etc. As a simplification, we assume travelers pay the cash fare to ride each transit service. Table 10 includes fare prices in year 2010 expressed in both year 2000 and year 2010 dollars (i.e., the table does *not* include information about the cost of taking transit in the year 2000).

The above transit fares hold across forecast years for the No Project, Proposed Plan, Transit Priority, and Enhanced Network of Communities alternatives. The Environment, Equity, and Jobs alternative allows travelers under 18 years to travel on transit for free. The intent of the alternative is to allow only low income travelers to use transit for free. Due to time and software limitations, the simulation assumes *all* travelers under 18, even those from households with higher incomes, travel on transit for free.

TABLE 10: YEAR 2010 COMMON TRANSIT FARES[†]

<i>Operator</i>	<i>Base fare</i>	
	<i>\$2000</i>	<i>\$2010</i>
San Francisco Municipal Transportation Agency (Muni)	\$1.61	\$2.00
Alameda/Contra Costa Transit (AC Transit) – Local buses	\$1.61	\$2.00
Santa Clara Valley Transportation Authority (VTA) – Local buses	\$1.61	\$2.00
Santa Clara Valley Transportation Authority (VTA) – Express buses	\$4.02	\$5.00
San Mateo County Transit (SamTrans) – Local buses	\$1.61	\$2.00
Golden Gate Transit – Marin County to San Francisco service	\$2.93	\$3.65
County Connection (CCCTA)	\$1.61	\$2.00
Vallejo Transit	\$1.41	\$1.75
Tri-Delta Transit	\$1.41	\$1.75
Livermore Amador Valley Transit Authority (Wheels, LAVTA)	\$1.61	\$2.00

[†] This is a sample, rather than an exhaustive list, of Bay Area transit providers and fares.

PARKING PRICING

The travel model segments space into travel analysis zones (TAZs). Simulated travelers move between TAZs and, in so doing, burden the transportation network. Parking costs are applied at the TAZ-level: travelers going to zone X in an automobile must pay the parking cost assumed for zone X.

The travel model uses hourly parking rates for daily/long-term (those going to work or school) and hourly/short-term parkers. The long-term hourly rate for daily parkers represents the advertised monthly parking rate, averaged for all lots in a given TAZ, scaled by 22 days per month, then scaled by 8 hours per day; the short-term hourly rate is the advertised hourly rate – generally higher than the rate daily parkers pay – averaged for all lots in a given TAZ. Priced parking in the Bay Area generally occurs in greater downtown San Francisco, downtown Oakland, Berkeley, downtown San Jose, and Palo Alto.

In forecasting, we assume that parking prices change over time per a simple model: parking cost is assumed to increase linearly with employment density. Across the alternatives and scenario years, therefore, the parking charges vary with employment density.

PERCEIVED AUTOMOBILE OPERATING COST AND VEHICLE-MILES TRAVELED TAX

When deciding between traveling in a private automobile or on a transit vehicle (or by walking, bicycling, etc.), MTC assumes travelers consider the cost of operating and maintaining, but not owning and insuring, their automobiles. The following three inputs are used to determine the perceived automobile operating cost: average fuel price, average fleet-wide fuel economy, and non-fuel-related operating and maintenance costs.

In an effort to improve consistency among travel models across the state, the Regional Targets Advisory Committee (formed in response to Senate Bill 375) recommended that California's metropolitan planning organizations (MPOs) use consistent assumptions for fuel price and for the computation of automobile operating cost in long range planning. Using forecasts generated by the United States Department of Energy (DOE) in the Summer of 2010 (and expressed in year 2009 dollars), MPOs agreed to use the fuel prices and non-fuel-related prices presented in Table 10, which is a weighted average of DOE's low-end estimate (25 percent weight) and DOE's high-end estimate (75 percent), plus a 25 cents surcharge to account for fuel generally being more expensive in California. The average fleet-wide fuel economy implied by the EMFAC software – also presented in Table 11 – is used to represent the average fleet-wide fuel economy.

TABLE 11: PERCEIVED AUTOMOBILE OPERATING COST CALCULATIONS

<i>Measure</i>	<i>Analysis year</i>			
	<i>2010</i>	<i>2020</i>	<i>2035</i>	<i>2040</i>
Average fuel price (Year 2000 dollars per gallon)	\$2.61	\$3.81	\$4.21	\$4.33
Average fuel price (Year 2009 dollars per gallon)	\$3.25	\$4.74	\$5.24	\$5.40
EMFAC-implied fuel economy (miles per gallon)	21.35	24.10	30.88	31.26
Non-fuel-related operating cost (\$2000 per mile)	\$0.06	\$0.07	\$0.09	\$0.09
Non-fuel-related operating cost (\$2009 per mile)	\$0.08	\$0.09	\$0.11	\$0.12
<i>Perceived automobile operating cost (\$2000 per mile)[†]</i>	\$0.18	\$0.22	\$0.22	\$0.23
<i>Perceived automobile operating cost (\$2009 per mile)[†]</i>	\$0.23	\$0.28	\$0.28	\$0.29

[†] Sum of the fuel-related operating cost (average fuel price divided by average fuel economy) and non-fuel-related operating cost

With one exception, the assumptions shown in Table 10 hold across each of the forecast year alternatives. Specifically, the year 2020, 2035, and 2040 simulations for the No Project, Proposed Plan, Transit Priority, and Enhanced Network of Communities use the perceived automobile operating costs shown in Table 10.

The Environment, Equity, and Jobs alternative increases the perceived automobile operating costs by 1 cent per mile (\$2011; 0.78 cents per mile in year 2000 dollars) in each of the forecast year alternatives. This additional penny per mile is intended to simulate a vehicle-miles traveled tax. Per the vision of the crafters of this alternative, low income travelers would be exempt from the tax. Due to time and software limitations, the simulation assumes *all* travelers, even low income travelers, pay the tax.

CORDON TOLLS

The Proposed Plan, Transit Priority, Enhanced Network of Communities, and Environment, Equity, and Jobs alternatives include a cordon toll in San Francisco. The scheme requires all vehicles to pay a \$3.00 (\$2010; \$2.40 in year 2000 dollars) fee to enter the greater downtown San Francisco area during the morning and evening commute periods. The cordoned area is bounded by Laguna Street to the West, 18th Street to the South, and the San Francisco Bay to the North and East¹³.

Other Key Assumptions

An additional key assumption relates to telecommuting. Technology is currently allowing large numbers of Bay Area residents to work at home¹⁴ and the MTC travel model allows for the explicit representation of full-time workers staying home on the typical weekday simulation. In the forecast years, MTC assumes the trend of workers working at home revealed in the 1980, 1990, 2000, and 2010 Census will continue through 2040. Figure 9 presents the historical data, the trend, and the MTC forecasts. These telecommuting assumptions are the same across alternatives, meaning full-time workers telecommute at the same rate in the No Project, Proposed Plan, Transit Priority, Enhanced Network of Communities, and Environment, Equity, and Jobs alternatives.

¹³ Additional details are available from San Francisco County here: <http://www.sfcta.org/content/view/468/288/>.

¹⁴ Additional information is available here: <http://www.workshifting.com/downloads/downloads/Telework-Trends-US.pdf>.

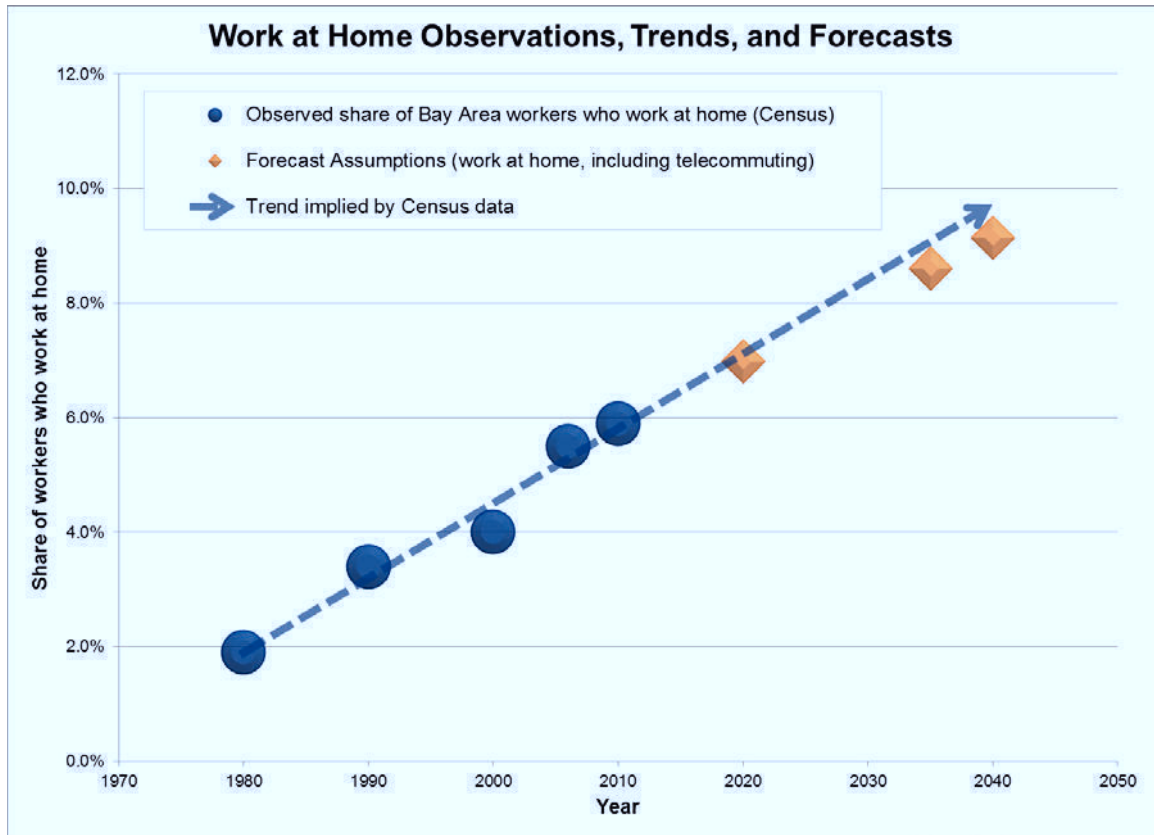


FIGURE 9: WORK AT HOME OBSERVATIONS, TRENDS, AND FORECASTS

4 Key Results

Selected travel model results across a variety of dimensions are summarized and discussed here. The presented results are not exhaustive and are intended only to give the reader a general sense of the expected behavioral changes in response to differing input assumptions across the alternatives and forecast years.

Performance Targets and Equity Analysis

The purpose of this document is to describe the response of travelers to the projects and policies implemented in the alternatives described in the previous section. Information from the travel model is also used to help assess the performance of each of the alternatives per agency-adopted targets. This information is described in the *Performance Assessment Report* available at www.onebayarea.org.

Information from the travel model is also used to analyze how different populations are impacted by the investments and policies included in each alternative. This information is described in the *Equity Analysis Report* available at www.onebayarea.org.

Automobile Ownership

Figure 10 presents the automobile ownership rates across the five alternatives in the year 2040 simulations as well as year 2010. The differences across alternatives are not dramatic. One key finding is the general increase in zero automobile households in the Proposed Plan, Transit Priority, Enhanced, and EEJ alternatives.

To give a sense of the change in automobile ownership over time, results for the Proposed Plan alternative simulations for 2020, 2030, and 2040 are compared to year 2010 results in Figure 11. Here, we see a steady increase in zero automobile households and a steady decrease in two automobile households.

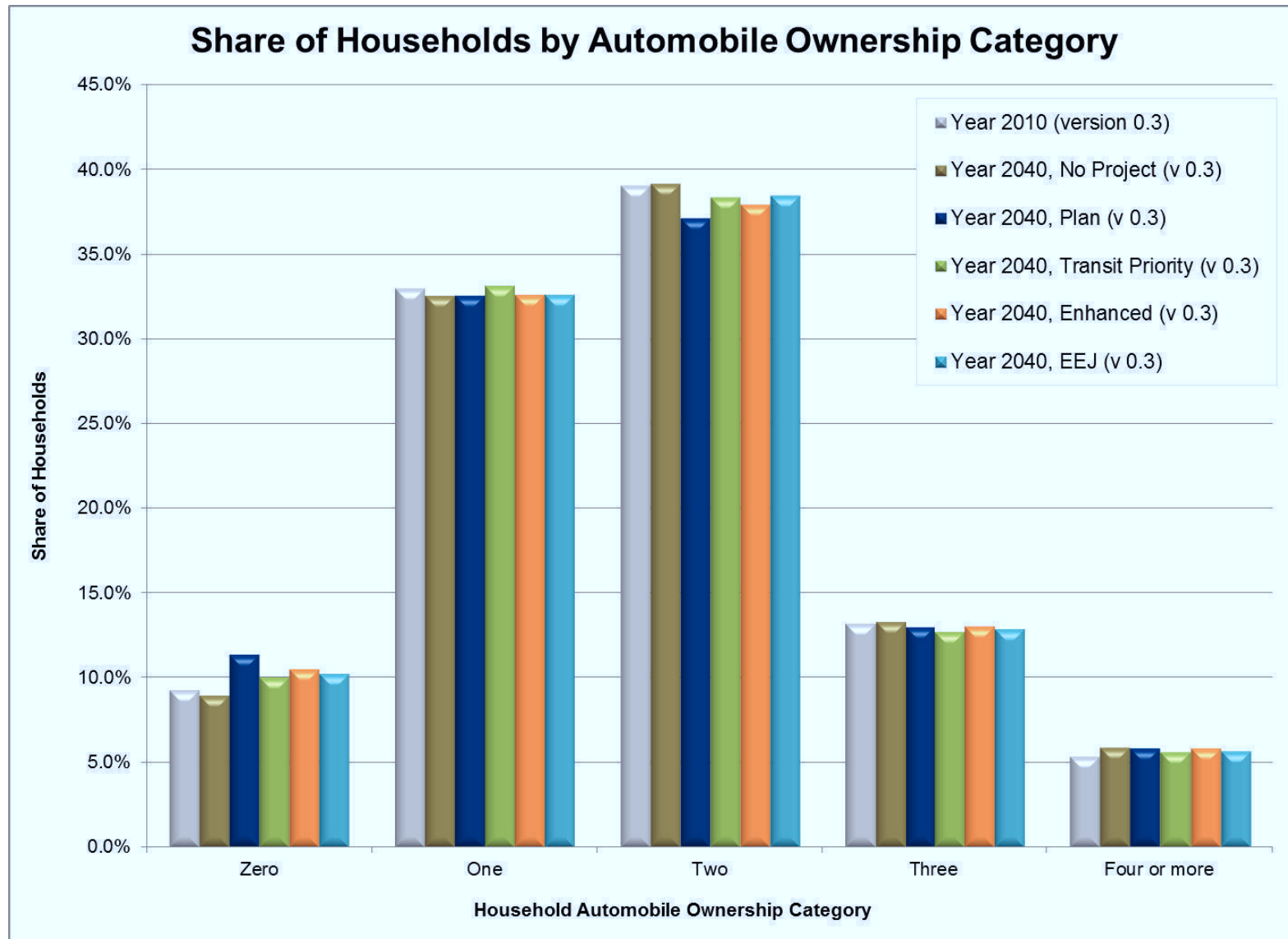


FIGURE 10: YEAR 2040 AUTOMOBILE OWNERSHIP RESULTS

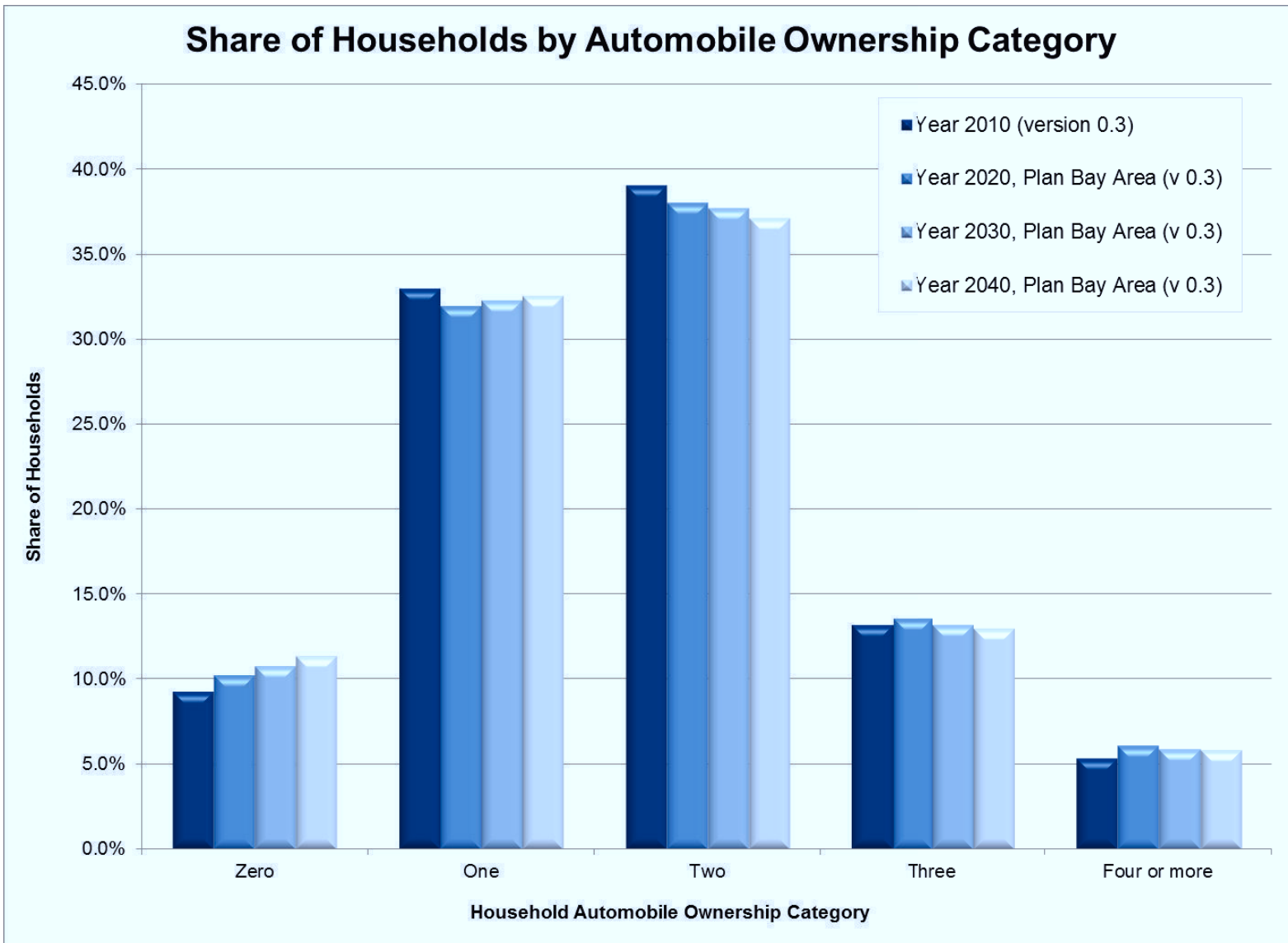


FIGURE 11: AUTOMOBILE OWNERSHIP RESULTS FOR PROPOSED PLAN ALTERNATIVE

Activity Location Decisions

Figure 12 and Figure 14 present the average trip distance by travel mode for all travel and for trips on work tours, respectively, for the year 2010 and the year 2040 alternatives. The key finding here is that each of the five forecast alternatives brings activities closer together relative to 2010. The substantial investment in transit technologies that tend to serve longer distance travel markets, such as commuter rail (see Figure 6), causes the average transit trip distance to increase a bit relative to 2010. These trends are more apparent in the summary of work travel in Figure 14.

Companion results for the Proposed Plan alternative for 2020, 2030, and 2040 are presented in Figure 13 and Figure 15. Again, over time, activities are getting closer together and transit is becoming more competitive for longer distance travel. Figure 16 speaks to the volume of travel, showing the change in the Proposed Plan alternative 2020, 2030, and 2040 simulations relative to year 2010. As the population increases, so does the amount of travel.

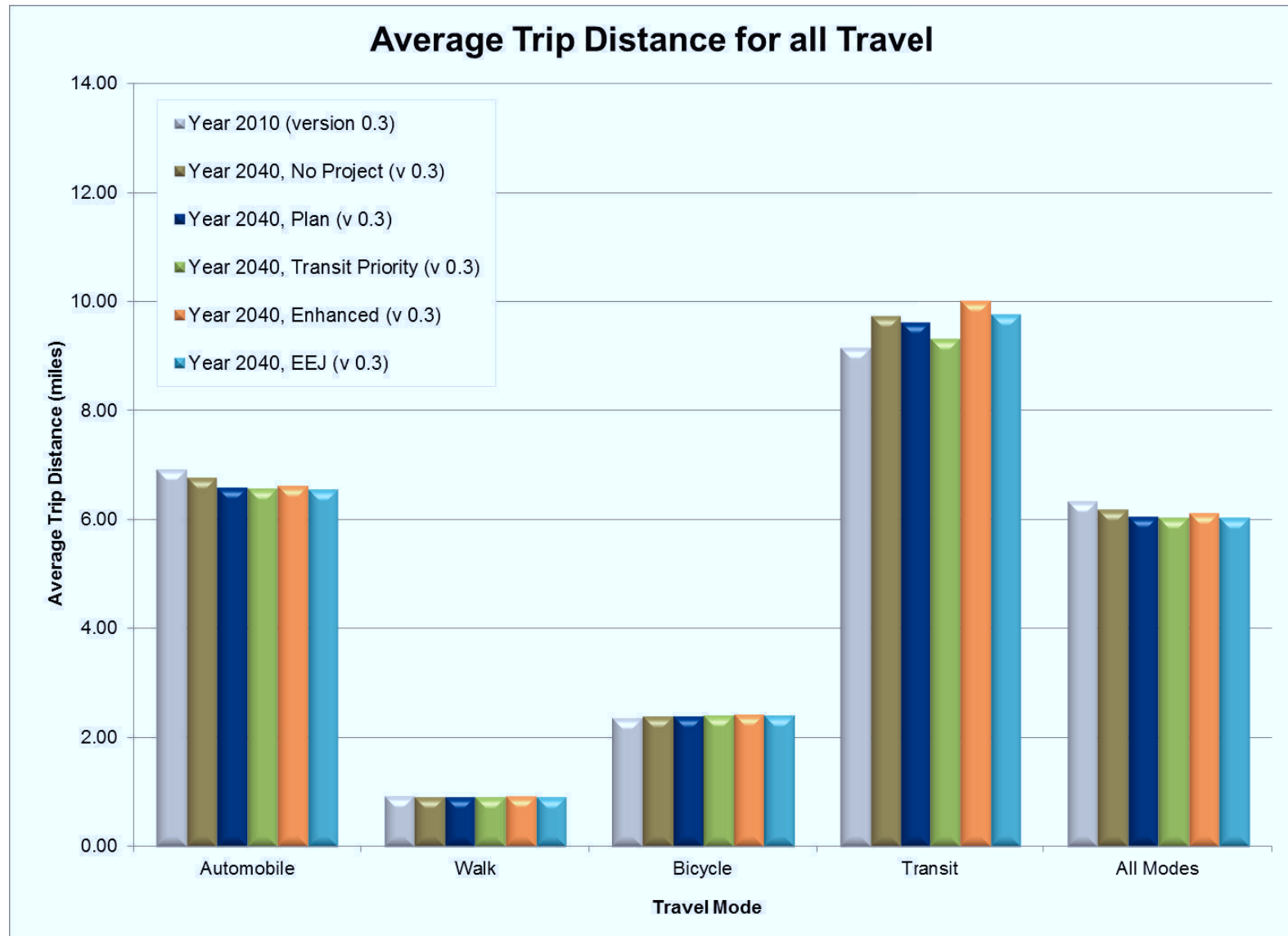


FIGURE 12: YEAR 2040 AVERAGE TRIP DISTANCE

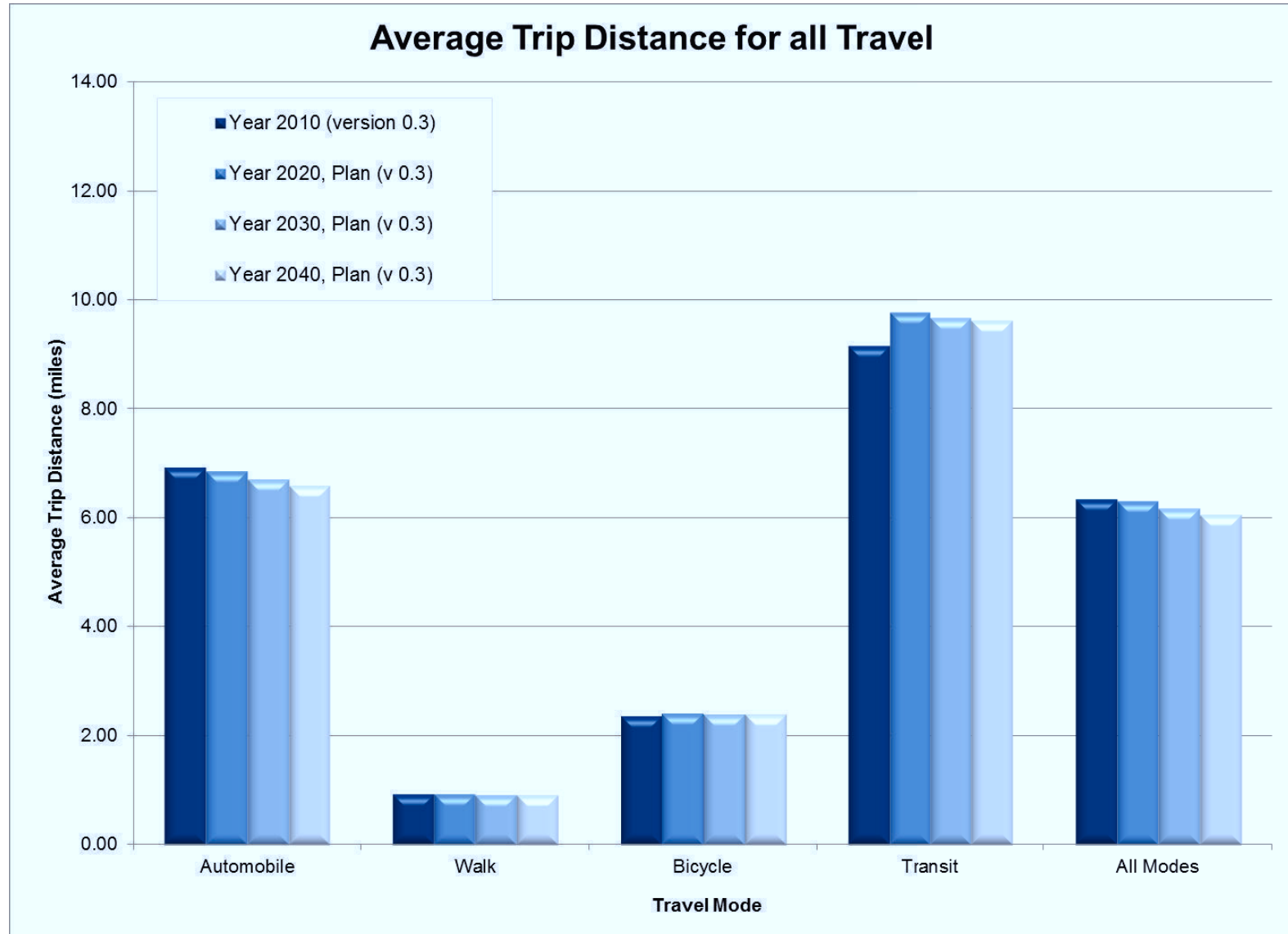


FIGURE 13: AVERAGE TRIP DISTANCE FOR PROPOSED PLAN ALTERNATIVE

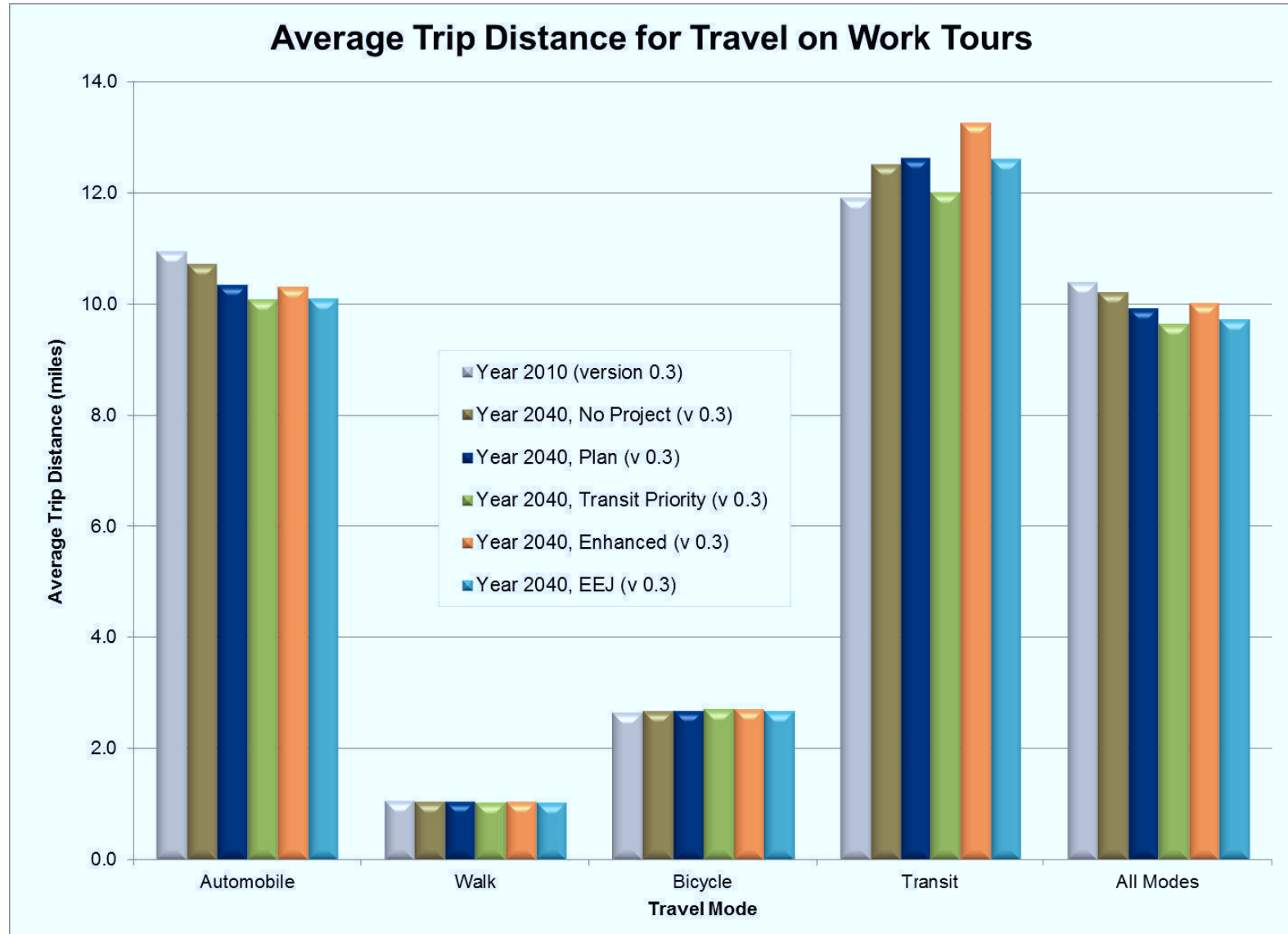


FIGURE 14: YEAR 2040 AVERAGE TRIP DISTANCE FOR TRAVEL ON WORK TOURS

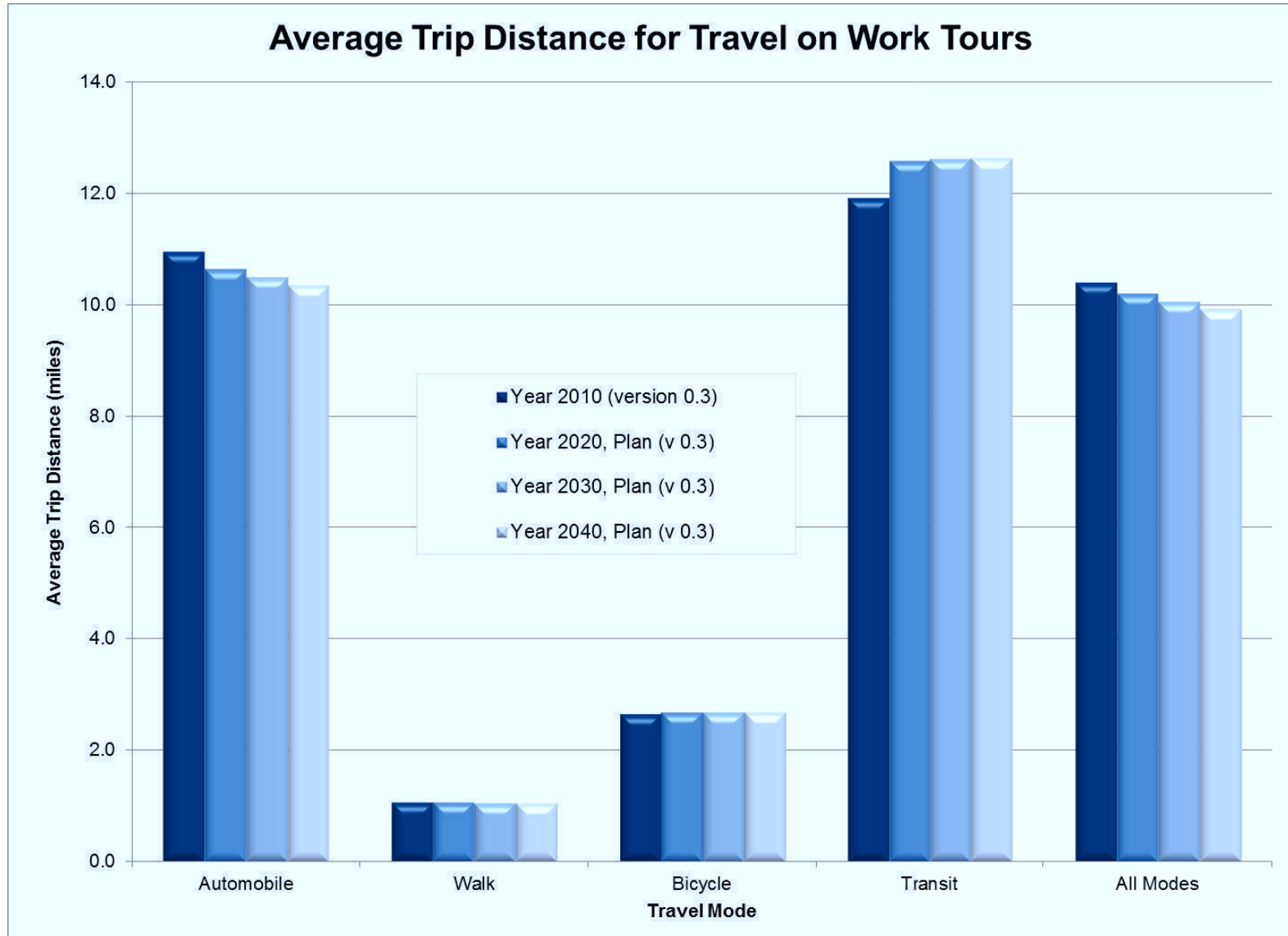


FIGURE 15: AVERAGE TRIP DISTANCE FOR TRAVEL ON WORK TOURS FOR PROPOSED PLAN ALTERNATIVE

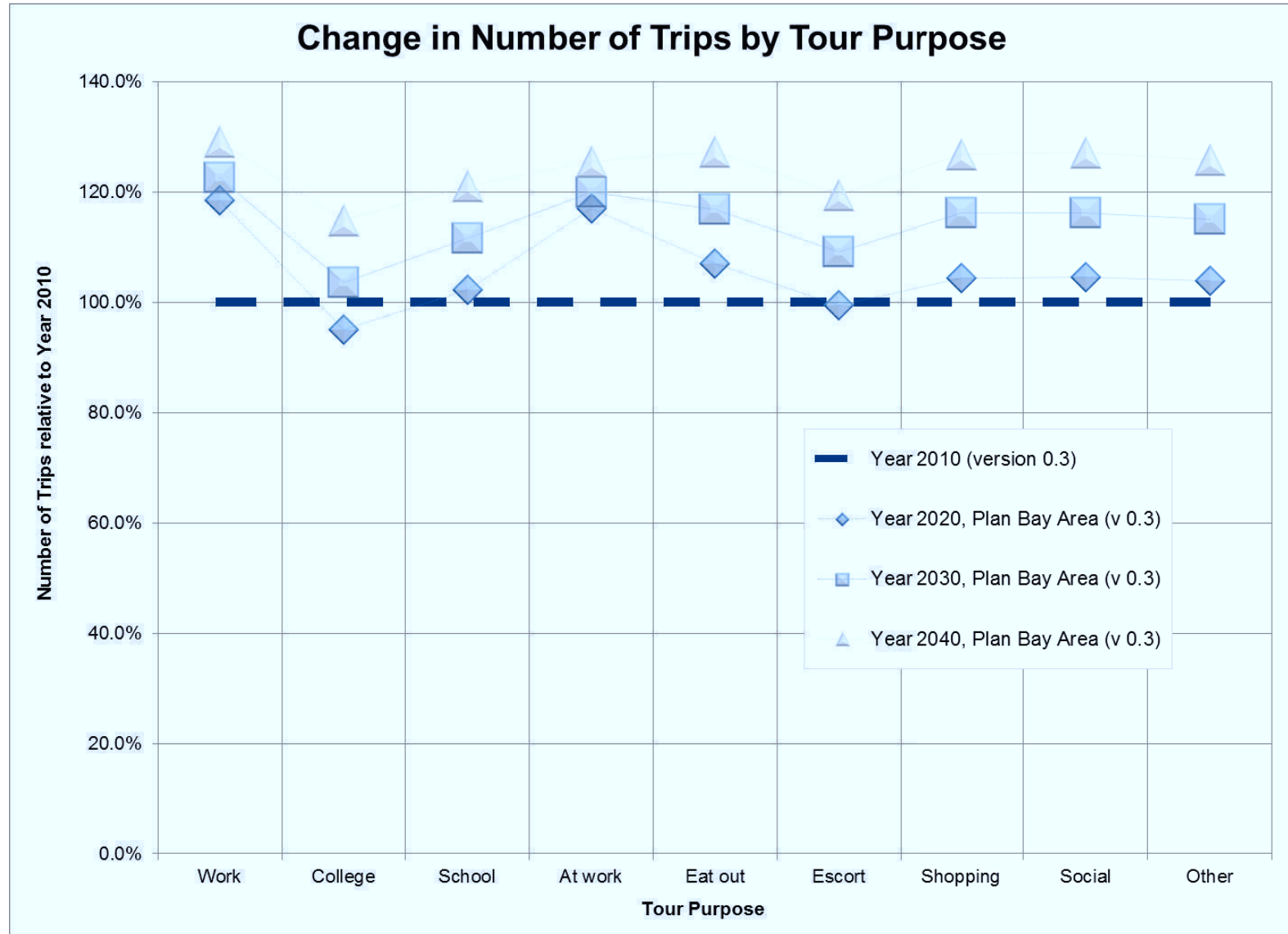


FIGURE 16: CHANGE IN NUMBER OF TRIPS BY TOUR PURPOSE FOR PROPOSED PLAN ALTERNATIVE

Travel Mode Choice Decisions

The means by which a traveler gets from point A to point B is referred to as the travel mode. Within MTC's representation of travel behavior, five automobile-based modal options are considered, specifically:

- traveling alone in a private automobile and opting *not* to pay to use an express lane (“single occupant, no HOT”), an option only available to those in households who own at least one automobile;
- traveling alone in a private automobile and opting to pay to use an express lane (“single occupant, pay to use HOT”), an option only available to those who both own a car and whose journey would benefit from using the express lane facility (e.g., this option is not available to those driving through a residential neighborhood to drop a child at school);
- traveling with one other occupant in a private automobile and opting *not* to pay to use an express lane (“two occupants, no HOT”) (these travelers can use carpool lanes for which they are eligible), an option available to those in households with and without automobiles;
- traveling with one other occupant in a private automobile and opting to pay to use an express lane (“two occupants, pay to use HOT”), an option available to those in households with and without automobiles but only to those who would benefit from using an express lane (if the express lane facility which benefits these travelers allows two occupant vehicles to travel for free, than these travelers are categorized as “two occupants, no HOT”); and,
- traveling with two other occupants in a private automobile (“three-or-more occupants”) – these vehicles are uniformly allowed to travel for free on express lane facilities across all of the alternatives (as well as carpool facilities).

The travel model explicitly considers numerous non-automobile options which are collapsed here into the following four options: transit, getting to and from by foot (“walk to transit”); transit, getting to or from in an automobile (“drive to transit”); walk; and, bicycle.

Figure 17 and Figure 18 present the share of trips made by various travel modes. Figure 17 shows shares of travel in automobile by occupancy category as well as willingness to pay to use an express lane. Overall, we predict Bay Area residents will reduce the share of travel accomplished in a private automobile from about 83 percent in 2010 to just below 80 percent in 2040 in the Proposed Plan, Transit Priority, and Environment, Equity, and Jobs alternatives. Figure 18 presents companion results for non-automobile travel models, including public transit, walking, and bicycling. Here, we see an increase in walking and transit across the year 2040 alternatives, which reflect the increases in transit service and increasingly efficient land development patterns.

Figure 19 and Figure 20 show the automobile and non-automobile travel mode share results for the year 2020, 2030, and 2040 simulations of the Proposed Plan alternative. Here, we see a steady but small shift to non-automobile modes from 2010 to 2040.

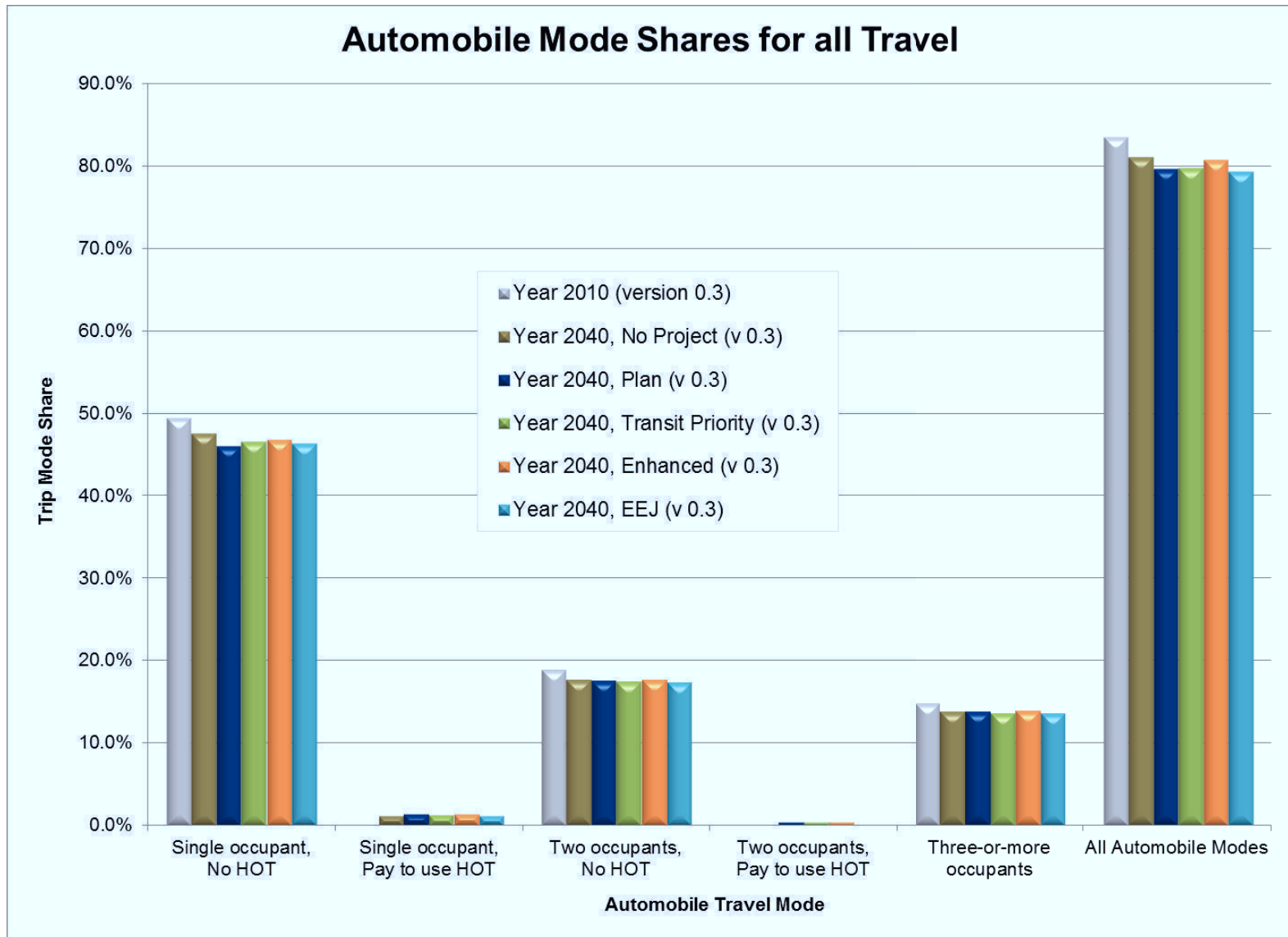


FIGURE 17: YEAR 2040 AUTOMOBILE MODE SHARES FOR ALL TRAVEL

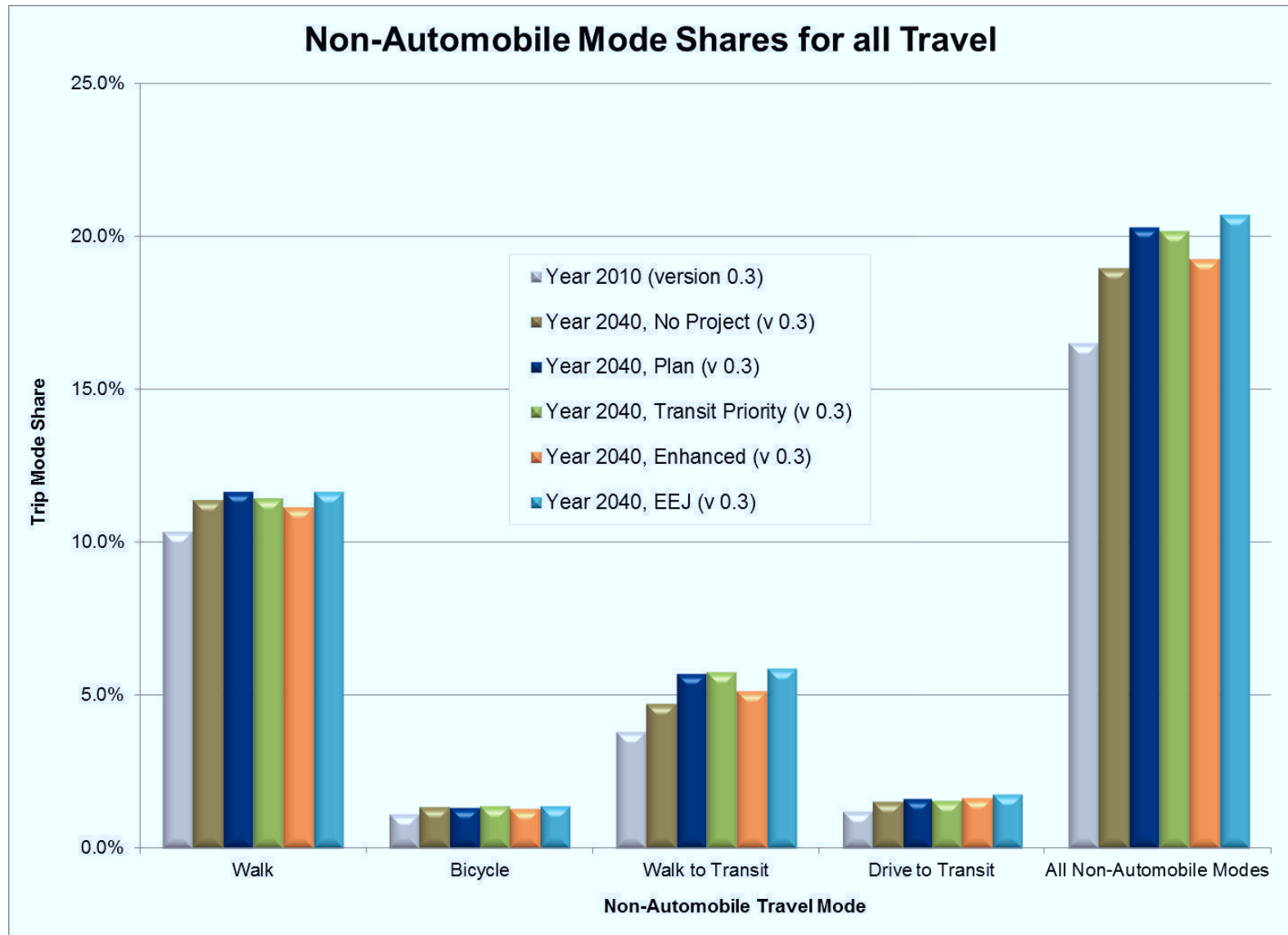


FIGURE 18: YEAR 2040 NON-AUTOMOBILE MODE SHARES FOR ALL TRAVEL

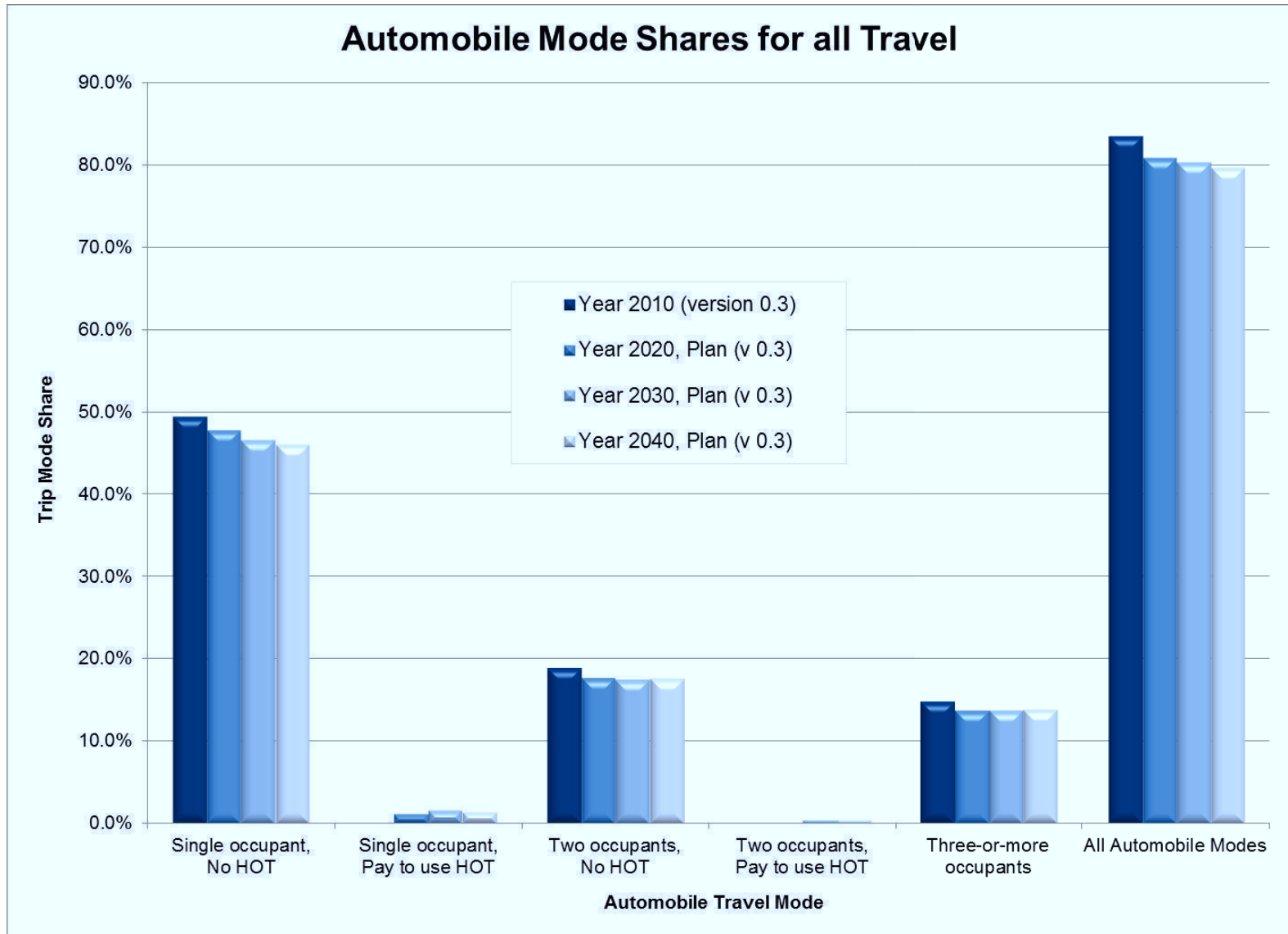


FIGURE 19: AUTOMOBILE MODE SHARES FOR ALL TRAVEL FOR PROPOSED PLAN ALTERNATIVE

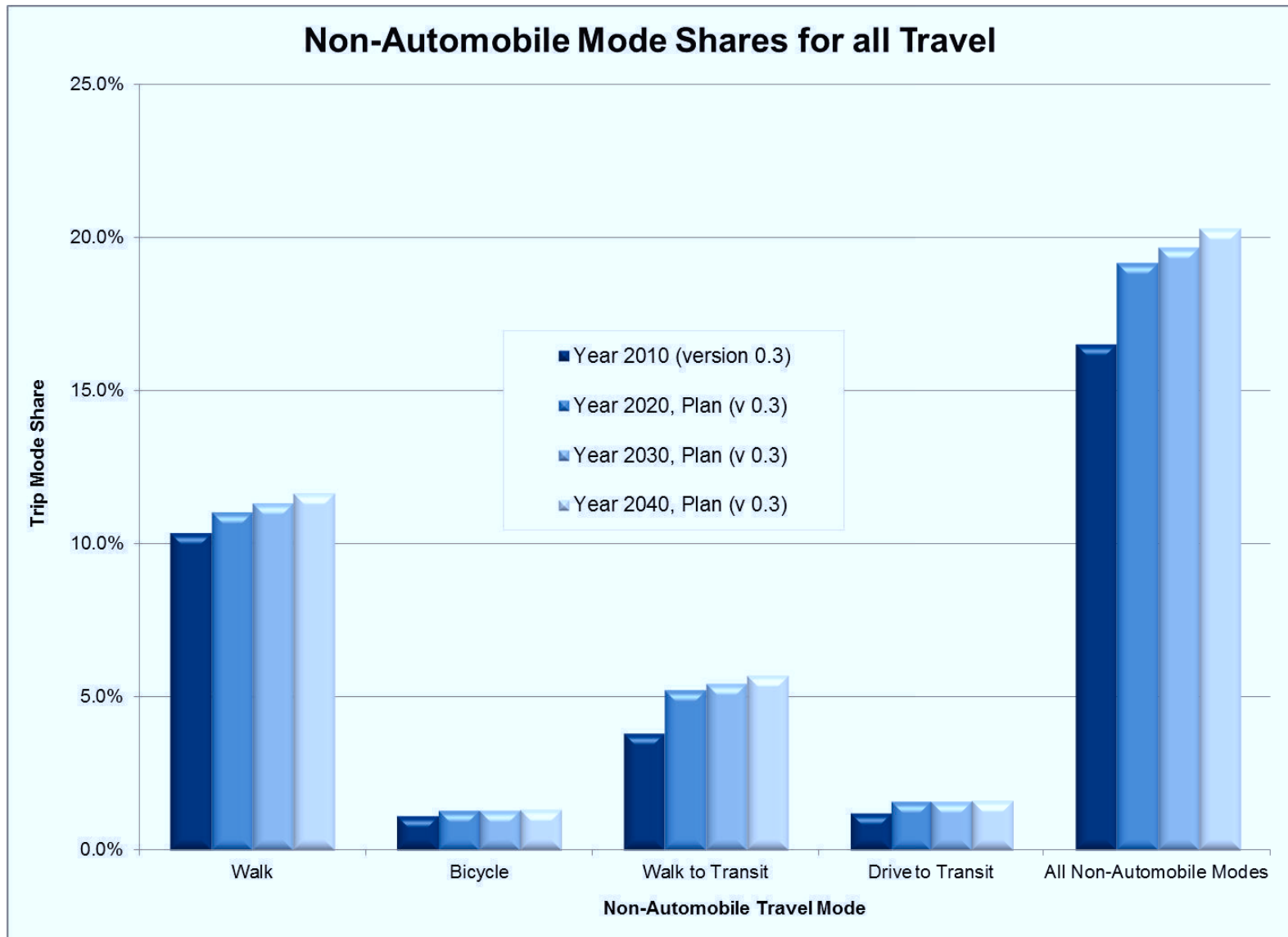


FIGURE 20: NON-AUTOMOBILE MODE SHARES FOR ALL TRAVEL FOR PROPOSED PLAN ALTERNATIVE

Aggregate Transit Demand Estimates

Bay Area residents choosing to travel by transit are explicitly assigned to a specific transit service. As a simplification, MTC groups transit lines into the following technology-specific categories:

- **Local bus:** standard, fixed-route bus service, of the kind a traveler may take to and from a neighborhood grocery store, as well as so-called “bus rapid transit” service.
- **Express bus:** longer distance service typically provided in over-the-road coach technology. Golden Gate Transit, for example, provides express bus service between Marin County and Downtown San Francisco.
- **Light rail:** represented in the Bay Area by San Francisco’s Muni Metro and F-Market streetcar services, as well as Santa Clara Valley Transportation Authority’s light rail service.
- **Heavy rail:** another name for the Bay Area Rapid Transit (BART) service.
- **Commuter rail:** longer distance rail service typically provided on grade-separated railroads, including Caltrain, SMART, Capitol Corridor, Altamont Commuter Express, and Amtrak.

Figure 21 presents the estimates of transit boardings by these categories on the typical weekday simulated by the travel model. The Environment, Equity, and Jobs alternative, which includes the most expansive transit system across the five alternatives (see the Transit Supply section), has the highest expected transit ridership at about 3.2 million daily boardings, which is approximately twice the year 2010 estimate of 1.6 million boardings.

Figure 22 shows boardings for year 2010 as well as the year 2020, 2030, and 2040 Proposed Plan alternative simulations. Here, a steady and substantial increase in ridership is expected every decade.

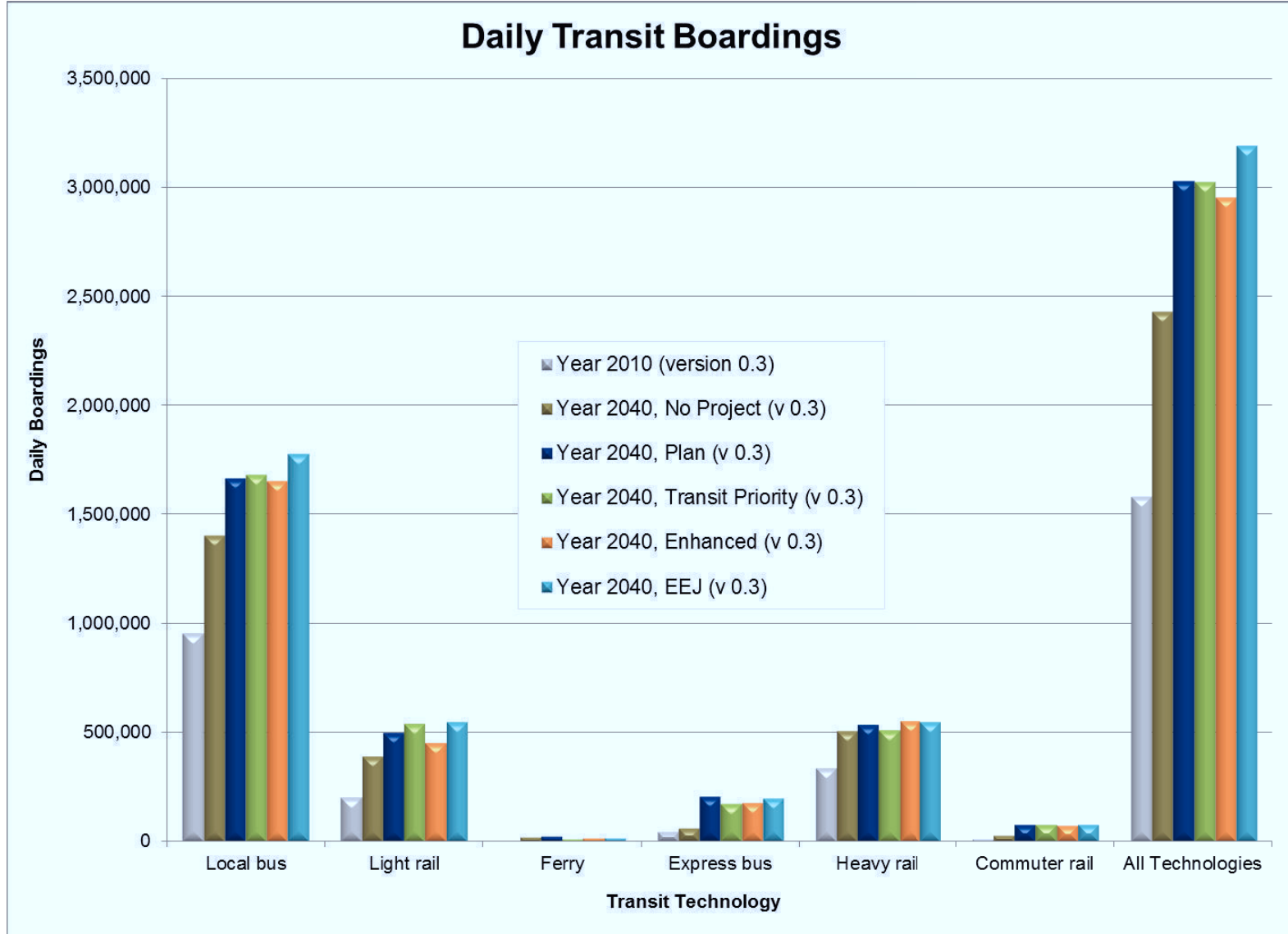


FIGURE 21: YEAR 2040 TYPICAL WEEKDAY TRANSIT BOARDINGS BY TECHNOLOGY

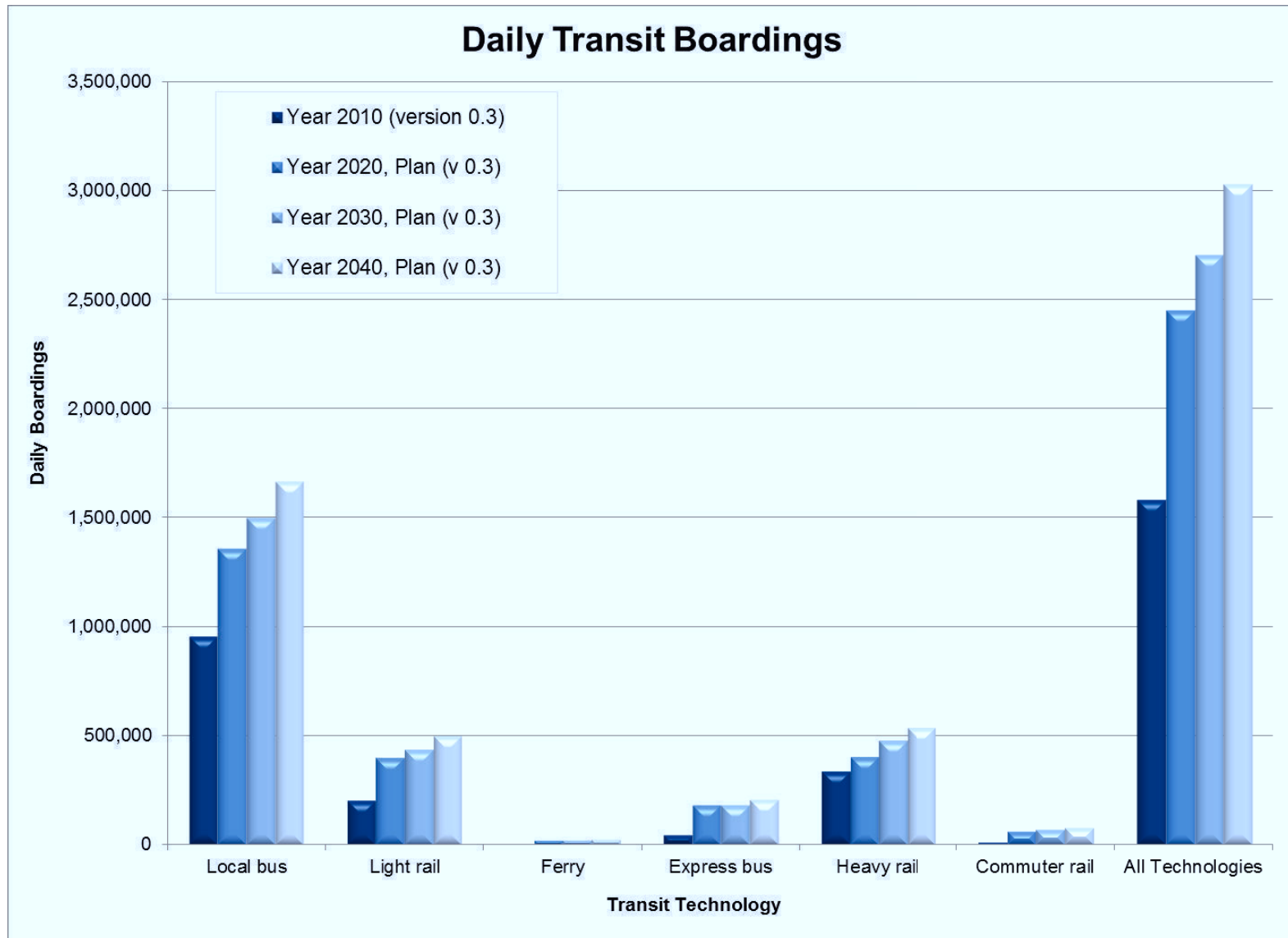


FIGURE 22: TYPICAL WEEKDAY BOARDINGS BY TECHNOLOGY FOR PROPOSED PLAN ALTERNATIVE

Roadway Congestion Estimates

Trips made by automobile are first aggregated into matrices identifying each trip's origin and destination and then "assigned" to a representation of the Bay Area's roadway network. The assignment process iteratively determines the shortest path between each origin-destination pair, shifting some number of trips to each iteration's shortest path, until the network reaches a certain level of equilibrium – defined as a state in which travelers cannot change to a lower "cost" route (where cost is expressed in monetary and non-monetary (e.g., time) units). The assignment process inherently computes numerous quantities of interest, such as vehicle miles traveled, delay, and average travel speed.

Please note that MTC maintains three separate estimates of the quantity of vehicle miles traveled (VMT), as follows: (1) the quantity assigned directly to the highway network; (2) the quantity assigned to the highway network plus so-called intra-zonal VMT, which is computed off-line; (3), the quantity (2) adjusted to match the amount of VMT the Air Resources Board (CARB) believes takes place in the Bay Area (a number slightly higher than MTC's estimate). In this document, the VMT identified as quantity (1) in the above list is presented; the emission estimates (presented in the next subsection) are based on the VMT identified as quantity (3).

Figure 23 first segments VMT into five time periods and then scales the VMT by the number of hours in each time period. The result is the intensity of VMT by time of day as well as the increase in VMT from 2010 to 2040. Overall, VMT varies only slightly across the year 2040 alternatives, with the Enhanced Network of Communities alternative having the highest VMT due to the larger Bay Area population assumed in this alternative.

Figure 24 presents the average freeway speed across the alternatives. Looking at the speeds during the morning and evening commute periods, we see a reduction in speed (or, said another way, an increase in congestion) from the year 2010 scenario to the year 2040 No Project alternative. Each of the alternatives improves freeway speed, with the greatest improvement coming in the Transit Priority alternative.

Figure 25 and Figure 26 present hourly VMT and freeway speeds for the year 2020, 2030, and 2040 simulations of the Proposed Plan alternative. In these charts, we can see VMT growing over time and freeway speeds degrading after 2020.

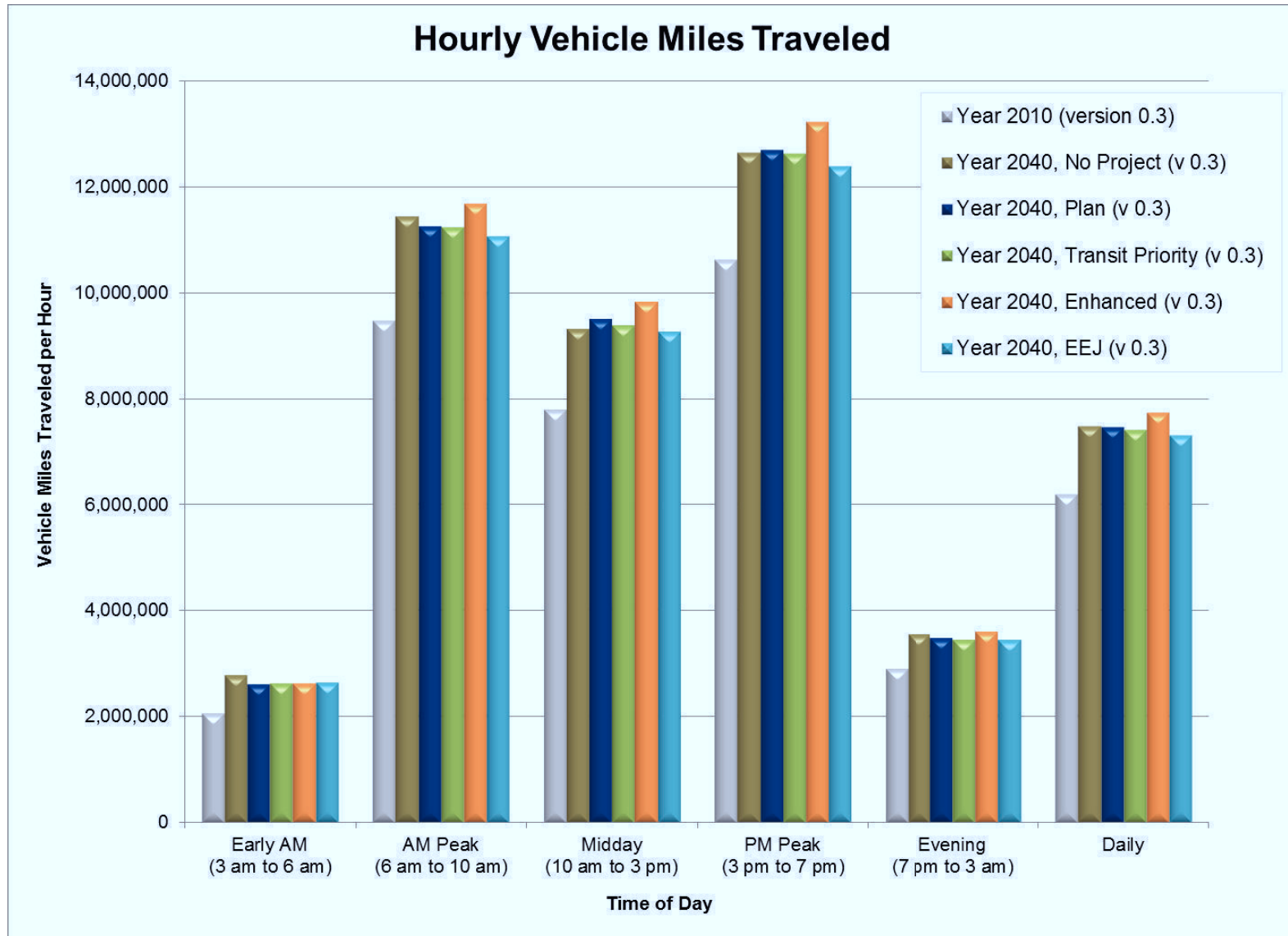


FIGURE 23: YEAR 2040 VEHICLE MILES TRAVELED PER HOUR BY TIME PERIOD

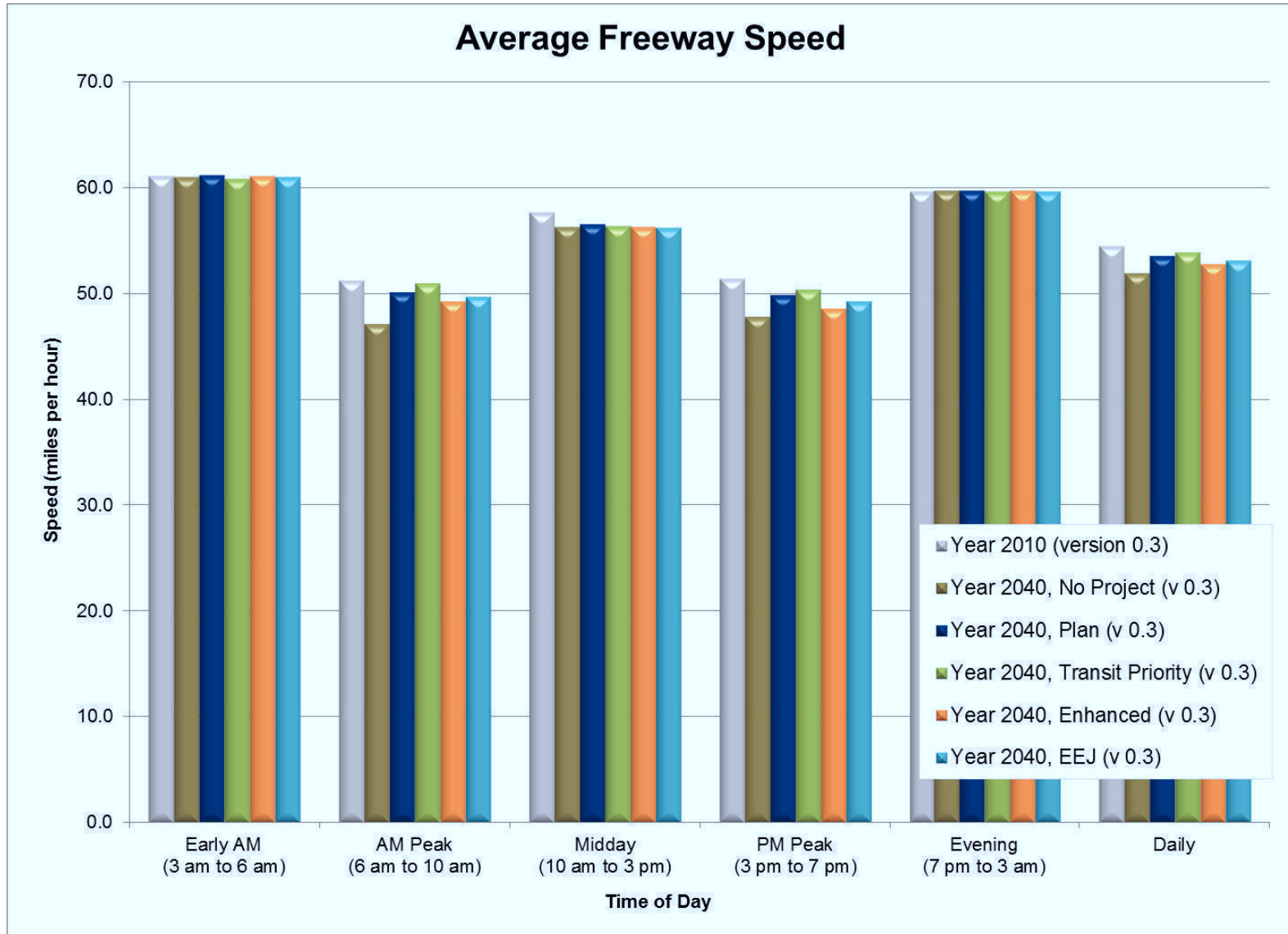


FIGURE 24: YEAR 2040 AVERAGE VEHICLE SPEEDS ON FREEWAYS

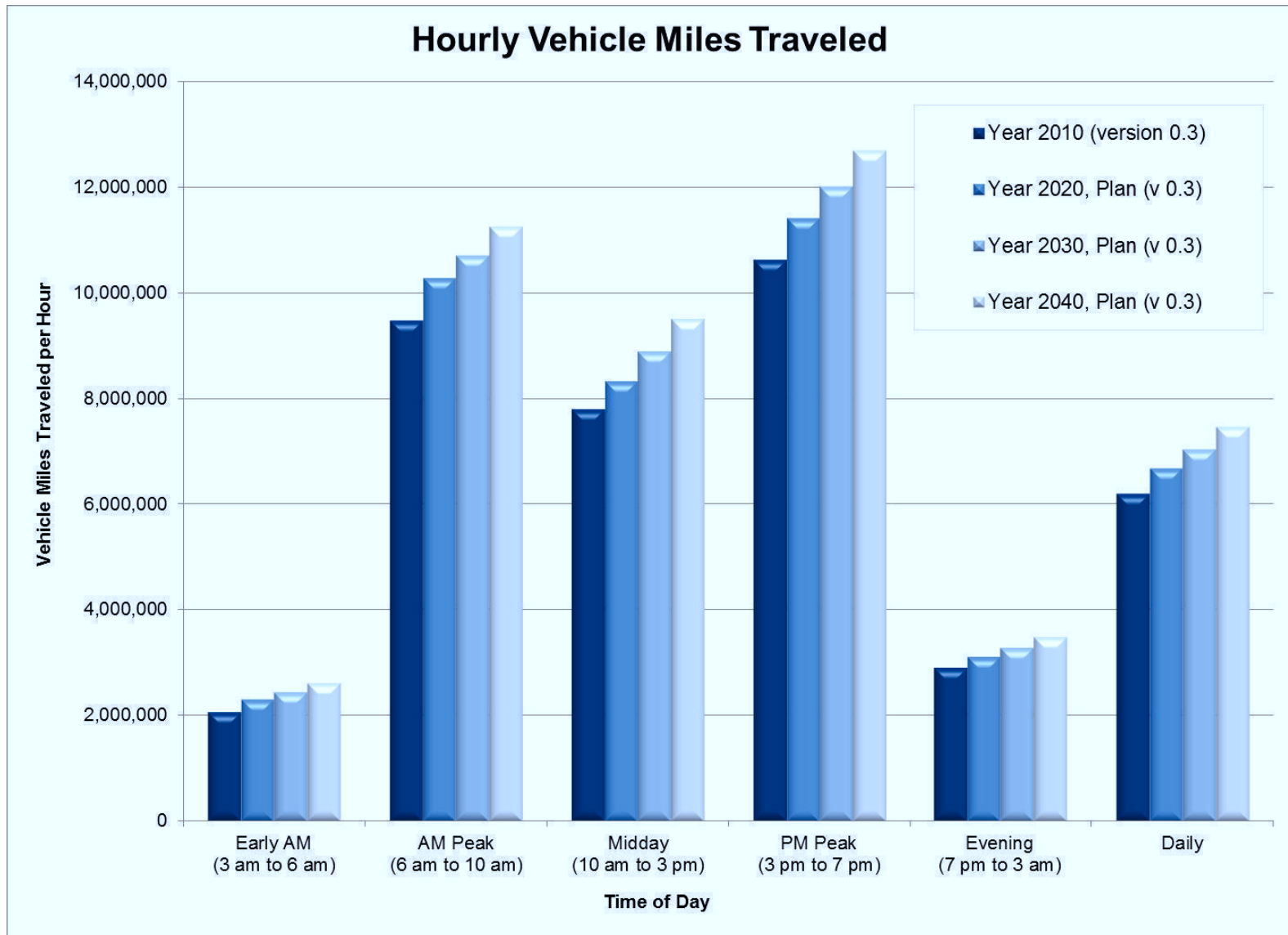


FIGURE 25: VEHICLE MILES TRAVELED PER HOUR FOR PROPOSED PLAN ALTERNATIVE

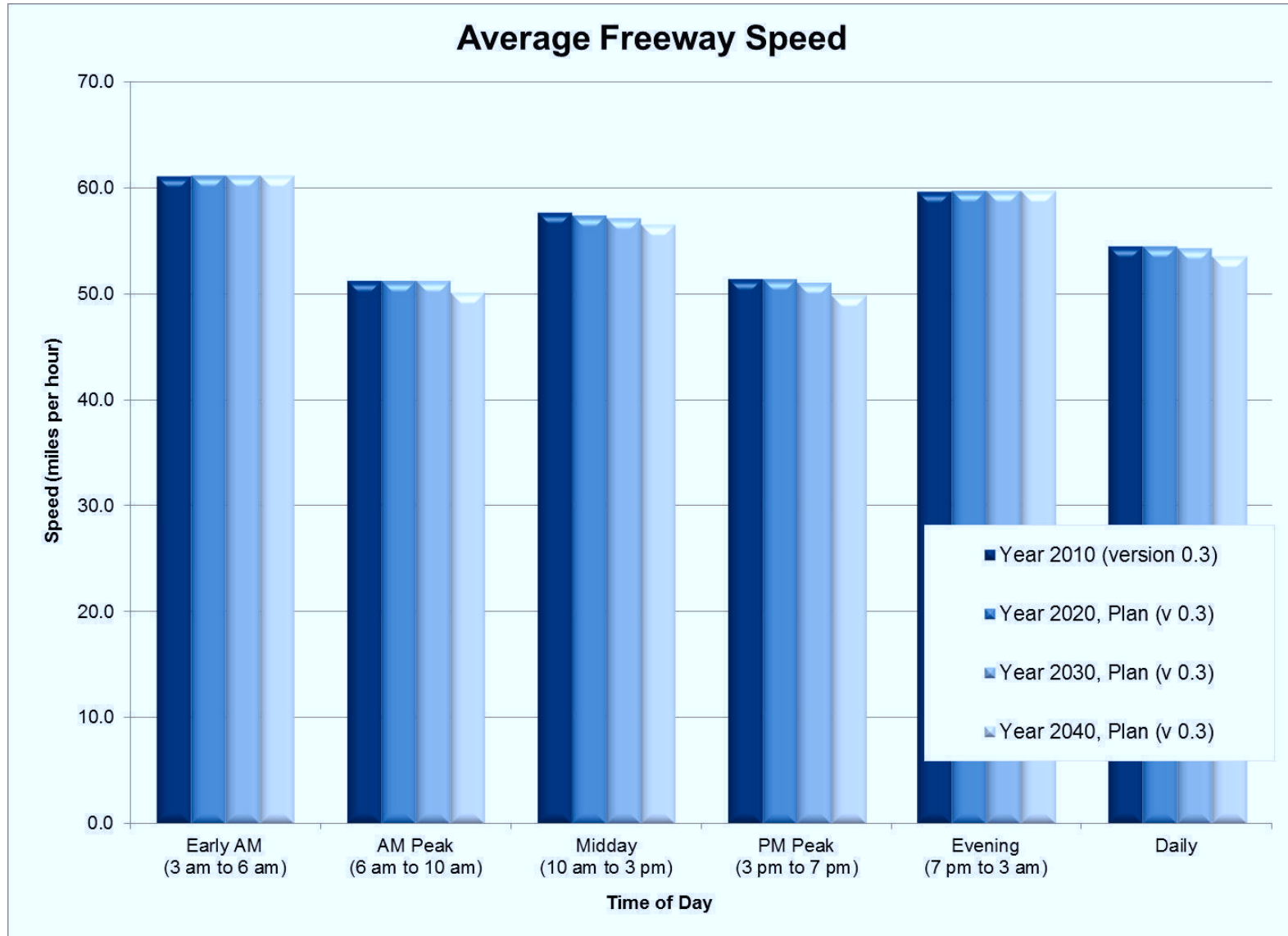


FIGURE 26: AVERAGE VEHICLE SPEEDS ON FREEWAYS FOR PROPOSED PLAN ALTERNATIVE

Air Quality Implications

Table 12 and Table 13 summarize various on-road mobile source emission estimates across alternatives for Year 2040 and for Years 2010, 2020, 2030, and 2040 for the Proposed Plan alternative. A few key notes on these tables are as follows:

- Carbon dioxide, which serves as a proxy for all greenhouse gas emissions, is reported for the nine county Bay Area (rather than the MTC air basin);
- All other pollutants are reported for the MTC air basin, which includes portions of Solano and Sonoma Counties;
- Carbon dioxide is reported two ways: the first ignores vehicle and fuel regulations (specifically the so-called Pavley¹⁵ regulations and low-carbon fuel standard) and the second considers the impact of vehicle and fuel regulations; and,
- Pollutants subject to vehicle control regulations decrease, in some cases dramatically, when moving from the current year through the forecast years.

¹⁵ Additional information is available here: <http://www.arb.ca.gov/cc/ccms/ccms.htm>.

TABLE 12: YEAR 2040 ON-ROAD MOBILE SOURCE EMISSION ESTIMATES FOR THE MTC AIR BASIN

Alternative	Tons per typical weekday for all vehicles (unless otherwise noted)							
	Carbon Dioxide (CO ₂) [†]	CO ₂ [†] Pounds per Capita	Carbon Dioxide (CO ₂) ^{††}	Small Particulate Matter (PM _{2.5})	Particulate Matter (PM ₁₀) [*]	Winter Nitrous Oxides (NO _x)	Reactive Organic Gases	Carbon Monoxide (CO)
Year 2005 (version 0.3)	71,660	20.5	71,660	8.84	14.95	277.7	137.9	1,321.0
Year 2040, No Project (v 0.3)	84,210	19.3	53,770	5.67	12.50	53.95	36.47	268.5
Year 2040, Proposed Plan (v 0.3)	82,550	18.1	52,700	5.64	12.42	53.71	36.52	266.4
Year 2040, Transit Priority (v 0.3)	82,270	18.4	52,520	5.61	12.37	53.31	36.47	265.9
Year 2040, Enhanced (v 0.3)	85,670	18.1	54,690	5.85	12.88	55.59	38.00	277.0
Year 2040, EEJ (v 0.3)	81,410	18.3	51,970	5.55	12.24	52.77	35.80	262.2
[†] - Passenger vehicle emissions for the nine-county Bay Area, excluding – per SB 375 – expected reductions from fuel and vehicle regulations and excluding reductions from MTC’s Climate Initiatives Program; ^{††} - Passenger vehicle missions for the nine-county Bay Area, including reductions expected from Pavley I and Low Carbon Fuel Standard Regulations and excluding reductions from Climate Initiatives Program; [*] - Does not include road dust.								

TABLE 13: ON-ROAD MOBILE SOURCE EMISSION ESTIMATES FOR THE MTC AIR BASIN FOR PROPOSED PLAN ALTERNATIVE

Alternative	Tons per typical weekday for all vehicles (unless otherwise noted)							
	Carbon Dioxide (CO ₂) [†]	CO ₂ [†] Pounds per Capita	Carbon Dioxide (CO ₂) ^{††}	Small Particulate Matter (PM _{2.5})	Particulate Matter (PM ₁₀) [*]	Winter Nitrous Oxides (NO _x)	Reactive Organic Gases	Carbon Monoxide (CO)
Year 2005 (version 0.3)	71,660	20.5	71,660	8.84	14.95	277.7	137.9	1,321.0
Year 2010 (version 0.3)	70,090	19.0	69,820	6.84	12.63	185.3	93.66	879.9
Year 2020, Proposed Plan (v 0.3)	74,420	19.3	54,350	5.04	11.08	83.22	46.80	374.4
Year 2030, Proposed Plan (v 0.3)	78,010	18.6	50,730	5.30	11.68	55.14	37.53	272.4
Year 2040, Proposed Plan (v 0.3)	82,550	18.1	52,700	5.64	12.42	53.71	36.52	266.4
[†] - Passenger vehicle emissions for the nine-county Bay Area, excluding – per SB 375 – expected reductions from fuel and vehicle regulations and excluding reductions from MTC’s Climate Initiatives Program; ^{††} - Passenger vehicle missions for the nine-county Bay Area, including reductions expected from Pavley I and Low Carbon Fuel Standard Regulations and excluding reductions from Climate Initiatives Program; [*] - Does not include road dust.								

5 Off-Model Emission Reduction Estimates

MTC, with consultant assistance from ICF International, prepared “off-model”, or “sketch modeling”, analyses of various transportation-focused Climate Policy Initiatives anticipated to produce measurable per-capita greenhouse gas (GHG) emission reductions. Investments are made in programs that will accelerate the adoption of clean vehicle technologies, encourage changes in how we drive, and promote alternative travel modes.

Primary inputs into the sketch modeling analyses were outputs from *Travel Model One* in years 2005, 2020, 2035, and 2040, as well as emissions factors from ARB’s EMFAC2011.

The Climate Policy Initiatives include:

1. Regional Charger Program for Plug-In Hybrid Electric Vehicles
2. Vehicle Buy-Back and Plug-In Hybrid Electric Vehicles or Battery Electric Vehicles Purchase Incentives
3. Clean Vehicles “Feebate” Program
4. Car Sharing
5. Smart Driving Strategy
6. Commuter Benefits Ordinance
7. Vanpool Incentives/Employer Shuttles

Each Climate Policy Initiative is summarized in the following pages, including a description of the project objective, contextual background, assumptions and methodology, analytic steps and results.

In addition to the seven Climate Policy Initiatives, the Proposed Plan and EIR alternatives include \$226 million for the expansion of the current Climate Initiatives Innovative Grants program. The funding will be used to support the advancement of GHG emission reduction strategies that are currently being piloted. The most effective strategies will be improved upon and expanded as appropriate throughout the region. No emissions reductions credit (for the purposes of SB 375) is taken for the Innovative Grants projects since MTC has not yet determined which projects will be funded.

Emission Rates

To calculate the carbon dioxide (CO₂) emissions reductions from the Climate Policy Initiatives, the California Emissions Model (EMFAC2011) trip end emission rates and exhaust per mile emission rates for light and medium duty vehicles were used. The regional average for annual CO₂ emissions from light and medium duty vehicles are applied to the calculated trip reductions and VMT reductions, which are summarized in the individual policy descriptions below.

TABLE 14: CARBON DIOXIDE EMISSION RATES

	<i>Year 2020</i>	<i>Year 2035</i>
CO ₂ Exhaust Emission Rate (grams per mile)	400.13	400.05
CO ₂ Trip End Emission Rate (grams per trip)	86.16	86.55

Source: EMFAC2011

Note that these emission rates were not used for the vehicle strategies. The next section clarifies the baseline for the vehicle strategies.

Calculating the Baseline for Vehicle Strategies

In the following sections, we review three programs which focus on reducing GHG emissions by increasing the use of electricity as a transportation fuel, accelerating the deployment of electric vehicles with a fleet turnover program, and a clean vehicle feebate program. Unfortunately, EMFAC2011 does not include baseline assumptions regarding the vehicle fleet as a result of the Advanced Clean Cars Program. This program impacts the percentage of zero emission vehicles (ZEVs) that original equipment manufacturers (OEMs) are required to sell in California through 2025. As a result, MTC and ICF developed a baseline for vehicles and emissions using EMFAC2011 with several modifications, based in part on information released by ARB. The baseline for GHG emissions was developed using well-to-wheels emission factors rather than the tailpipe emission factors reported in EMFAC.

The following subsections outline the methodology employed to develop the baseline vehicle populations, including plug-in electric vehicles (PEVs), and associated GHG emissions in the nine Bay Area counties. Generally, a combination of data from EMFAC2011 and ARB documentation for the Advanced Clean Cars Program were used; these data were supplemented by assumptions to account for regulations such as Pavley Standards, the Low Carbon Fuel Standard (LCFS), and the ZEV Program.

Baseline Vehicles and GHG Emissions for the Bay Area

BASELINE VEHICLES

The number of vehicles reported in EMFAC2011 for the nine Bay Area counties was used to develop a baseline vehicle population. The analysis was limited to light-duty vehicles, including light-duty automobiles (LDA) and light-duty trucks (LDT1 and LDT2). New vehicles sales in the Bay Area were estimated based on statewide projected sales in 2011. Based on EMFAC and sales data from the

California New Car Dealers Association (CNCDA), it was estimated that the Bay Area accounts for approximately 21 percent of vehicle sales in California. It was also assumed that vehicle sales will increase at an annualized rate of about 0.5 percent out to 2035, based on growth rates extracted from EMFAC.

The analysis accounted for PEVs that would be deployed to meet the requirements of the ZEV Program, which requires automobile manufacturers to introduce zero tailpipe emission vehicles in volumes that increase over time. The program is implemented using credits, which vary depending on factors such as emission control technology and vehicle range. The analysis relied on ARB documentation describing the most likely compliance scenario¹⁶ – a mix of transitional zero emission vehicles (TZEVs), battery electric vehicles (BEVs), and hydrogen fuel cell vehicles (FCVs). To develop the baseline, it was assumed that TZEVs would all be plug-in hybrid electric vehicles (PHEVs) and that the percentage of ZEVs sold in the Bay Area would be proportional to the percentage of total light-duty vehicles sold in the Bay Area compared to the entire state. We refer to this as a fair-share assumption; it is conceivable and even likely that, in the near-term, PEV sales will be proportionally higher in the Bay Area than other regions in California. However, with a 25-year timeline for the analysis (2010-2035), it is difficult to justify that the Bay Area will sustain higher PEV sales for the entire duration of the analysis.

Information presented by ARB on the updated ZEV Program was used to estimate the penetration of PHEVs, BEVs and FCVs out to 2025. Beyond 2025, it is assumed PEV sales as a percent of total vehicle sales will remain constant, since there is no regulatory driver for increased PEV sales post-2025. See Table 15 for penetration rates reported as new vehicle sales.

TABLE 15: PERCENT NEW VEHICLE SALES FOR BASELINE

Year	% new vehicle sales		
	PHEV	BEV	FCV
2020	5.2%	2.2%	0.6%
2035	9.2%	3.7%	2.6%

The ZEV Program includes provisions for OEMs to earn credits for over-compliance¹⁷, as measured by grams of carbon dioxide per mile (gCO₂/mi). These over-compliance credits can effectively reduce the ZEV requirements for OEMs out to 2021, thereby decreasing the total number of PEVs. However, for the purposes of this exercise, it is assumed that OEMs will not use this as a compliance option.

We applied a vehicle turnover profile extracted from EMFAC to calculate the total number of PEVs (i.e., vehicle stock or total PEV population as opposed to new vehicles) over time. The turnover for PEVs will likely be different than for conventional vehicles, especially considering that the useful lifetime of batteries (in an automotive application) deployed today is unknown. However, we did not have sufficiently convincing data to modify the fleet turnover profile.

¹⁶ Appendix B, Draft Environmental Analysis for the Advanced Clean Cars Program, CARB, December 2011. We also drew from an ARB Staff Presentation dated November 16, 2010 entitled “ZEV Regulation 2010, Staff Proposal”, available online at: http://www.arb.ca.gov/msprog/zevprog/2011zevreg/11_16_10pres.pdf

¹⁷ See Section 1962.2(d)(6)(C) of the Final Regulation Order for the Zero Emission Vehicle Regulation: 2018 and Subsequent Model Years for more information.

BASELINE GHG EMISSIONS

The GHG emissions attributable to light-duty vehicles in the Bay Area were estimated on a lifecycle basis. From the standpoint of developing PEV-related scenarios for the Sustainable Communities Strategy, it would be an apples-to-oranges comparison if we did not account for the upstream emissions of electricity used as a transportation fuel. The GHG reduction benefits of PEVs on a strictly tailpipe emissions basis are much more significant. Although the emissions were calculated on a lifecycle basis, we only considered CO₂ emissions as opposed to equivalent CO₂ emissions (CO_{2e}) in our estimates.

The GHG emissions attributable to light-duty vehicles are a function of vehicle fuel economy, the corresponding emissions factor(s) for the fuel(s) used, the vehicle miles traveled (VMT), and the vehicle lifetime.

To estimate the GHG emissions attributable to conventional vehicles using gasoline, PHEVs, BEVs, and FCVs, the carbon intensity values and the energy economy ratios (EERs) shown in Table 16 were used. For the most part, these values are either taken directly from or modified based on the LCFS documentation. The following adjustments and modifications were made:

- For reformulated gasoline, we accounted for the LCFS by subtracting the GHG reductions attributable to the baseline deployment of PHEVs, BEVs, and FCVs in the Bay Area and adjusting the carbon intensity of reformulated gasoline to reflect the remaining reductions required to comply with the regulation.
- For electricity, the carbon intensity of marginal electricity generation in California from CARB's LCFS look-up table and adjusted for CO₂ emissions only. ICF also accounted for compliance with the Renewable Portfolio Standard (RPS) in the calculation of the carbon intensity for electricity and assumed that PG&E would meet the 33 percent goal by 2020; as a result, the carbon intensity post-2020 was adjusted accordingly.
- In the case of hydrogen consumption in FCVs, we adjusted values in 2020 assuming that 50 percent of the hydrogen consumed was generated via on-site steam reformation using methane and that the remaining 50 percent was generated via on-site reformation using renewable feedstocks.

TABLE 16: CARBON INTENSITY VALUES USED FOR ANALYSIS

Fuel	Carbon Intensity (g CO ₂ -eq/MJ)		EER ¹⁸	Notes
	2010-2020	2021+		
Gasoline	92.59	92.59	--	Adjusted from CARB data to account for difference between CO ₂ e and CO ₂
Electricity	98.94	79.27	3.4	Adjusted from CARB data to account for difference between CO ₂ e and CO ₂ ; updated in 2020 to account for RPS
Hydrogen	126.78	85.23	2.5	Adjusted from CARB data to account for difference between CO ₂ e and CO ₂ ; adjusted in 2020 assuming: a) 50% on-site NG reformation and b) 50% on-site reformation w/ renewable feedstocks

As a simplification, we assumed a constant annual per vehicle VMT of 12,333 miles. This value was agreed upon by ICF and MTC after considering the values extracted from EMFAC by vehicle age and the VMT employed by MTC's travel model. For PHEVs, we assumed that 30 percent of the VMT would occur in charge depleting mode or "all-electric" miles.

The annual GHG emissions for years 2015-2035 in 5-year increments are shown below in Table 17, reported in units of million metric tons (MMT).

TABLE 17: BASELINE GHG EMISSIONS FROM LDVS FOR THE BAY AREA

Year	GHG Emissions (MMT)			
	PHEV	BEV	FCV	Total LDV
2015	0.073	0.007	0.001	24.517
2020	0.201	0.022	0.003	20.291
2025	0.369	0.048	0.009	17.979
2030	0.582	0.077	0.008	16.709
2035	0.744	0.098	0.008	16.209

¹⁸ See Table 5 in Proposed Regulation Order Subchapter 10, Article 4, Subarticle 7. Low Carbon Fuel Standard, Section 95485, October 2011.

Regional Charger Program

Plug-in electric vehicles (PEVs) have the potential to reduce GHG emissions in the transportation fuels sector significantly. Today, the Bay Area is the leading market for PEV sales, including both plug-in hybrid electric vehicles (PHEVs) and battery electric vehicles (BEVs). PHEVs have a hybridized powertrain which is fueled by chemical energy from a battery or by gasoline/diesel. BEVs are powered exclusively by the chemical energy from a battery. The focus of this strategy is on expanding the charging opportunities for PHEVs.

PHEVs have what is referred to as an all-electric range (when in charge depleting mode) of about 10-40 miles. For instance, the Toyota Prius Plug-in has an all-electric range of 11 miles; the Ford C-MAX Energi has an all-electric range of 21 miles; and the Chevrolet Volt has an all-electric range of 38 miles. It is generally assumed that most PEV owners will charge their vehicles at home. The charging equipment is referred to as electric vehicle supply equipment (EVSE). Although at-home charging provides the most convenient – and perhaps the most affordable – form of charging, by providing PEV drivers access to EVSE at workplaces, commuter hubs, and other destinations, the all-electric range of their vehicles can be extended. Miles traveled using electricity yield a larger GHG benefit.

The MTC *Travel Model One* simulation for year 2010 estimated an average distance from home to work for Bay Area commuters of 13 miles; these miles only include the distance between home and work and do not factor in any errands, or other trips that may extend the daily distance traveled. In other words, the average round-trip distance in the Bay Area in 2010 was about 26 miles. In some cases, e.g., with the Chevrolet Volt, there may be sufficient range to make these trips entirely using electricity. However, with increases in the sales of PHEVs with less than 25 miles of range, and several more PHEV models with similar ranges hitting the market soon, there is significant potential to extend the all-electric miles traveled in the Bay Area.

The objective of this program is to establish a regional public network of electric vehicle supply equipment (EVSE) for plug-in hybrid electric vehicles. However, the costs are often prohibitive and there are other barriers (e.g., on-site electrical capacity) that may limit the potential for deploying EVSE at workplaces. This program will be designed to help overcome some of those barriers by providing financial assistance to interested employers, retailers, parking management companies, and others that qualify.

This program will also help support the objectives outlined in the Bay Area's PEV Regional Readiness Plan.¹⁹ MTC works in partnership with the Bay Area Air Quality Management District (BAAQMD) regarding regional PEV readiness planning. The BAAQMD is leading regional efforts to ensure that local and regional governments are identifying the steps that they need to take to become PEV-ready. The readiness planning focuses on issues such as updating building codes, streamlining permitting and inspection processes, and modifying zoning, parking rules, and local ordinances as needed to support

¹⁹ Bay Area and Monterey Bay Area Plug-in Electric Vehicle Readiness Plan, Summary 2012. Prepared by ICF International for the Bay Area Air Quality Management District. Available online: <http://www.baaqmd.gov/~media/Files/Strategic%20Incentives/EV%20Ready/Summary%20PEV%20Readiness%20Plan%20FINAL.ashx>

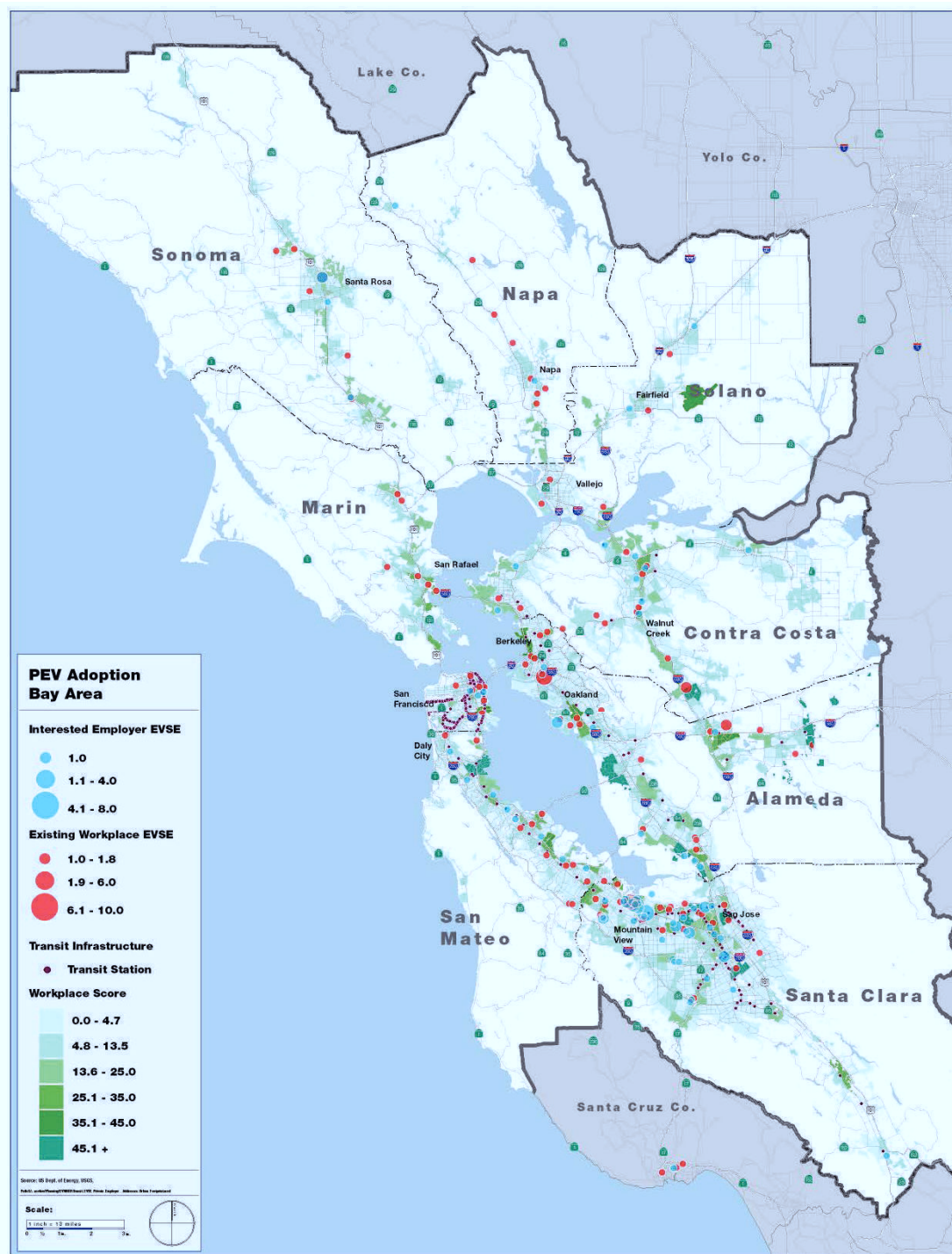
PEV deployment. The readiness plan also includes a siting analysis, which seeks to guide and coordinate future PEV charging infrastructure-siting efforts based on anticipated or projected demand for EVSE. The three major goals of the siting analysis were to:

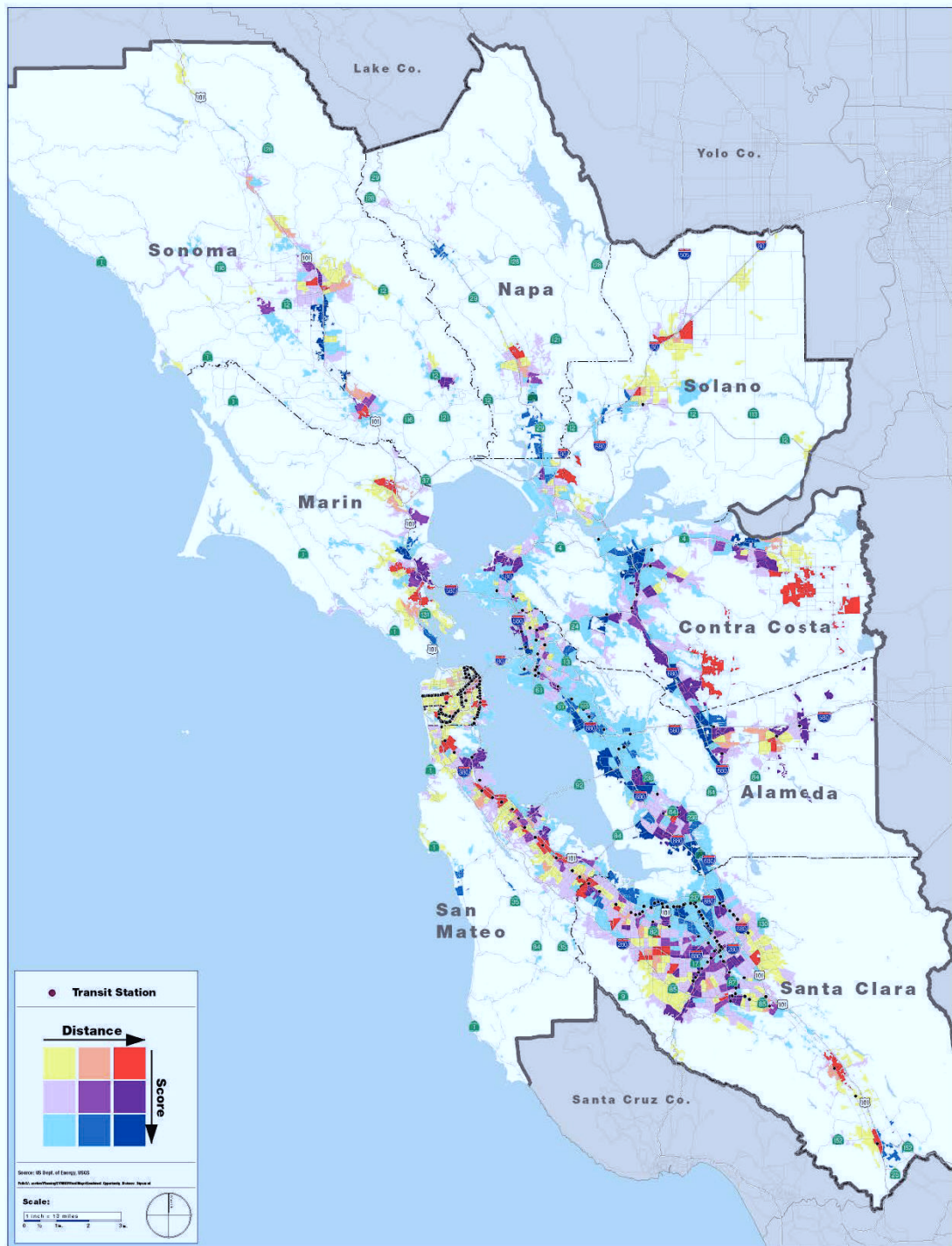
- Provide charging opportunities for PEV owners that lack access to home charging;
- Extend the range of PEVs for intra- and inter-regional travel along various corridors; and
- Maximize all-electric miles by providing ample opportunities for charging while minimizing the risk of stranded PEVs.

ICF worked with MTC to identify likely PEV adopters in the region. ICF, in partnership with Fehr & Peers, worked with MTC to use *Travel Model One* to identify the most likely destinations for PEV adopters. These destinations were characterized using trip purposes e.g., work, shopping, social/recreational, etc. The analysis focuses on workplace siting and opportunity charging. The two maps below are taken from the PEV Readiness Plan and show the results of the workplace siting analysis and the opportunity charging siting analysis:

- The map in Figure 27 below shows an overlay of the following data: the most likely destination zones for workplace trips (different shades of green), areas with existing workplace Level 2 EVSE (red dots), areas with employers interested in deploying workplace EVSE for employee charging (blue dots), and transit stations (purple dots).
- Opportunity charging is distinguished from residential and workplace charging and covers a wide range of situations where a PEV driver could potentially charge when away from home and/or work. Within this category, there are different sub-categories specific to the type of venue—such as retail parking lots, on-street parking, airport long- and short-term parking, cultural and/or recreational centers, etc. The legend in Figure 28 shows nine colors representing a matrix of scoring across three groups of distances and three groups of PEV-weighted trips. Each block or color in the horizontal direction (left to right) represents the following trip distances: 0-5 miles, 6-10 miles, and 11+ miles. Opportunity trips are generally in addition to other daily trips (e.g., home to work and work to home trips). Each block or color in the vertical direction (top to bottom) represents the highest number of trips by likely PEV adopters to that zone. In other words, the blue shaded zones (light, medium, and dark blue) represent the most trips by likely PEV adopters to that particular region.

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Source: ICF, MTC GIS Unit; from Bay Area and Monterey Bay Area PEV Readiness Plan, Summary 2012

FIGURE 28: OPPORTUNITY CHARGING FOR LEVEL 2 EVSE

ASSUMPTIONS AND METHODOLOGY

In the baseline, it was assumed that 30 percent of miles traveled by PHEVs would be in charge depleting mode or electric miles. Based on the increased availability of EVSE throughout the Bay Area, this percentage is increased to 41 percent.

To increase the electric miles traveled by PHEVs, a regional network of charging infrastructure must provide drivers an opportunity to plug-in, particularly while at work, as this is where most vehicles will spend most of their time parked when not at home. Due to the focus on PHEVs, the regional EVSE network would provide incentives for the installation of Level 1 EVSE (75%) and Level 2 EVSE (25%).

With an upper limit of 16 kWh for the battery size of a PHEV, the time to recharge to full capacity is about 7 hours and 3 hours for a Level 1 and Level 2 EVSE, respectively.

This analysis assumes incentives of \$250 for Level 1 EVSE installations and \$2,100 for Level 2 EVSE installations.

There were no assumptions made regarding a shift in fleet make-up as a result of EVSE availability. It is conceivable that the increased availability of Level 2 EVSE could increase the sales of BEVs. However, this is difficult to justify as fast charging EVSE are more likely to induce demand than Level 2 charging. Similarly, there is a cap on the amount of credit that OEMs can earn as a result of selling PHEVs, so there is not a regulatory driver for increased PHEV sales beyond what was assumed in the baseline.

ANALYSIS STEPS

To determine the GHG emission reductions from EVSE deployment throughout the region, an emissions calculator for the Bay Area that was used to:

1. Modify the percentage of miles traveled in charge depleting mode from the baseline 30 percent to 41 percent.
2. Determine the GHG emissions reduction.
 - a. The GHG emissions attributable to PHEVs are based on how many miles each vehicle spends in each mode (charge depleting or gas/diesel).
 - b. The GHG emission reductions are determined as the difference between the emissions attributable to the PHEV versus the emission that would have otherwise occurred using an average conventional gasoline vehicle.
3. There were no changes made to the VMT.

On a strictly linear basis, about 20 to 25 percent of all PHEVs would require access to EVSE at any given time to achieve the increased electrification goal of this strategy. However, by 2035, we assume that EVSE will have improved capabilities and that it will be possible to plug-in multiple vehicles to a single charge point and stagger the charging so that each vehicle returns to full state of charge (SOC).

TABLE 18: REGIONAL CHARGER PROGRAM EMISSION REDUCTION BENEFITS

		<i>EIR Alternative</i>				
		<i>No Project</i>	<i>Proposed Plan</i>	<i>Transit Priority Focus</i>	<i>Enhanced Network of Communities</i>	<i>Environment Equity, and Jobs</i>
CO ₂ Emissions Reductions	2020 Daily Short Tons Reduced	0	-76	-76	-76	-76
	2020 Percent Per Capita Reduction from 2005 Baseline	0%	-0.1%	-0.1%	-0.1%	-0.1%
	2035 Daily Short Tons Reduced	0	-282	-282	-282	-282
	2035 Percent Per Capita Reduction from 2005 Baseline	0%	-0.3%	-0.3%	-0.3%	-0.3%

Emission reductions are consistent across all EIR alternatives since the analysis does not rely on inputs from the travel model.

COSTS

The costs of EVSE are a function of the level of charging (i.e., Level 1 or Level 2) and the total number of chargers required.

1. We estimate a ratio of approximately one EVSE for every five vehicles by 2035, consistent with charger-to-vehicle ratios estimated by EPRI for workplace and public charging opportunities and research conducted by ICF regarding charging optimization²⁰.
2. Multiply estimated number of EVSE by per EVSE incentive.

²⁰ D. Bowermaster, EPRI. *How Much Electric Vehicle Charging is Needed?* California Plug-in Electric Vehicle Collaborative Meeting, August 2012.

TABLE 19: ANTICIPATED NUMBER OF EVSE INSTALLATIONS AND COST

Year	Number of EVSE		Total Cost (\$millions)
	L1	L2	
2020	10,800	3,600	\$10.2
2035	62,800	20,900	\$59.7

Total program costs are estimated at \$80 million in year of expenditure dollars.

Vehicle Buyback & PEV Incentive

Plug-in electric vehicles are being adopted at significant levels today in the Bay Area. The ZEV Program and the LCFS in California are regulatory drivers for advanced vehicle technologies and alternative fuels. Despite the near-term success of PEVs in the Bay Area, sales are still relatively small and represent 0.5 percent of total new light-duty vehicle sales. There is also some uncertainty regarding the medium- to long-term availability of purchase incentives e.g., the federal tax credit and the California state rebate. Furthermore, one of the main drivers today for PEV sales, particularly for PHEVs, is HOV lane access: PHEVs are eligible for the green sticker (limited to the first 40,000 applicants through January 1, 2015) and BEVs are eligible for the white sticker and qualify through January 1, 2015. As of March 2013, nearly 11,000 green stickers have already been issued in California.²¹

Most analysts agree that the first adopters of PEVs will be higher income individuals who own their homes, and in many cases, own or have owned a hybrid electric vehicle e.g., a Toyota Prius. The higher purchase price of PEVs makes it difficult for middle and low income consumers to adopt a PEV. This program will provide a combination of an incentive of up to \$2,000 to purchase a PEV along with the buyback of older, less efficient vehicles. This is intended to extend the market for PEVs into a broader range of income classes. Older and wealthier individuals tend to buy more new vehicles than other cross-sections of the population. This demographic also tends to buy newer cars more frequently. Furthermore, recent research from Polk has shown that owners of both new and used vehicles are holding on to their vehicles longer²². When compared to similar surveys in 2001, Americans are holding on to their cars for nearly two years longer. Additionally, ARB estimates that half of cars live to be 15 years old and one quarter live to be 20 years old. Interestingly, if a vehicle does survive to 20, there is a 40 percent chance it will be on the road for another ten years after that.²³ This will impact the turnover of the fleet significantly and may slow the purchase of new vehicles, including plug-in electric vehicles. The vehicle buyback program seeks to accelerate fleet turnover, while also incentivizing the purchase of advanced

²¹ CARB Mobile Source Program: <http://www.arb.ca.gov/msprog/carpool/carpool.htm>. Accessed March 28, 2013.

²² Americans are Holding their Vehicles Longer ... is it Good for Loyalty? Blog post by L. Miller at Polk, December 17, 2012. Available online at: <http://blog.polk.com/blog/blog-posts-by-lonnie-miller/americans-are-holding-their-vehicles-longer-is-it-good-for-loyalty>

²³ Report to the California Legislature, Accelerated Light-Duty Vehicle Retirement Program. <http://www.arb.ca.gov/research/apr/reports/12070.pdf>. Accessed March 20, 2013.

vehicle technology. Depending on the fuel economy threshold set by the program, the combination vehicle buyback and incentive program is intended to induce demand in middle and lower income brackets that might otherwise delay car purchasing, purchase a new conventional vehicle, or purchase a used vehicle.

Given the uncertainty regarding the medium- to long-term availability of incentives for PEV purchasing, and the potential interest from mid-adopters (e.g., middle income consumers), MTC is proposing to fund a vehicle buyback program. The program will be designed as a trade-in for older vehicles that meet a certain fuel economy threshold (as measured via miles per gallon, MPG). The consumer is only eligible for the trade-in if the new vehicle being purchased is a PHEV or BEV. The incentive amount will vary with the fuel economy of the vehicle being traded in (measured in MPG) as well as the vehicle type being purchased (e.g., PHEV or BEV).

The objective of the vehicle buy-back program is to provide an opportunity for consumers to trade-in an older, less efficient vehicle for a new PHEV or BEV.

ASSUMPTIONS AND METHODOLOGY

There are two aspects of a vehicle buyback program which will reduce GHG emissions: the first is attributable to the accelerated turnover of vehicles and the second is due to the accelerated deployment of PEVs.

- Implementation of this program will begin in 2020.
- 47,000 additional PEVs will be on the road by 2035, adding to the estimated 535,000 PEVs on the road in the Bay Area for the baseline scenario. This is a modest annual increase of about 0.5 percent in new vehicle sales attributable to the buyback incentive program.
- To estimate the GHG benefits of the accelerated turnover of vehicles as a result of the program, this analysis estimates a fleet average fuel economy improvement above EMFAC2011 estimates of 0.5 percent. The fuel economy improvement was estimated based on displaced older vehicles in the fleet (>10 years old).
- For the initial analysis, it is assumed that the deployed vehicles would be split 50/50 between PHEVs and BEVs.
- It is assumed that the incentive level would average about \$1,000 per PHEV and \$2,000 per BEV. However, the actual incentive will vary based on the MPG of the vehicle being traded in as well as the technology of the vehicle being purchased.

ANALYSIS STEPS

The analysis followed three steps to estimate the emissions reduced by the removal of old vehicles:

Removal of Old Vehicles

1. Decrease number of vehicles in the EMFAC2011 inventory that are older than 10 years based on estimated PEVs deployed as part of this program.
2. Estimate fuel economy improvement based on accelerated turnover.
3. Calculate GHG emissions of improved fleet fuel economy.
4. Calculate GHG emissions of increased PEVs deployed.

Introduction of PEVs

1. The GHG emission reductions were determined as the difference between the emissions attributable to the PEV versus the emission that would have otherwise occurred using an average conventional gasoline vehicle. For the PHEV this depends on the proportion of time spent in charge depleting mode versus gas/diesel mode.

TABLE 20: VEHICLE BUY BACK AND PEV INCENTIVE PROGRAM EMISSION REDUCTION BENEFITS

		<i>EIR Alternative</i>				
		<i>No Project</i>	<i>Proposed Plan</i>	<i>Transit Priority Focus</i>	<i>Enhanced Network of Communities</i>	<i>Environment Equity, and Jobs</i>
CO ₂ Emissions Reductions	2020 Daily Tons Reduced	0	0	0	0	0
	2020 Percent Per Capita Reduction from 2005 Baseline	0%	0%	0%	0%	0%
	2035 Daily Tons Reduced	0	-470	-470	-470	-470
	2035 Percent Per Capita Reduction from 2005 Baseline	0%	-0.5%	-0.5%	-0.5%	-0.5%

Due to the 2020 program start date, no emission reduction benefits are included for the year 2020. Emission reductions are consistent across all EIR alternatives because the analysis does not rely on inputs from the travel model.

COSTS

The costs of the program are two-fold: a) the monetary value of the incentives deployed and b) the costs of administering the program

- We determined the costs of the incentives by multiplying the number of PHEVs and BEVs deployed (assumed 50/50 split) as part of program by incentive level (\$1,000 and \$2,000, respectively).
- The administration costs were assumed to be 5% of the costs of the incentives; this is consistent with the level of administrative support required for programs such as the Hybrid Truck and Bus Voucher Incentive Program and the Clean Vehicle Rebate Project.

Total escalated YOE costs are \$120 million.

Clean Vehicles Feebate Program

Originally coined in the 1990s, feebate programs have typically been used to shift buying habits in the transportation and energy sectors. MTC is proposing to use a feebate program to incentivize consumers to scrap older vehicles and purchase higher performing, cleaner vehicles. A feebate program uses a combination of fees and rebates to change consumer behavior. Consumers purchasing a vehicle that emit more CO₂ on a gram per mile basis than a defined standard are assessed a fee at the point of purchase. These fees are used to provide rebates to consumers that purchase vehicles that emit less CO₂ on a gram per mile basis than the defined standard.

Feebates have been used with some success in other countries, including Denmark, France, the Netherlands, and Norway. The structure of a feebate program for California was studied in considerable detail for the ARB²⁴. In fact, California has come close to implementing a statewide feebate program on multiple occasions through legislative efforts – the first time in the early 1990s and more recently in 2008. In California, feebate programs have been proposed as a legislative initiative (e.g., AB 493 Ruskin in 2007), whereby implementation authority would be delegated to ARB and the State Board of Equalization. Moving forward, MTC will have to engage with ARB and the local air district, Bay Area Air Quality Management District (BAAQMD) to determine how the program would be implemented. Ultimately, it is conceivable that MTC would need to seek action via the Legislature to approve of a regional feebate initiative. A feebate program is not dissimilar from the fee that was approved by the Legislature via AB 434 (Sher, Chapter 807, Statutes of 1991) establishing the Transportation Fund for Clean Air (TFCA).

ASSUMPTIONS AND METHODOLOGY

The analysis draws heavily from results reported by Bunche and Greene's feebate analysis for the ARB. The major benefits of the feebate programs analyzed by Bunch and Greene are attributable to the first several years of the program. In that report, the authors state: "In later years the level of GHG emissions reduction relative to the standard diminishes as the standard becomes more stringent."

It is assumed that the feebate program is introduced in 2020 and that there are not any increases in fuel economy standards at the state- or national-level after 2025. To maintain consistency with the Bunch and Greene study, this analysis assumes a \$20 per g/mi feebate rate in a single benchmark system. Based on a sensitivity analysis performed by Bunch and Greene, an increase to \$30 per g/mi feebate rate will yield a 50 percent increase in GHG reductions.

This analysis also assumes that the program is designed to be revenue neutral, but that administrative costs are covered by MTC. Bunch and Greene estimate about \$4.6 to \$6.5 million annually for a statewide

²⁴ Greene, David L. and Bunch, David S., "Potential design, implementation, and benefits of a feebate program for new passenger vehicles in California", Prepared for the California Air Resources Board, Contract UCD 08-312, February 2011.

program with an additional \$2 to \$4 million in startup costs. The program largely scales linearly with the total fees collected, estimated at about 1 percent of total fees collected. This analysis assumes that the Bay Area represents about 20 percent of the entire California market.

ANALYSIS STEPS

The GHG emission reductions were calculated in the following steps:

1. Estimated the improvement in fuel economy (back-calculated based on grams per mile estimates) of the new vehicle fleet due to the feebate program. Maximum improvement at the outset of the program is about 4.2 percent; by 2035, the improvement is reduced to 2.3 percent.
2. Based on vehicle turnover, estimate modified fuel economy of entire fleet after change to improved fuel economy of new vehicles as of 2020 due to feebate program.
3. Calculate differential in well-to-wheels GHG emissions of modified fleet versus baseline fleet.

TABLE 21: CLEAN VEHICLE FEEBATE EMISSION REDUCTION BENEFITS

		<i>EIR Alternative</i>				
		<i>No Project</i>	<i>Proposed Plan</i>	<i>Transit Priority Focus</i>	<i>Enhanced Network of Communities</i>	<i>Environment Equity, and Jobs</i>
CO ₂ Emissions Reductions	2020 Daily Short Tons Reduced	0	0	0	0	0
	2020 Percent Per Capita Reduction from 2005 Baseline	0%	0%	0%	0%	0%
	2035 Daily Short Tons Reduced	0	-587	-587	-587	-587
	2035 Percent Per Capita Reduction from 2005 Baseline	0%	-0.6%	-0.6%	-0.6%	-0.6%

Due to the 2020 program start date, no emission reduction benefits are included for the year 2020. Emission reductions are consistent across all EIR alternatives because the analysis does not rely on inputs from the travel model.

COSTS

The costs of the program are estimated using parameters outlined in the Bunch and Greene analysis. They identified start-up costs and annual costs. Both are scaled to the size of Bay Area market, assuming that the cost of the program scales with the total fees collected. Total year of expenditure costs are \$25 million.

Car Sharing

Car sharing allows individuals to rent vehicles by the hour, thus giving them access to an automobile without the costs and responsibilities of individual ownership. Car sharing is growing rapidly in the Bay Area both in traditional for profit/non-profit services (City CarShare, Zipcar, U Car Share, WeCar), new peer-to-peer car sharing (Getaround, RelayRides) and 1-way car share services (BMW DriveNow).

Traditional car sharing businesses operate on a membership basis. Users pay an annual fee in addition to hourly and sometimes per mile rates. Gas, maintenance, parking, insurance, and 24-hour access is all included in the membership and usage rates for car sharing. The pricing scheme is set up to encourage the use of the vehicles for errands, picking people up from the airport, and other short trips. For trips longer than one day it is usually less expensive to rent a vehicle through a car rental agency. It works best for households in neighborhoods that are highly served by transit where vehicles are only infrequently needed. After joining a car sharing program, households in these neighborhoods can often shed all vehicles and just participate in car sharing. In less dense neighborhoods car sharing may allow a two or three car family to shed one car and then use car sharing for the rare times that multiple vehicles are needed at the same time. In general, members are required to have a clean driving record and be over the age of 18 in order to join. Businesses are also signing up for business memberships to avoid maintaining a company fleet of vehicles.

Peer-to-peer car sharing (also known as P2P) allows an individual to rent out his/her private vehicle when not in use. This generates income for the owner and provides a wide range of vehicle types and prices to the renter. Peer-to-peer is more likely to succeed in less dense, suburban neighborhoods since the service is simply providing extra cash to the owners and does not require the vehicles to turn a profit over their cost of ownership. One such peer-to-peer company, Getaround, was launched in 2011 and has already built an extensive and rapidly growing network of vehicles.

One-way car sharing allows a driver to pick up a vehicle in one location and drop it off at another pod or in some cases, wherever is convenient within a set geographic area. This could allow an individual who took transit to work to then pick up a vehicle and run errands on the way home and leave the car parked by his/her home. This also allows the vehicles to turn over more frequently since users can drive to an event, park the car, let someone else rent it, and then pick up a different vehicle nearby for their return trip. One-way car sharing is just beginning in the Bay Area with the BMW all electric vehicle DriveNow system. There is also a scooter car sharing system in San Francisco named Scoot which operates a one-way program. In other markets such as San Diego and Austin there are successful one-way, all electric vehicle car sharing programs operated by Mercedes-Benz called Car2Go.

Car sharing has positioned itself to cause a major shift in the market that is not explicitly captured in *Travel Model One*. In the United States, there are currently over half a million car sharing members; this could swell to over 600,000 in 2013²⁵. Based on the average number of members per car sharing vehicle we estimate that there are over 60,500 car sharing members currently in traditional Bay Area car sharing

²⁵ Bieszcza, Alice and Joe Schwieterman. "My Car, Your Car." *Planning* May/June 2012: 37-40.

schemes²⁶. There are already thousands of vehicles available to serve those members. Car sharing helps to enable and expand the trend of younger generations putting off obtaining licenses and purchasing vehicles. Sharing rather than owning is becoming ever more popular. “FORBES estimates the revenue flowing through the share economy directly into people’s wallets will surpass \$3.5 billion this year, with growth exceeding 25percent. At that rate peer-to-peer sharing is moving from an income boost in a stagnant wage market into a disruptive economic force.”²⁷ Additionally, with increasing and volatile fuel prices the overall cost of auto ownership is increasing and there are uncertainties regarding operating expenses that many people would prefer to not deal with. Car sharing eliminates these concerns.

Car sharing reduces emissions by lowering the average VMT of members and by allowing trips to be taken with more fuel efficient vehicles than would have been used without car sharing (see assumptions and methodology for more details).

MTC can help encourage car share expansion by providing support for new pods and services in the North Bay, South Bay and inland East Bay.

ASSUMPTIONS AND METHODOLOGY

Under traditional car sharing models, estimates of the likely population to adopt car sharing ranges from 10 percent²⁸ to 13 percent²⁹ of the eligible population. The eligible population is defined as adults between the ages of 20 and 64 (56 percent of the total projected 2035 Bay Area population). With the introduction of one-way and peer-to-peer car sharing MTC assumes that adoption rates will reach 15 percent of the eligible population in dense urban areas by 2035. It is assumed that a much lower adoption rate of 5 percent of the eligible population could adopt car sharing by 2035 in suburban areas. These increased adoption rates across the board are assumed to be influenced by the expansion of peer-to-peer car sharing and one-way car sharing as well as the introduction of MTC subsidies. For a full set of the adoption rate assumptions see Table 22 below.

²⁶ Estimated to be 1,200 vehicles in the Zipcar and City CarShare fleet in 2012. With an average of 49 members/vehicle (Shaheen, S.A., Cohen, A, and Chung, M. (2009). North American Carsharing: 10-Year Retrospective, Transportation Research Record: Journal of the Transportation Research Board, No. 2110, Transpotation Research Board of the National Academies, Washington, DC, pp. 35-44) that places the Bay Area traditional car sharing membership at 60,500.

²⁷ Geron,Tomio. “Airbnb and the Unstoppable Rise of the Share Economy”. Forbes, February 11, 2013.

²⁸ Zipcar. <http://www.zipcar.com/is-it/greenbenefits>. Accessed December 7, 2012.

²⁹ Zhou, B., Kockelman, K, and Gao, R. "Opportunities for and Impacts of Carsharing: A Survey of the Austin, Texas Market", TRB, 2009.

TABLE 22: CAR SHARING ADOPTION RATES

<i>EIR Alternative</i>	<i>Urban Areas (UA)</i>	<i>Suburban Areas (SA)</i>
No Project (2020 and 2035)	10%	0%
All Other Alternatives (2020)	15%	0%
All Other Alternatives (2035)	15%	5%

Urban areas are defined as areas with a population density of at least ten people per residential acre. All other areas are considered suburban areas.

Research by Robert Cervero³⁰ indicates that on average car share members drive seven fewer miles per day than non-members. This is mostly due to the members who shed a vehicle after joining car sharing. Their daily VMT drops substantially and outweighs the increase in VMT from car share members that previously did not have access to a vehicle. In addition to this reduction in VMT, when members drive in car share vehicles, their per-mile emissions are lower because car share vehicles are more fuel efficient than the average vehicle. Research by Martin and Shaheen³¹ shows that the car share fleet uses 29 percent less fuel per mile, a difference we assume will persist through 2040.

ANALYSIS STEPS

VMT Reduction

1. For the analysis year, calculate the residential density (RD) of every TAZ (transportation analysis zone).

$$RD_{TAZ} = \frac{Total\ Population_{TAZ}}{Residential\ Acres_{TAZ}}$$

2. Calculate the total car sharing eligible population (EP) in TAZs with a RD >10 (Urban Areas or UA) and with a RD <10 (Suburban Areas or SA).

³⁰ Cervero, Golub, and Nee, "City CarShare: Longer-Term Travel-Demand and Car Ownership Impacts", July 2006, TRB 2007 Annual Meeting paper.

³¹ Average US/Canada mpg from Martin and Shaheen, MTI report, page 65

$$EP_{UA} = \sum_{TAZ=1}^{1454} \sum_{RD>10} \sum_{age=20}^{64} Population$$

$$EP_{SA} = \sum_{TAZ=1}^{1454} \sum_{RD<10} \sum_{age=20}^{64} Population$$

3. Calculate future car share membership population (MP) using Table 22 to determine the appropriate car share adoption rate assumption.

$$MP = EP_{UA} \times Adoption Rate_{UA} + EP_{SA} \times Adoption Rate_{SA}$$

4. Calculate the daily VMT reduction assuming 7 miles shed per day per member³².

$$VMT = MP \times 7$$

Emissions Reduction

1. Calculate emission benefit of VMT reduction using EMFAC 2011 Exhaust Emission Rates.

$$Emissions_{VMT} = VMT \times Exhaust Emission Rate$$

2. Calculate the total annual miles driven in car share vehicles in the Bay Area by multiplying the Membership Population (MP) estimate by 1,200 annual miles per member³³. Then use the annual miles to calculate the daily miles.

$$Annual Miles = MP \times 1200$$

$$Daily Miles = Annual Miles / 365$$

3. Calculate the emission benefit of the 29% more efficient car sharing fleet³⁴ from the emissions using EMFAC 2011 Exhaust Emission Rates.

$$Emissions_{Efficiency} = Daily Miles \times MP \times Exhaust Emission Rate \times 0.29$$

4. Sum the two sources of daily CO₂ emission reduction.

$$Emissions_{Total} = Emissions_{VMT} + Emissions_{Efficiency}$$

³² Cervero, Golub, and Nee, "City CarShare: Longer-Term Travel-Demand and Car Ownership Impacts", July 2006, TRB 2007 Annual Meeting paper.

³³ Estimate based on Martin and Shaheen, MTI report, 2010 (Figure 7).

³⁴ Average US/Canada mpg from Martin and Shaheen, MTI report, page 65

TABLE 23: CAR SHARING EMISSIONS REDUCTION BENEFITS

		<i>EIR Alternative</i>				
		<i>No Project</i>	<i>Proposed Plan</i>	<i>Transit Priority Focus</i>	<i>Enhanced Network of Communities</i>	<i>Environment Equity, and Jobs</i>
CO ₂ Emissions Reductions	2020 Daily Short Tons Reduced	-1,294	-2,040	-1,905	-2,032	-1,922
	2020 Percent Per Capita Reduction from 2005 Baseline	-1.6%	-2.6%	-2.4%	-2.6%	-2.5%
	2035 Daily Short Tons Reduced	-1,550	-2,346	-2,248	-2,355	-2,259
	2035 Percent Per Capita Reduction from 2005 Baseline	-1.8%	-2.5%	-2.5%	-2.5%	-2.5%

COSTS

MTC is proposing to provide funding to start-up car share offices in the North Bay and South Bay and support car share pods in lower density areas. Costs are estimated at \$1,769,000 for an office or 6-8 pods (15 cars)³⁵. Assume investment needed for offices or pods in:

- Sonoma and Marin Counties
- Napa and Solano Counties
- Eastern Contra Costa County
- Eastern Alameda County
- I-880 Corridor
- South Bay
- Peninsula

Total program cost in year of expenditure dollars is \$13 million.

Smart Driving Strategy

Changing habits is not easy, but our country has been successful at changing ingrained habits before. Over the past four decades, we have seen smoking rates decrease and recycling rates increase, through

³⁵ Based on City CarShare grant application to MTC

awareness, government programs, and application of tools to assist with changing habits. Driving, like recycling, is a habit ingrained through years of unconscious action. Smart driving is a shift in our ingrained driving behavior through conscious choice, creating change that may one day become as natural as recycling a soda can.

To use a much relied upon analogy, there are multiple legs to the vehicle emissions reduction stool. The first is vehicle technology, the second is cleaner fuels, and the last is driver behavior. The state and federal government are tackling the critical first two legs. The low carbon fuel standard will rapidly decrease the carbon intensity of our fuels. On the vehicle side, increasingly stringent MPG and CO₂ requirements have been put in place through vehicle model year 2025.

SB 375 tackles the last leg of vehicle emissions reduction, driver behavior, from one direction – trying to create a more efficient land use pattern by locating housing closer to jobs and creating complete communities. This allows people to travel less in order to get to the jobs, goods, and services that they require. In addition to changing how *much* someone drives, people can change *how* they drive through training in the techniques of smart driving. Smart driving behaviors are easy-to-implement actions (e.g., change in driving style, vehicle maintenance, etc.) that any driver can do.

Researchers have proven that it is possible to affect significant and swift reduction in emissions through behavior change. This behavioral wedge, they argue, buys us time as policies we put in place take time to have an effect³⁶. Smart driving is a good example of how behavior change can quickly reduce emissions.

Smart driving is starting to pick up a larger following around the world and is even inspiring technology startups in the Bay Area. One promising new technology which has recently received significant press and an overwhelming interest from the public is Automatic, which provides real time information on fuel efficiency on your smart phone along with calling 911 in a crash, deciphering the meaning of the “check engine” light, and remembering where you parked³⁷. It has been reviewed by Wired, CNBC, ABC, PC Magazine, CNET and others as being a “visionary gadget” that “could change the way you drive”.

The Metropolitan Washington Council of Governments (MWCOC) in Washington, D.C. completed an analysis of what it would take to meet their GHG goals. The most cost effective and productive strategy that could be implemented at the regional or local level was smart driving³⁸. For this reason, MWCOC joined in partnership with the Delaware, Maryland, New York, North Carolina, New Jersey, and Massachusetts Departments of Transportation, along with several other MPOs and Port Authorities to launch the I-95 smart driving (which they refer to as eco-driving) campaign³⁹.

³⁶ Community Based Social Marketing website, Fostering Sustainable Behavior, <http://www.cbsm.com/pages/guide/fostering-sustainable-behavior/>, accessed April 26, 2012

³⁷ <http://www.automatic.com/>

³⁸ “Meeting Transportation Greenhouse Gas Reduction Goals in the National Capital Region: A ‘What Would it Take’ Scenario”. http://www.mwcog.org/clrp/elements/scenarios/whatwouldittakeTPB_TRB_Resubmit.pdf. Accessed March 20, 2013.

³⁹ <http://www.i95coalition.org/i95/CoalitionEcoDrivingCampaign/tabid/216/Default.aspx>

The largest smart driving study undertaken to date was by Fiat in 2010. The study analyzed the effects of their eco:Drive software with 5,700 drivers, over 428,000 journeys, 150 days and five countries. Their study required that participants use a USB drive plugged into the vehicle's data port when driving and then transfer the USB to a computer when they wanted to view their results and tips on improvement. Over the course of the study, the average improvement in fuel economy was six percent. The top ten percent of participants improved their fuel efficiency by 16 percent⁴⁰. Based on the positive results of this study, Fiat has continued to expand their eco:Drive software to include in-vehicle displays and real time mobile apps. These improvements are mirrored in the technology that MTC is testing in their smart driving pilots (see below for more information). It is expected that with real-time feedback on driving habits, improvements in fuel efficiency could exceed the six percent seen in the initial study.

While there have been recent studies in the United States on smart driving, they have all been conducted with small sample sizes of twenty participants or less. Once outliers are removed from the data there is a low level of confidence in the results. In order to learn more about the potential of smart driving in the Bay Area, MTC is implementing the following smart driving pilots:

- 1) In-vehicle devices, displaying real time miles per gallon (MPG) and/or feedback on efficient acceleration, deceleration, and maintaining a steady speed. These devices are mounted on the dashboard of the participants' vehicles; and
- 2) MPG mobile apps, similar to the in-vehicle device pilot in a telephone app format. This pilot will be conducted in conjunction with ITS-UC Davis.

The in-vehicle display is connected to the vehicles OBD port and is receiving information from the vehicles computer system through the OBD port in real-time to inform the display. The smart phone app version calculates the drivers behavior based on the phone's GPS system. In both pilots, baseline driving habits over the course of at least one month will be collected. The devices will be in the participants vehicles for a minimum of three months to see how quickly the smart driving habits are learned and if the behaviors persist over time.

Each pilot will be evaluated for its ability to effect change in pilot participant's behavior and, ultimately, reduce GHG emissions. The results of this pilot will inform the future program implementation.

Currently, MTC is planning on implementing two main smart driving programs. The first is a social marketing campaign that will aim to teach drivers the basics of smart driving in-vehicle and maintenance behaviors in addition to trip linking and route planning. MTC currently offers several trip planning tools through www.511.org. For drivers, there is a real time and predicted future traffic information page which allows drivers to plan their trips to avoid congested routes. Trip linking is the practice of combining several trips into one larger trip by not returning home (or back to work) between locations. This smart driving technique focuses on eliminating vehicle miles traveled rather than improving fuel economy.

⁴⁰ EcoDriving Uncovered: The benefits and challenges of ecodriving, based on the first study using real journey data. [http://www2.fiat.co.uk/uploadedFiles/Fiatcouk/Stand_Alone_Sites/EcoDrive2010/en/ECO-DRIVING_UNCOVERED_full_report_2010_EN\(1\).pdf](http://www2.fiat.co.uk/uploadedFiles/Fiatcouk/Stand_Alone_Sites/EcoDrive2010/en/ECO-DRIVING_UNCOVERED_full_report_2010_EN(1).pdf). Accessed March 20, 2013

The second smart driving program is a rebate program for fuel efficiency meters. Under this program MTC will offer a \$100 rebate to consumers who purchase an OBD-connected after-market device. This device would be very similar to the in-vehicle devices being tested through MTC's two pilots. The real-time information on efficient driver behavior will quickly train drivers to alter their behavior in order to save money and gas, and reduce emissions.

ASSUMPTIONS

Social Marketing

In February 2011, MTC conducted a Baseline Climate Initiatives Survey which asked Bay Area residents about the ease of adoption of various emission reducing behaviors⁴¹. Behaviors targeted in this campaign were selected from the results of the survey.

In the survey, 55 percent of participants stated that it would be Very Easy or Easy to practice "smooth acceleration and deceleration and staying at or below the speed limit". The United States Department of Energy reports on their website that rapid acceleration and deceleration, and speeding can lead to fuel economy reductions from 5 percent on city streets to 33 percent on freeways⁴². For this program, it is assumed that between in-vehicle driver behavior, increased vehicle maintenance, and a series of other smart driving strategies that will be promoted through social marketing, residents can improve their fuel efficiency by 10 percent.

In MTC's Baseline Climate Initiatives Survey, 60 percent of participants stated that it would be Very Easy or Easy to practice "at least once per week, link several trips together, such as going shopping and to the post office, that you would normally make separately." For purposes of this analysis, that statement is interpreted to mean that due to the social marketing campaign the driver will link 3 shopping trips per week (effectively reducing 2 trips).

In MTC's Baseline Climate Initiatives Survey, 57 percent of participants stated that it would be Very Easy or Easy to practice "Using trip planning applications that plan your trips to ensure that you use the shortest routes and avoid traffic." By avoiding congested routes and eliminating idling in traffic it is assumed that drivers can improve their fuel efficiency by 5 percent, which is on the low end of research conducted by Facanha⁴³.

This campaign would be implemented through a traditional media format as well as social marketing. Preliminary estimates indicate \$1 million of advertising can purchase 8,000,000 TV views, 5,000,000 radio listeners and 15,000,000 online hits. The public needs to see/hear an advertisement multiple times before

⁴¹ MTC conducted a Baseline Climate Initiatives Survey in February 2011. It was a 15 minute random digit dial and cell phone sample of Bay Area driving age residents. It was offered in English, Mandarin, and Spanish and had an overall margin of error of $\pm 3.5\%$.

⁴² US Department of Energy, Office of Energy Efficiency and Renewable Energy, US Environmental Protection Agency, *Model Year 2005 Fuel Efficiency Guide*, DOE/EE-0302

⁴³ Cristiano Facanha, "Effects of Congestion and Road Level of Service on Vehicle Fuel Economy", Transportation Research Board's 88th Annual Meeting, Paper 09-0268, Washington, D.C. National Academy of Science, 2009.

recognizing the message and being able to practice the requested behavior change. It is assumed that 12 views are needed before the resident will internalize the message.⁴⁴

After a message is internalized the viewer must decide if this behavior is consistent with their lifestyle and/or self-image. It is assumed that the same percentage of the population that stated in the MTC Baseline Climate Initiatives Survey that the given behavior would be “easy” or “very easy” to adopt could adopt the behavior after internalizing the campaign message. This pool of residents who internalize the message and find the behavior easy to adopt are the potential adopters.

In order to adopt the desired behavior a resident must not only view the campaign and find the behavior easy to adopt but also be motivated to make a change (assuming that they were not practicing the desired behavior before viewing the campaign). Due to these limiting factors this analysis assumes that only 10% of people who viewed the campaign and stated that the behavior adoption would be easy actually adopt the behavior. It is assumed that the same total number of drivers will be practicing the behavior in 2020, 2035, and 2040. The campaign will be maintained throughout this time period so although some participants may stop practicing the behaviors, others will join over time in order to maintain a consistent program size.

After a strong four year campaign the annual funding would be reduced from \$5 million/year to \$2 million/year.

Fuel Economy Meters

Under this program MTC would offer a \$100 rebate to consumers who purchase an OBD-connected after-market device similar to Automatic⁴⁵ and the ones tested in the MTC pilots. Based on the Fiat study and a study by the National Renewable Energy Laboratory (NREL)⁴⁶ on various driver feedback devices, this analysis assumes a 5.6 percent fuel economy improvement in every vehicle that a rebate is provided for. This is lower than the fuel economy improvements for the social marketing campaign since the real time device only provides guidance on acceleration, deceleration, and shifting while the social media campaign includes vehicle maintenance, weight, aerodynamics and other tips.

This incentive level can lead to the purchase of 900,000 in-vehicle devices for a \$105 million in year-of-expenditure (YOE) dollars. It may be difficult to deploy this many in-vehicle devices through an MTC program; however, as auto manufacturers integrate more screens and technology into their vehicles some of this smart driving information is being included as an optional screen. This would allow more residents to receive feedback on their driving behaviors and teach them to correct inefficient behaviors. If redemption of the in-vehicle device rebates slows then this strategy could switch to a marketing campaign to encourage residents to use their vehicles built in technology to hone their smart driving skills.

⁴⁴ The estimated number of views needed for the target audience to engage with the message varies dramatically by the medium and quality of the creative, but 12 views is seen as relatively standard conversion rate by marketing firms such as RHDG and Wit Media.

⁴⁵ <http://www.automatic.com/>

⁴⁶ Jeffrey Gonder, Matthew Earleywine, and Witt Sparks, “Final Report on the Fuel Saving Effectiveness of Various Driver Feedback Approaches”, National Renewable Energy Laboratory, NREL/MP-5400-50836, March 2011

ANALYSIS STEPS

Social Marketing Campaign Reach

Steps 1-4 are used for each of the three social marketing elements (abbreviated as El). The social marketing elements include driving behavior (DB) such as acceleration, deceleration and maintenance, route planning (RP) to avoid traffic, and trip linking (TL).

1. Calculate the annual number of advertisement impressions assuming 8,000,000 TV views, 5,000,000 radio listeners and 15,000,000 online hits per \$1,000,000 spent advertising each strategy.

$$Impressions_{El} = Budget_{El} \times (TV + radio + internet)$$

2. Calculate the number of targeted impressions assuming 12 views are needed/impression.

$$Targeted_{El} = Impressions_{El} / 12$$

3. Of the targeted impressions, calculate the number that view the behavior as “easy” or “very easy” based on MTC’s Baseline Climate Initiatives Survey. This response ranged from 56 to 60 percent depending on the program element. These are referred to as the potential adopters.

$$Potential_{El} = Targeted_{El} \times Survey_{El}$$

4. Of the potential adopters, calculate the number of actual adopters assuming 10% of the potential adopters carry through to adopt the behavior.

$$Adopters_{El} = 0.1 \times Potential_{El}$$

Trip Linking (TL)

5. Multiply the number of trip linking behavior adopters by the number of trips they are assumed to eliminate per week (2 trips/week)

$$Trips_{week} = Adopters_{TL} \times 2$$

6. Divide the number of trips per week by seven to obtain the daily trips reduced.

$$Trips_{day} = \frac{Trips_{week}}{7}$$

7. Multiply the number of eliminated trips by the average shopping trip length (~4 miles) from MTC’s travel demand model to determine the daily VMT reduced from trip linking.

$$Miles_{TL} = Trips_{day} \times Length_{shopping}$$

Emissions Reductions

Trip Linking

- a) Calculate the emissions reduction using EMFAC 2011 trip end and exhaust emission rates.

$$Reduction_{TL} = Trips_{day} \times Trip\ End\ Rate + Miles_{TL} \times Exhaust\ Rate$$

Route Planning (RP), Driving Behavior (DB), and In-Vehicle (IV) MPG Meters

- a) Obtain the average daily VMT/person and VMT/vehicle from MTC’s Travel Model One.

- b) Calculate the daily miles that will be affected by the program by multiplying the number of people adopting the behavior or vehicles installed with real-time displays by the VMT/person or VMT/vehicle respectively.

$$Miles_{RP} = Adopters_{RP} \times VMT_{person}$$

$$Miles_{DB} = Adopters_{DB} \times VMT_{person}$$

$$Miles_{IV} = Rebates \times VMT_{vehicle}$$

- c) Calculate the daily CO₂ emissions prior to adoption of the campaign elements (El) by applying EMFAC 2011 emission rates.

$$Emissions_{El} = Miles_{El} \times Exhaust\ Rate$$

- d) Solve the equation below for **y**, substituting the expected percent increase in fuel economy of the various strategies for **x** (these values can be found in the assumptions section).

Greenhouse Gas Emissions and Fuel Economy Relationship Curve Equation⁴⁷

$$y = -0.0062x^2 + 0.9832x - 0.7206$$

x = % increase in fuel economy

y = % reduction in fuel consumption or CO₂ emissions

- e) Calculate the daily emissions reductions by applying the calculated value of **y** (the percent reduction in CO₂) to the original daily CO₂ emissions from the vehicles [step c].

$$Reduction_{El} = y_{El} \times Emissions_{El}$$

- f) Sum the emissions reduction from all strategies.

$$Reduction_{Total} = Reduction_{TL} + Reduction_{RP} + Reduction_{DB} + Reduction_{IV}$$

TABLE 24: SMART DRIVING PROGRAM EMISSION REDUCTION BENEFITS

		EIR Alternative				
		No Project	Proposed Plan	Transit Priority Focus	Enhanced Network of Communities	Environment Equity, and Jobs
CO ₂ Emissions Reductions	2020 Daily Short Tons Reduced	0	-1,452	-1,442	0	-1,428
	2020 Percent Per Capita Reduction from 2005 Baseline	0%	-1.9%	-1.8%	0%	-1.8%
	2035 Daily Short Tons Reduced	0	-1,386	-1,392	0	-1,373

⁴⁷ Equation derived from EMFAC 2011.

2035 Percent Per Capita Reduction from 2005 Baseline	0%	-1.6%	-1.6%	0%	-1.6%
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Note that the Enhanced Network of Communities Alternative redirects funding allocated for smart driving to local street and road maintenance, and state highway maintenance. Therefore, that alternative has no emissions reduction benefit from smart driving.

Costs

Social Marketing Campaign

Initial advertising costs for the campaign are assumed to be \$5 million/year for advertising and program management/development. After four years the campaign spending can be reduced to \$2 million/year to remind Bay Area residents to continue practicing the elements of the original campaign. This sums to \$56 million in YOE dollars.

In-Vehicle MPG Meters

MTC's \$100 rebate could deploy 900,000 in-vehicle devices for \$105 million in YOE dollars.

Combined, the total program cost is \$161 million in YOE dollars.

Commuter Benefit Ordinance

In 2012, MTC and the Bay Area Air Quality Management District (BAAQMD) successfully supported Senate Bill 1339 which authorizes BAAQMD and MTC to jointly adopt a regional commute benefit ordinance. The purpose of this legislation is to reduce GHG emissions and traffic congestion, and to improve air quality. The BAAQMD and MTC can adopt this new program on or after January 1, 2013. The two agencies are currently developing plans for drafting and implementing this program and will be seeking input from employers as part of the process. The agencies are required to report to the Legislature in 2016 on the results of the program, including the reduction in motor vehicle trips and emissions of greenhouse gases.

The program will require employers with 50 or more full-time employees in the Bay Area to offer their employees incentives to commute to work via modes other than driving alone. Employers would choose to offer one of the following incentives in order to make alternative commute modes more attractive to their employees:

- The opportunity to pay for transit, vanpooling or bicycling expenses with pre-tax dollars, as allowed by federal law (IRS Code Section 132 (f));
- An employer-provided subsidy of \$75 per employee per month to pay for transit or a vanpool;
- A free shuttle to the workplace operated by the employer; or
- Any employer-chosen alternative to these options that can be demonstrated to provide an equal or greater benefit in terms of reducing GHG emissions.

ASSUMPTIONS AND METHODOLOGY

The primary impact of commuter benefit programs is a reduction in commuting by single occupancy vehicles (SOVs). Commuters may switch to transit, carpooling, or non-motorized modes. In reality, commuter benefits programs may also generate a few new vehicle trips in shared ride vehicles and may shift trips from one non-SOV mode to another. For the sake of simplicity, this analysis assumes a unilateral shift from SOV to modes that do not generate new vehicle trips: sharing a ride in a vanpool or personal vehicle already on the road, taking transit, or using non-motorized modes.

The legislation has a minimum employer size of 50 employees. Data from Zipcode Business Patterns (ZBP) 2008 was used to estimate the percentage of employers (and employees) to which the legislation would apply. Employer data from ZBP for each zipcode was matched to MTC superdistricts using GIS software. See Figure 30 for a map of MTC's 34 superdistricts.

Some employers already offer the types of benefits described in the legislation. In 2008 the City and County of San Francisco enacted similar legislation. In implementing its ordinance, the City found that 46 percent of employers already offered one of the required benefits prior to implementation of the city's ordinance.⁴⁸ Accordingly, it is assumed that 46 percent of employees in the Bay Area would not receive any new benefit as a result of the legislation. This is a conservatively high estimate when applied to areas outside of San Francisco.

Approximately 80 percent of employers in San Francisco who are subject to their ordinance offer only a pre-tax transit benefit. This is the lowest cost option for employers and is therefore assumed to be the compliance path that most employers will choose. To be conservative, we assume that 100 percent of employers choose the pre-tax transit benefit. This option allows employees to purchase transit passes using pre-tax income—a discount of roughly one third for a typical employee.

Empirical research indicates that the long term elasticity of auto trips with respect to transit fares is between 0.15 and 0.3. These figures are synthesized by Litman from several research studies.⁴⁹ They represent average effects in a variety of urban contexts thus allowing the elasticity to be applied throughout the Bay Area without a more refined geographical analysis of employer access to transit. To be conservative, the low end of the range is used here. With transit costs reduced by one third, 4.95 percent of drivers would be expected to switch to transit.

⁴⁸ Data supplied by San Francisco Department of Environment

⁴⁹ Litman, Todd, "Transit Price Elasticities and Cross-Elasticities," *Journal of Public Transportation*, vol. 7, No. 2, 2004, p 53



FIGURE 29: SAN FRANCISCO BAY AREA SUPERDISTRICTS

ANALYSIS STEPS

VT Reduction

1. Match employer data from Zipcode Business Patterns (ZBP) for each zipcode to MTC superdistricts (see Figure 30) using GIS software. Sum the total number of jobs within each superdistrict (SD). A base year of 2008 ZBP data was used for this analysis due to the availability of the data. Since this was a recession year, it is a conservative estimate of the future number of employers subject to the program.
2. Calculate the percentage of jobs within each SD that are located at businesses that meet the 50 employee threshold using data from ZBP. This ranges from 27 to 74 percent with an average of 54 percent of jobs housed within businesses of 50 or more employees.

$$Implementation\ Fraction_{SD} = \frac{\sum_{Emp > 50} Jobs_{SD}}{\sum Jobs_{SD}}$$

3. Use MTC's Travel Model output to calculate daily commute tours by SD and travel mode.
4. Calculate the daily number of SOV commute trips by impacted employers who are *not* already in compliance with the legislation. It is assumed that similar to the results of the program in San Francisco, 46 percent of employers already offer commute benefits. This results in only 54 percent of SOV trips being impacted by implementation of the new program.

$$Impacted\ Trips_{SD} = (Trips_{SD,SOV} \times Implementation\ Fraction_{SD}) \times 0.54$$

5. Calculate the daily number of trips shifted from SOV to transit by the reduction in transit fares. With transit costs reduced by one third, 4.95 percent of impacted trips would be expected to switch to transit.

$$Shifted_{SD} = Impacted\ Trips_{SD} \times 0.0495$$

6. Calculate the daily reduction in VMT from the shifted commute trips and the average trip lengths.

$$\begin{aligned} Average\ Commute\ Round\ Trip\ Distance &= ATD \\ VMT_{SD} &= Shifted_{SD} \times ATD_{SD,SOV} \end{aligned}$$

Emissions Reductions

1. Sum daily shifted trips and use EMFAC2011 trip end emission factors to calculate CO₂ reduced. Sum daily VMT reduced and use EMFAC2011 per mile emission factors to calculate CO₂ reduced.

$$Emissions = \sum_{SD} Shifted_{SD} \times Trip\ End\ Rate + \sum_{SD} VMT_{SD} \times Exhaust\ Rate$$

TABLE 25: COMMUTE BENEFIT ORDINANCE EMISSION REDUCTION BENEFIT

		<i>EIR Alternative</i>				
		<i>No Project</i>	<i>Proposed Plan</i>	<i>Transit Priority Focus</i>	<i>Enhanced Network of Communities</i>	<i>Environment Equity, and Jobs</i>
CO ₂ Emissions Reductions	2020 Daily Short Tons Reduced	-126	-117	-117	-118	-122
	2020 Percent Per Capita Reduction from 2005 Baseline	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%
	2035 Daily Short Tons Reduced	-264	-233	-237	-244	-246
	2035 Percent Per Capita Reduction from 2005 Baseline	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%

Cost

While it is assumed that all employers subject to the legislation will comply with it, MTC and the BAAQMD are committed to providing outreach and assistance to local employers through their existing employer outreach programs.

Vanpools/Employer Shuttles

Vanpool

MTC has coordinated a vanpool program since 1981 to encourage alternative commutes and reduce congestion and emissions. To date, MTC's 511 vanpool program recruitment has consisted of online passenger and driver matching, employer outreach, up to \$500 for start-up fees, up to \$100/year to encourage continued participation when a passenger is lost, free bridge tolls, and various other incentives. With these basic incentives there is an operational vanpool fleet in the Bay Area. However, there has been a significant decrease in the number of vans in recent years. The current fleet numbers 515 vans. This translates to over 5,500 residents commuting to work in vanpools daily.

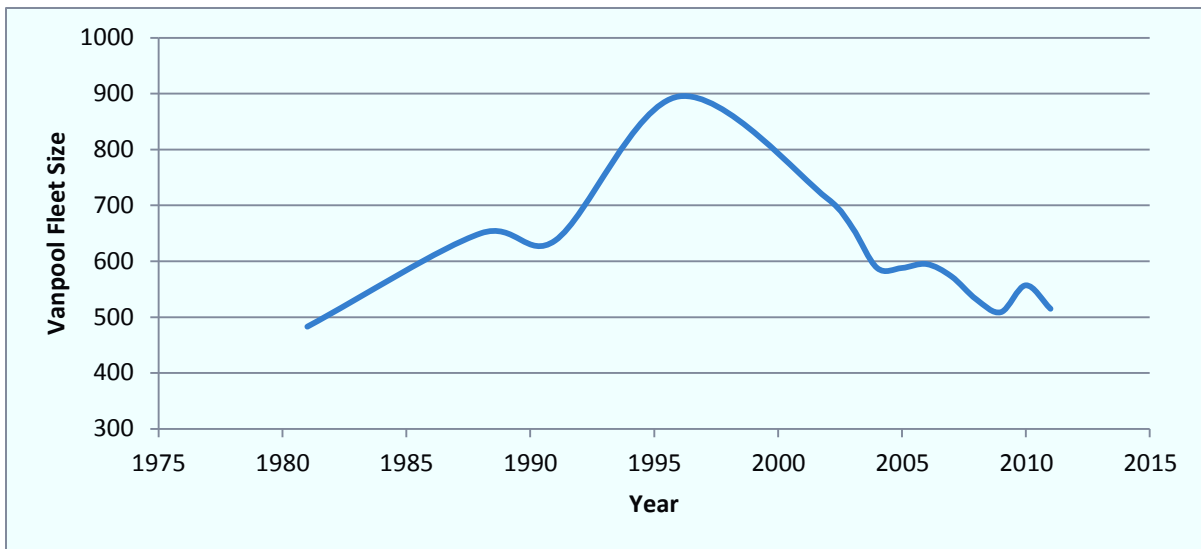


FIGURE 30: VANPOOL FLEET SIZE

Shuttles

In addition to these traditional vanpools, there has been an explosive growth in the number of employer provided shuttles in the Bay Area. These shuttles are used as a recruiting tool and they allow for increased worker productivity due to the onboard wireless internet, thus turning commute time into productive time. Rough estimates indicate that the big technology company shuttles that operate between San Francisco and Silicon Valley transport close to 17,500 people per workday.⁵⁰ The Google shuttle alone carried about 4,500 employees to work every day in 2011 and they were anticipating that the program would grow to 6,000 workers per day in 2012 and more beyond that.⁵¹ Google's shuttle system began as a vanpool in 2006 and rapidly grew into the current system.⁵² Prior to the SB 375 GHG emissions baseline year there were very few employer provided shuttles in the region. For purposes of this analysis there are assumed to have been no shuttles prior to 2005.

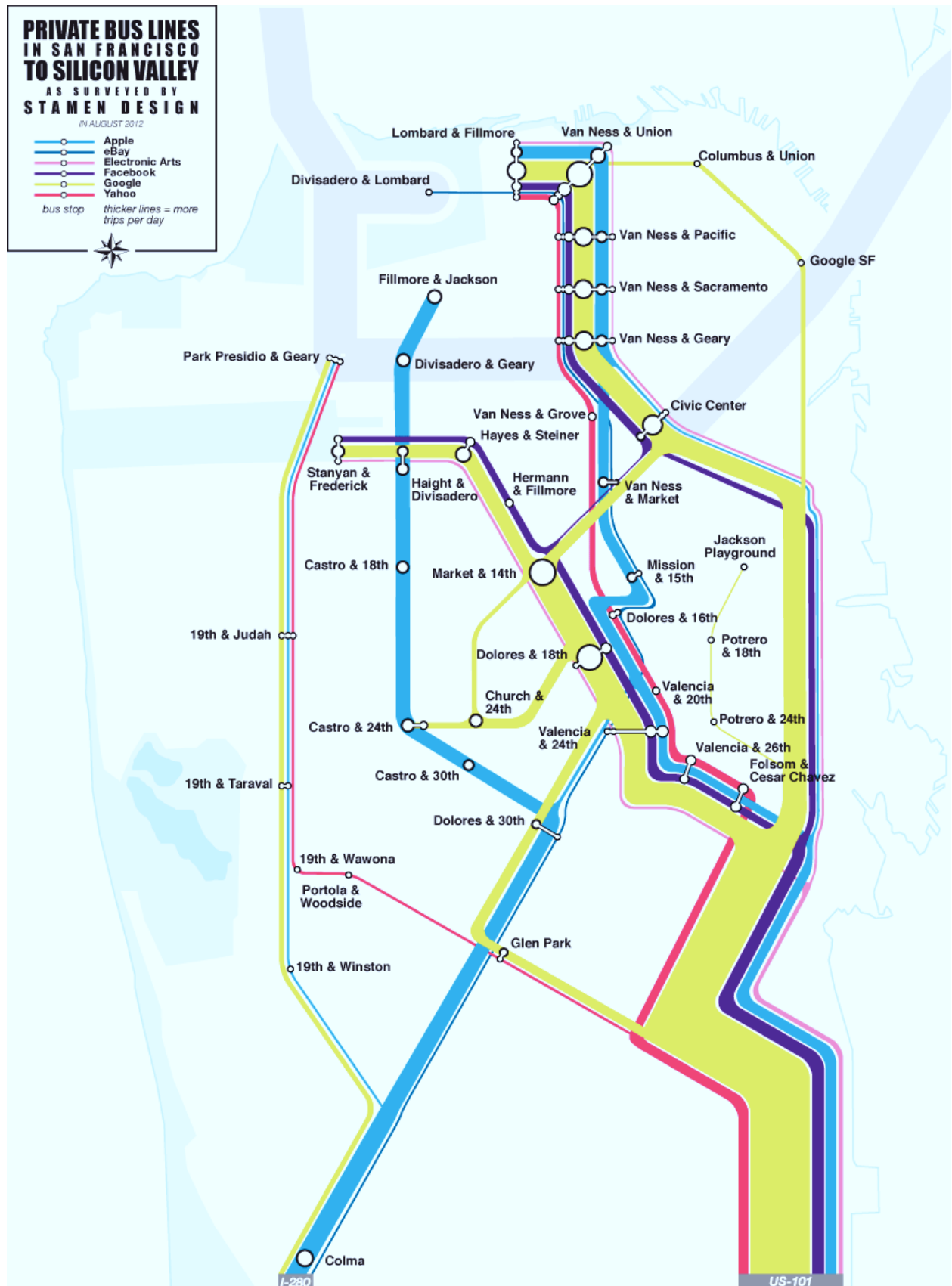
The figure on the following page takes the detailed shuttle routes in San Francisco and simplifies it into a subway style map to communicate relative shuttle volumes. Although the map only shows data for shuttles running from San Francisco to Silicon Valley, there are private shuttles running through all parts on the Bay Area including intra-San Francisco, the East Bay, the Peninsula, around San Jose, and from

⁵⁰ Based on Stamen's estimate that San Francisco shuttles carry approximately equal to 35% of Caltrain ridership levels (<http://stamen.com/zero1/>). Obtaining shuttle ridership levels is extremely difficult due to the confidential nature of the information since businesses use these shuttles as a recruiting tool. In the month prior to Stamen releasing their work, Caltrain reported ridership levels of 50,000 passengers per weekday. <http://www.caltrain.com/Page1731.aspx>

⁵¹ Google Green, Accessed March 13, 2013. <http://www.google.com/green/efficiency/oncampus/>

⁵² Ibid.

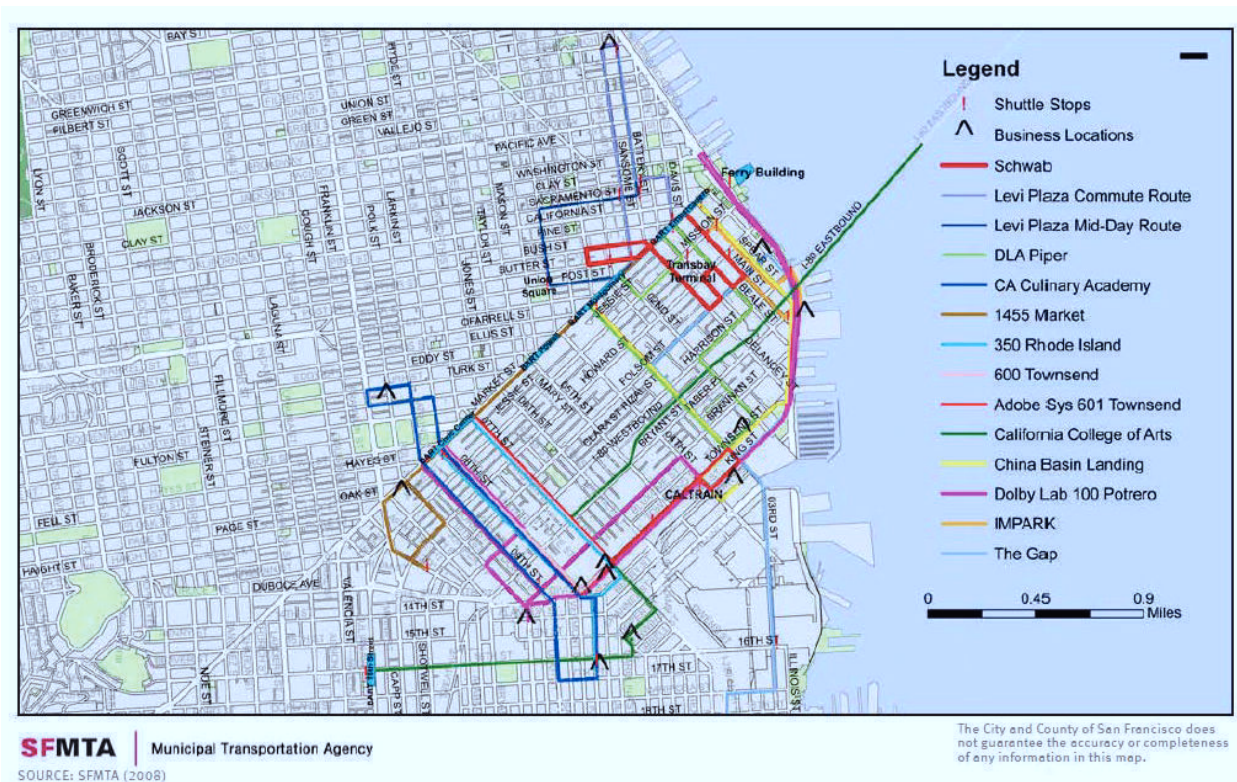
BART and Caltrain stations to corporate campuses. These shuttles are not represented in MTC's travel model and thus must be accounted for in this off-model analysis.



Stamen Design. The City from the Valley 2012. <http://stamen.com/zero1/>

FIGURE 31: SAN FRANCISCO TO SILICON VALLEY EMPLOYER OPERATED SHUTTLES

For a representation of the shuttle routes operating in the South of Market neighborhood of San Francisco see the following map. The high density of the shuttle routes illustrates the popularity of these offerings.



Source: San Francisco County Transportation Authority, Strategic Analysis Report: The Role of Shuttle Service in San Francisco's Transportation System. June 2011. http://www.sfcta.org/sites/default/files/content/Planning/Shuttles/Final_SAR_08-09_2_Shuttles_062811.pdf

FIGURE 32: SOUTH OF MARKET EMPLOYER SHUTTLE ROUTES

ASSUMPTIONS AND METHODOLOGY

Vanpools

MTC will implement a \$400/month/van subsidy for as long as the vanpool operates and meets the minimum usage requirements. This is the same incentive that SANDAG offers in the San Diego region. They have seen strong growth in their program since its inception in 1995. Currently vanpool rentals cost approximately \$1,300⁵³ to rent and operate per month. The \$400 per month would reduce these costs by 31 percent.

MTC assumes this incentive will significantly increase the vanpool fleet, at a minimum resulting in a doubling of the fleet. This equates to 1,030 vanpools, slightly more than the 1996 peak of 900 vans. It is

⁵³ Based on staff conversations with vanpool users.

assumed that the average of 10.8 passengers per vanpool and roundtrip distance of 116 miles remains constant over time. In order to account for the emissions from the vanpool van itself, the calculations only account for 9.8 passengers in the van. Reducing the vanpool size is a simplified proxy for the emissions from the shared van.

The population that shifts to vanpools is anticipated to be consistent with the general population's commute mode share. Information on this mode split for the Proposed Plan is found in Table 26. For the other EIR Alternatives the mode shares vary by ± 3 percent. Emissions reduced from a commuter switching from a single occupancy vehicle (SOV) are assumed to be 100 percent. Emissions reduced from a commuter switching from a two person carpool are assumed to be 50 percent. Emissions reduced from a commuter switching from a 3+ person carpool are assumed to be 33 percent.

Since the baseline year for the SB 375 GHG emissions reduction target is 2005, the current vanpool fleet of 515 vans is not included in the analysis. Only growth above and beyond 515 vans is accounted for.

TABLE 26: PROPOSED PLAN COMMUTE MODE SHARE

<i>Commute Mode</i>	<i>2020</i>	<i>2035</i>
Single Occupancy Vehicle	67%	63%
Carpool (2 People)	10%	10%
Carpool (3+ People)	5%	5%
All Other Modes	18%	22%

The “all other modes” category includes walking, biking, and transit use. These modes are assumed to be non-emitting and therefore no emissions benefits (or disbenefits) are assessed for shifts from these modes to vanpools or shuttles.

Employer Shuttles

It is assumed that increases in the shuttle fleet from this point forward will be caused by companies meeting the requirements of the Commuter Benefit Ordinance (CBO). However, in the CBO analysis it is assumed that 46 percent of employers are already in compliance with the program. These commuters are not included in the CBO analysis because the analysis is based on increased transit use and that level of transit use is accounted for in Travel Model One. But employer operated shuttles are not accounted

for in *Travel Model One*. For this reason, the existing fleet of employer shuttles which are not accounted for in the *Travel Model One* nor the CBO analysis are included here.

To be conservative, this analysis will assume that the 17,500 daily employer operated shuttle riders from San Francisco to the Silicon Valley account for all employer operated shuttle riders in the Bay Area.

It is assumed that the shuttles carry an average of 30 passengers⁵⁴ and that the average round trip commute on a shuttle is 40 miles⁵⁵. The same as for vanpools, it is assumed that if there was not a shuttle available then the passengers commute mode split would mirror that of the general population. This is supported by the San Francisco County's survey of shuttle riders which indicated that 63 percent of shuttle riders would have otherwise driven alone to work⁵⁶.

The shuttles have their own emission impacts as well. It is assumed that the shuttles mirror the average emissions of urban buses. This is likely an overestimate of the emissions since the shuttle buses are generally smaller and the employers who have taken a proactive approach to alternative transportation are generally striving to use the cleanest vehicles available. The exhaust emission rate extracted from EMFAC 2011 and used for 2020 shuttles is 2,311.3 grams/mile. The 2035 exhaust emission rate is 2,151.7 grams/mile.

ANALYSIS STEPS

Vanpool

1. Calculate the daily VMT traveled in vanpools less the vanpool driver mileage. As stated in the assumptions, vanpool members are anticipated to mirror the general population commute mode split prior to joining the vanpool. Only the *increase* in the vanpool fleet is used for this analysis. It is assumed that average vanpool commute distance and average riders per van are consistent over time.

$$\text{Future Vanpool Fleet} = FF$$

$$\text{Existing Vanpool Fleet} = EF$$

$$\text{Average Round Trip Commute Length} = RT$$

$$\text{Single Occupancy Vehicle Mode Share} = SOV$$

⁵⁴ SFCTA Strategic Analysis Report (SAR) 08/09-2. The Role of Shuttle Services in San Francisco's Transportation System. http://www.sfcta.org/sites/default/files/content/Planning/Shuttles/Final_SAR_08-09_2_Shuttles_062811.pdf Most shuttles have a capacity of 25 passengers but the large employers operated shuttles that seat 50 to 70 passengers. A average capacity of 30 passengers per shuttle seemed appropriate.

⁵⁵ Many shuttles operate from BART or Caltrain to employers offices. For this analysis the average round trip commute length includes a passengers travel on transit since that is part of their low emission commute.

⁵⁶ SFCTA Strategic Analysis Report (SAR) 08/09-2. The Role of Shuttle Services in San Francisco's Transportation System. http://www.sfcta.org/sites/default/files/content/Planning/Shuttles/Final_SAR_08-09_2_Shuttles_062811.pdf

$$\text{Two Person Carpool Mode Share} = SCarpool$$

$$\text{Three Plus Person Carpool Mode Share} = LCarpool$$

$$VMT = ((FF - EF) \times (Riders - 1) \times RT) \times (SOV + SCarpool \times 0.5 + LCarpool \times 0.33)$$

2. Calculate the trips per day eliminated by the vanpool riders.

$$Trips = ((FF - EF) \times (Riders - 1)) \times (SOV + SCarpool \times 0.5 + LCarpool \times 0.33)$$

3. Use EMFAC 2011 emission factor rates to calculate the emissions reduced from the vanpools.

$$Emissions = VMT \times Exhaust Rate + Trips \times Trip End Rate$$

Shuttles

1. Calculate shuttle passenger VMT eliminated.

$$VMT = Passengers \times RT \times (SOV + SCarpool \times 0.5 + LCarpool \times 0.33)$$

2. Calculate the vehicle trips reduced by the shuttle passengers.

$$Trips = Passengers \times (SOV + SCarpool \times 0.5 + LCarpool \times 0.33)$$

3. Calculate the minimum number of shuttle trips required to transport the shuttle riders.

$$Shuttle Trips = \frac{Passengers}{Shuttle Capacity}$$

4. Calculate the minimum shuttle VMT to serve the passengers.

$$Shuttle VMT = Shuttle Trips \times RT$$

5. Calculate the shuttle emissions using the urban bus (UB) EMFAC 2011 Emissions Factors.

$$Shuttle Emissions = Shuttle VMT \times UB Rate$$

6. Calculate the shuttle passenger emissions reductions.

$$Passenger Emissions = VMT \times Exhaust Rate + Trips \times Trip End Rate$$

7. Subtract the shuttle emissions from the passenger emissions to obtain the net emissions reduced.

$$Net Emissions = Passenger Emissions - Shuttle Emissions$$

TABLE 27: VANPOOL INCENTIVE/EMPLOYER SHUTTLE EMISSION REDUCTION BENEFIT

		<i>EIR Alternative</i>				
		<i>No Project</i>	<i>Proposed Plan</i>	<i>Transit Priority Focus</i>	<i>Enhanced Network of Communities</i>	<i>Environment Equity, and Jobs</i>
CO ₂ Emissions Reductions	2020 Daily Short Tons Reduced	-176	-230	-231	-230	-227
	2020 Percent Per Capita Reduction from 2005 Baseline	-0.2%	-0.3%	-0.3%	-0.3%	-0.3%
	2035 Daily Short Tons Reduced	-180	-355	-362	-353	-351
	2035 Percent Per Capita Reduction from 2005 Baseline	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%

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Appendix D
List of Transportation Control Measures (TCM) Projects

Vehicle Deployment Throughout the Bay Area¹

AC Transit³

TCM A: Regional Express Bus
Regional Express Bus Program
Vehicle Deployment Throughout the Bay Area¹
February 18, 2009

Transit Operator	Vehicle Type	Serial Registration ²	Funds Obligated	Operating Agency	Route	Weekday Service Hours	Weekend Service Hours
Fairfield-Suisun	Over-The-Road	1M8PDMPA13P055949	11/14/2002	Fairfield-Suisun	40 Vacaville/Fairfield to Pleasant Hill/Walnut Creek BART	5:00 AM - 9:57 AM & 3:01 PM - 8:31 PM	
	Over-The-Road	1M8PDMPA83P055950	11/14/2002	Fairfield-Suisun	40 Vacaville/Fairfield to Pleasant Hill/Walnut Creek BART	5:00 AM - 9:57 AM & 3:01 PM - 8:31 PM	
	Suburban	15GCD201731111920	1/27/2003	Fairfield-Suisun - Transferred from SamTrans ⁴	30 Fairfield to Davis/Sacramento	6:08 AM - 7:05 PM	Sat Only 8:03 AM - 4:43 PM
	Suburban	15GCD201931111921	1/27/2003	Fairfield-Suisun - Transferred from SamTrans ⁴	30 Fairfield to Davis/Sacramento	6:08 AM - 7:05 PM	Sat Only 8:03 AM - 4:43 PM
Golden Gate	Over-The-Road	1M8PDMPA53P055680	11/8/2002	Golden Gate	71 Novato/San Rafael/Marin City/San Francisco	6:35 AM - 8:27 PM	Sat Only 6:59 AM - 7:28 PM
	Over-The-Road	1M8PDMPA73P055681	11/8/2002	Golden Gate	71 Novato/San Rafael/Marin City/San Francisco	6:35 AM - 8:27 PM	Sat Only 6:59 AM - 7:28 PM
	Over-The-Road	1M8PDMPA93P055682	11/8/2002	Golden Gate	72 Santa Rosa/Rohnert Park/Cotati/San Francisco	3:54 AM - 8:59 AM & 2:12 PM - 8:05 PM	
	Over-The-Road	1M8PDMPA03P055683	11/8/2002	Golden Gate	72 Santa Rosa/Rohnert Park/Cotati/San Francisco	3:54 AM - 8:59 AM & 2:12 PM - 8:05 PM	
	Over-The-Road	1M8PDMPA23P055684	11/8/2002	Golden Gate	75 Santa Rosa/Rohnert Park/Cotati - Petaluma /Marin Civic Center/San Rafael	5:02 AM - 8:35 AM & 2:59 PM - 7:18 PM	
	Over-The-Road	1M8PDMPA43P055685	11/8/2002	Golden Gate	75 Santa Rosa/Rohnert Park/Cotati - Petaluma /Marin Civic Center/San Rafael	5:02 AM - 8:35 AM & 2:59 PM - 7:18 PM	
LAVTA	Suburban	15GDD271521110872	3/25/2002	LAVTA	70X Pleasanton - Walnut Creek Express	5:09 AM - 9:16 AM & 3:19 PM - 7:42 PM	
	Suburban	15GDD271721110873	3/25/2002	LAVTA	70X Pleasanton - Walnut Creek Express	5:09 AM - 9:16 AM & 3:19 PM - 7:42 PM	
	Suburban	15GDD271921110874	3/25/2002	LAVTA	70X Pleasanton - Walnut Creek Express	5:09 AM - 9:16 AM & 3:19 PM - 7:42 PM	
	Suburban	15GDD271021110875	3/25/2002	LAVTA	70X Pleasanton - Walnut Creek Express	5:09 AM - 9:16 AM & 3:19 PM - 7:42 PM	
NCTPA	Suburban	15GCD201631111911	1/27/2003	SamTrans Transferring to NCTPA on 2/28/09	June 2009 - Calistoga/Yountville/Napa/American Canyon/Baylink Ferry Terminal	5:00 AM-6:30 PM; Peak Only	
	Suburban	15GCD201831111912	1/27/2003	SamTrans Transferring to NCTPA on 2/28/09	June 2009 - Calistoga/Yountville/Napa/American Canyon/Baylink Ferry Terminal	5:00 AM-6:30 PM; Peak Only	
Tri-Delta	Over-The-Road	1M8PDMPA63P055686	11/8/2002	Tri-Delta	300 Express Commuter Service Brentwood/Pittsburg BART	4:15 AM - 9:07 PM	
	Over-The-Road	1M8PDMPA63P055687	11/8/2002	Tri-Delta	300 Express Commuter Service Brentwood/Pittsburg BART	4:15 AM - 9:07 PM	
	Over-The-Road	1M8PDMPA63P055688	11/8/2002	Tri-Delta	300 Express Commuter Service Brentwood/Pittsburg BART	4:15 AM - 9:07 PM	
	Over-The-Road	1M8PDMPA63P055689	11/8/2002	Tri-Delta	300 Express Commuter Service Brentwood/Pittsburg BART	4:15 AM - 9:07 PM	
Vallejo	Over-The-Road	1M8PDMPA13P055627	11/14/2002	Leased to Fairfield-Suisun ⁵	90 Fairfield/EI Cerrito Del Norte BART	4:55 AM - 10:35 PM	
	Over-The-Road	1M8PDMPA33P055628	11/14/2002	Leased to Fairfield-Suisun ⁵	90 Fairfield/EI Cerrito Del Norte BART	4:55 AM - 10:35 PM	
	Over-The-Road	1M8PDMPA53P055629	11/14/2002	Vallejo	78 Vallejo/Benicia/Pleasant Hill BART/Walnut Creek BART	5:00 AM - 8:38 PM	
	Over-The-Road	1M8PDMPA13P055630	11/14/2002	Leased to Fairfield-Suisun ⁵	90 Fairfield/EI Cerrito Del Norte BART	4:55 AM - 10:35 PM	
	Over-The-Road	1M8PDMPA33P055631	11/14/2002	Leased to Fairfield-Suisun ⁵	90 Fairfield/EI Cerrito Del Norte BART	4:55 AM - 10:35 PM	
	Over-The-Road	1M8PDMPA53P055632	11/14/2002	Vallejo	78 Vallejo/Benicia/Pleasant Hill BART/Walnut Creek BART	5:00 AM - 8:38 PM	
	Over-The-Road	1M8PDMPA73P055633	11/14/2002	Vallejo	78 Vallejo/Benicia/Pleasant Hill BART/Walnut Creek BART	5:00 AM - 8:38 PM	
	Over-The-Road	1M8PDMPA93P055634	11/14/2002	Vallejo	78 Vallejo/Benicia/Pleasant Hill BART/Walnut Creek BART	5:00 AM - 8:38 PM	
	Over-The-Road	1M8PDMPA03P055635	11/14/2002	Vallejo	78 Vallejo/Benicia/Pleasant Hill BART/Walnut Creek BART	5:00 AM - 8:38 PM	
	Over-The-Road	1M8PDMPA23P055636	11/14/2002	Leased to Fairfield-Suisun ⁵	90 Fairfield/EI Cerrito Del Norte BART	4:55 AM - 10:35 PM	
	Over-The-Road	1M8PDMPA43P055637	11/14/2002	Leased to Fairfield-Suisun ⁵	90 Fairfield/EI Cerrito Del Norte BART	4:55 AM - 10:35 PM	
	Over-The-Road	1M8PDMPA83P055639	11/14/2002	Leased to Fairfield-Suisun ⁵	90 Fairfield/EI Cerrito Del Norte BART	4:55 AM - 10:35 PM	
	Suburban	15GCD211121111974	3/7/2002	WestCat	30Z Hercules Transit Center/Martinez/BART	5:59 AM - 8:03 PM	
	Suburban	15GCD211521111975	3/7/2002	WestCat	30Z Hercules Transit Center/Martinez/BART	5:59 AM - 8:03 PM	
WestCat	Suburban	15GCD211121111976	3/7/2002	WestCat	30Z Hercules Transit Center/Martinez/BART	5:59 AM - 8:03 PM	
	Suburban	15GCD201X31111913	1/27/2003	WestCat - Transferred from SamTrans ⁴	LYNX Rodeo/Hercules/San Francisco Transbay Terminal	5:00 AM - 9:45 AM & 3:30 PM - 8:33 PM	
	Suburban	15GCD201131111914	1/27/2003	WestCat - Transferred from SamTrans ⁴	LYNX Rodeo/Hercules/San Francisco Transbay Terminal	5:00 AM - 9:45 AM & 3:30 PM - 8:33 PM	
	Suburban	15GCD201331111915	1/27/2003	SamTrans ⁴	LYNX Rodeo/Hercules/San Francisco Transbay Terminal	5:00 AM - 9:45 AM & 3:30 PM - 8:33 PM	

1. Please note: MTC does not currently have information compiled on cumulative operating hours for all of the TCRP buses. For projects where the buses have been assigned to routes receiving operating funds that are tied to required performance measures, MTC has data compiled on the annual performance of those routes.
2. Each vehicle may be deployed on any of the approved routes listed for each operator.
3. Vehicles are deployed as needed for various routes on weekdays and weekends. All transbay service does not operate on weekends, but all vehicles may be deployed on weekend transbay service.
4. SamTrans REX service was discontinued in 2007 due to low ridership; all 11 TCRP vehicles purchased for the REX service were reallocated to AC Transit, Fairfield-Suisun Transit, WestCat, and NCTPA.
5. Route 90 service was transferred from Vallejo to Fairfield-Suisun Transit in 2006.

TCM B: Bicycle/Pedestrian Program
TDA ARTICLE 3 [Transportation Development Act Funds for Bicycle and Pedestrian Projects]

SPONSOR		PROJECT NAME	AMOUNT
FY 2003-04	Alameda County	ADA Compliant Accessible Ramps	\$ 105,767
FY 2003-04	Alameda County	Tesla Road Bicycle Lanes	\$ 51,000
FY 2003-04	City of Albany	Manor Way Pedestrian Improvements	\$ 22,706
FY 2003-04	City of Berkeley	Bicycle Safety Education	\$ 30,000
FY 2003-04	City of Berkeley	Prepare plan for implementing future	\$ 31,033
FY 2003-04	City of Fremont	Bike Detectors, Bike Logo on Pavement,	\$ 128,989
FY 2003-04	City of Hayward	Installation of Wheelchair Ramps	\$ 84,198
FY 2003-04	City of Livermore	Complete Portion of S. Livermore Valley	\$ 97,301
FY 2003-04	City of Newark	Silliman Activity Center Pedestrian/	\$ 59,158
FY 2003-04	City of Oakland	Bancroft Ave. Bike Lanes (96th - Durant)	\$ 96,000
FY 2003-04	City of Oakland	Citywide Ped. Curb Ramp Program -	\$ 295,266
FY 2003-04	City of Oakland	Lake Merritt 12th St. Dam Ped/Bike	\$ 116,000
FY 2003-04	City of Oakland	Pedestrian Bulb Outs-Highland &	\$ 100,000
FY 2003-04	City of Oakland	Walk/Bike Calif. Conf. - Alameda Co.	\$ 30,000
FY 2003-04	City of Oakland	West City of Oakland Bay Trail	\$ 289,000
FY 2003-04	City of Piedmont	Sidewalk Extension and Curb Cuts	\$ 6,506
FY 2003-04	City of Pleasanton	ADA Compliant Wheelchair Accessible	\$ 38,627
FY 2003-04	City of San Leandro	Install New Curb Cuts & Upgrade	\$ 40,000
FY 2003-04	City of Brentwood	Installation of Wheelchair Ramps	\$ 30,000
FY 2003-04	City of Concord	Iron Horse Trail Rte 242 Undercrossing	\$ 36,000
FY 2003-04	City of Concord	Wren Avenue Ped. Improvements	\$ 45,000
FY 2003-04	Contra Costa County	Bicycle/Pedestrian Safety Education	\$ 21,500
FY 2003-04	Contra Costa County	Olympic Blvd. Ped. Path Phase II	\$ 115,000
FY 2003-04	City of Lafayette	Hough Avenue Sidewalk	\$ 37,000
FY 2003-04	City of Moraga	Rheem Blvd./Moraga Rd. Intersection	\$ 66,100
FY 2003-04	City of Pittsburg	Polaris Drive Bike Facility	\$ 77,500
FY 2003-04	City of San Ramon	Dougherty Road Sidewalk	\$ 25,000
FY 2003-04	Marin County	Bicycle/Pedestrian Bridge	\$ 140,000
FY 2003-04	Mill Valley	Signage Project	\$ 7,200
FY 2003-04	City of Novato	Commuter Bikeway Connection	\$ 402,286
FY 2003-04	City of Novato	Hill Road Path Connection	\$ 60,000
FY 2003-04	City of San Anselmo	Purchase & Install Bicycle Racks	\$ 15,000
FY 2003-04	Napa County	Yountville Cross Rd. Bike Lane	\$ 150,000
FY 2003-04	Yountville	Yountville Cross Rd. Bike Lane	\$ 47,000
FY 2003-04	City of Campbell	Westmont Ave. Improvement Project	\$ 43,192
FY 2003-04	City of Los Altos	Fremont Ave. Sidewalk Phase III	\$ 15,781
FY 2003-04	Los Altos Hills	Paseo Del Roble Pedestrian Bridge	\$ 9,554
FY 2003-04	City of Milpitas	Calaveras Blvd. Sidewalk & Bike Path	\$ 36,895
FY 2003-04	Mountain View	Access Ramp Installation	\$ 24,905
FY 2003-04	Mountain View	Audible Ped. Signal Installations	\$ 16,500
FY 2003-04	Mountain View	Bicycle Path Construction	\$ 13,113
FY 2003-04	Palo Alto	Baffle Replacements: Calif. Ave.	\$ 15,993
FY 2003-04	Palo Alto	Homer Ave. Ped. Bicycle Undercrossing	\$ 293,000
FY 2003-04	Palo Alto	Ped. Walkway Lighted Warning System	\$ 20,000
FY 2003-04	City of San Jose	ADA Wheel Chair Curb & Ramp Install.	\$ 100,000
FY 2003-04	City of San Jose	Certified TDA Fiscal Audit	\$ 9,000
FY 2003-04	City of San Jose	Murdock Park Bridge over San Tomas	\$ 100,000
FY 2003-04	City of San Jose	Ped & Bike Facility Signing & Striping	\$ 100,000
FY 2003-04	City of San Jose	Ped & Bike Safety Education	\$ 50,000
FY 2003-04	City of San Jose	Pedro Street Sidewalk Improvement	\$ 124,434
FY 2003-04	City of San Jose	Street Sidewalk Improvement	\$ 147,435
FY 2003-04	City of Santa Clara	Certified TDA Fiscal Audit	\$ 5,000
FY 2003-04	City of Santa Clara	Install Bike & Ped. Improvements	\$ 61,815
FY 2003-04	City of Santa Clara	Update City's Existing Bike Plan &	\$ 3,900
FY 2003-04	Santa Clara County	Bike Detector @ various Intersections	\$ 58,118

TCM B: Bicycle/Pedestrian Program
TDA ARTICLE 3 [Transportation Development Act Funds for Bicycle and Pedestrian Projects]

	SPONSOR	PROJECT NAME	AMOUNT
FY 2003-04	Santa Clara County	Path along McKee Rd. bet Staples Ave.	\$ 50,000
FY 2003-04	City of Saratoga	Saratoga Avenue Walkway Project	\$ 17,254
FY 2003-04	City of Sunnyvale	Calabazas Creek Trail	\$ 50,152
FY 2003-04	San Francisco City and County	Bicycle Projects	\$ 404,000
FY 2003-04	San Francisco City and County	Pedestrian Projects	\$ 300,000
FY 2003-04	City of Half Moon Bay	Construct Rt. 92 Bicycle Lanes and	\$ 485,146
FY 2003-04	City of Pacifica	Milagra Drive Overcrossing at State	\$ 240,000
FY 2003-04	City of San Bruno	Crystal Springs Rd. Traffic Signal	\$ 20,000
FY 2003-04	City of San Mateo	Bikeway Detection Units	\$ 30,000
FY 2003-04	City of San Mateo	Regional Bayfront Trail Upgrade	\$ 150,000
FY 2003-04	South San Francisco	Construct San Francisco Bay Trail	\$ 100,000
FY 2003-04	South San Francisco	Orange Avenue Intersection Improve.	\$ 100,000
FY 2003-04	City of Benicia	Park Road Bike/Ped Improvements	\$ 160,000
FY 2003-04	Solano County	Dixon to Davis Bike Route	\$ 125,000
FY 2003-04	City of Suisun City	Central County Bikeway	\$ 25,000
FY 2003-04	City of Healdsburg	Foss Creek Northwestern Pacific Multi-	\$ 99,695
FY 2003-04	City of Petaluma	Washington Creek Multi-Use Path	\$ 175,000
FY 2003-04	City of Santa Rosa	Sonoma Ave. Bike Lanes Phase II	\$ 50,000
FY 2003-04	Sonoma County	Old Redwood Highway Class II Bike Lanes	\$ 350,000
FY 2004-05	Alameda County	Conduct a planning study & develop	\$ 38,000
FY 2004-05	Alameda County	Conduct bicycle plan study	\$ 59,650
FY 2004-05	Alameda County	Sign & stripe 0.6 miles of 6-foot wide	\$ 100,000
FY 2004-05	City of Berkeley	Contract with a qualified consultant	\$ 34,281
FY 2004-05	City of Berkeley	Educate children about bicycle safety	\$ 30,000
FY 2004-05	City of Fremont	Stripe bike lanes, modify bike lane	\$ 121,168
FY 2004-05	City of Hayward	Design & construct ADA wheel chair	\$ 88,925
FY 2004-05	City of Newark	Design & construct ADA wheel chair	\$ 27,009
FY 2004-05	City of Piedmont	Design & construct ADA wheel chair	\$ 6,852
FY 2004-05	City of Pleasanton	Preserve Golf Course	\$ 75,000
FY 2004-05	City of San Leandro	Install curb ramps, accessible ped.	\$ 41,438
FY 2004-05	City of San Leandro	Install curb ramps, accessible ped.	\$ 50,024
FY 2004-05	City of San Leandro	Install curb ramps, accessible ped.	\$ 8,000
FY 2004-05	City of Antioch	Improve curbs, ramps, crosswalk, signs	\$ 80,000
FY 2004-05	City of Brentwood	Install lighted crosswalk and flashing lights	\$ 31,500
FY 2004-05	City of Concord	Construct 500 ft of 4-to 6-foot wide bike/ped path	\$ 45,000
FY 2004-05	City of El Cerrito	Conduct a planning study for bicycle/ped needs	\$ 26,500
FY 2004-05	City of Lafayette	Construct 125 feet of 5-foot wide	\$ 10,000
FY 2004-05	City of Martinez	Replace the two existing unsafe bridges	\$ 90,000
FY 2004-05	City of Orinda	Develop a Lamorinda Trail Map & install	\$ 28,500
FY 2004-05	City of Pittsburg	Construct Class II and Class III	\$ 51,000
FY 2004-05	City of Pittsburg	Sign & stripe 3600 feet of 13-foot wide	\$ 52,000
FY 2004-05	City of San Pablo	Install bike/ped friendly lighting	\$ 45,100
FY 2004-05	City of Walnut Creek	Construct 2040 feet of asphalt walkway	\$ 95,000
FY 2004-05	Contra Costa County	Construct 344 feet of 4.5-foot wide bike/ped path	\$ 201,000
FY 2004-05	Contra Costa County	Construct 402 feet of 5-foot wide bike/ped path	\$ 158,928
FY 2004-05	Contra Costa County	Provide bicycle & pedestrian safety	\$ 20,000
FY 2004-05	City of San Rafael	Construct 6' wide sidewalk & stripe	\$ 207,710
FY 2004-05	City of Sausalito	Construct 6' wide sidewalk & stripe	\$ 186,290
FY 2004-05	City of Calistoga	Construct 1.0 miles of Class I bike-ped path	\$ 270,881
FY 2004-05	City of Napa	Construct 2.0 miles of Class I bikeway	\$ 149,727
FY 2004-05	City of Campbell	Construct Class II bike lockers at J.D.	\$ 24,308
FY 2004-05	City of Campbell	Widen & regrade bicycle/Pedestrian	\$ 515,600
FY 2004-05	City of Cupertino	Construct 1030' bike path	\$ 107,622
FY 2004-05	City of Gilroy	Complete 881' of Uvas Creek Class I	\$ 50,000
FY 2004-05	City of Gilroy	Refurbish & replace bikeway signs, etc	\$ 10,611

TCM B: Bicycle/Pedestrian Program
TDA ARTICLE 3 [Transportation Development Act Funds for Bicycle and Pedestrian Projects]

	SPONSOR	PROJECT NAME	AMOUNT
FY 2004-05	City of Gilroy	Rehabilitate, resurface & stripe 2.5 mile path	\$ 60,666
FY 2004-05	City of Los Altos	Construct approx. 300' of concrete bike path	\$ 27,354
FY 2004-05	City of Los Altos	Replace approx. 2,800 lineal feet of bike path	\$ 17,580
FY 2004-05	City of Los Gatos	Design & construct solution to restore path	\$ 35,000
FY 2004-05	City of Morgan Hill	Install bicycle sensitive detector	\$ 36,000
FY 2004-05	City of Mountain View	Install countdown pedestrian signals	\$ 30,000
FY 2004-05	City of Mountain View	Install curb access ramps at Showers	\$ 2,381
FY 2004-05	City of Mountain View	Install curb access ramps at various	\$ 15,696
FY 2004-05	City of Mountain View	Purchase & install 14 bicycle lockers	\$ 14,506
FY 2004-05	City of Palo Alto	Construct raised pavement pedestrian path	\$ 50,000
FY 2004-05	City of San Jose	Construct 0.66 miles of Class I paved path	\$ 712,131
FY 2004-05	City of San Jose	Design & construct ADA wheel chair improvement	\$ 176,068
FY 2004-05	City of San Jose	Design & construct sidewalk for school	\$ 36,000
FY 2004-05	City of San Jose	Design & install 12' wide asphalt path	\$ 136,821
FY 2004-05	City of San Jose	Install median island ped. Refuge	\$ 185,000
FY 2004-05	City of San Jose	Install sidewalk, ADA curb ramps	\$ 90,000
FY 2004-05	City of San Jose	Provide bicycle & pedestrian safety	\$ 50,000
FY 2004-05	City of San Jose	Stripe crosswalks, paint pavements	\$ 100,000
FY 2004-05	City of Santa Clara	Perform an annual transportation	\$ 5,000
FY 2004-05	City of Santa Clara	Stripe crosswalks & paint pavements	\$ 62,148
FY 2004-05	City of Saratoga	Install continuous curb & gutter	\$ 19,357
FY 2004-05	City of Sunnyvale	Provide gates, signs, fencing and ramps	\$ 27,550
FY 2004-05	Santa Clara County	Construct a 3,300' by 5' walkway	\$ 63,403
FY 2004-05	Santa Clara County	Sign & restripe 8" stripe on shoulders	\$ 121,105
FY 2004-05	SF City/County	Bicycle safety brochures, maps, public education	\$ 31,500
FY 2004-05	SF City/County	Prelim. engineering (plan & design) of bike path	\$ 200,000
FY 2004-05	SF City/County	Purchase & install bicycle racks	\$ 95,000
FY 2004-05	SF City/County	Repair public sidewalks at various locations	\$ 115,000
FY 2004-05	SF City/County	Stripe & sign Class II bike lanes	\$ 188,500
FY 2004-05	City of Benicia	Final design plans, specs & estimate	\$ 124,573
FY 2004-05	City of Suisun City	Constr. 10' wide concrete bike path	\$ 86,000
FY 2004-05	City of Vacaville, Transit	Construct 3400 feet of Class I bike/Ped path	\$ 148,738
FY 2004-05	Solano Transportation Authority (STA)	Build bridge adjacent to existing path	\$ 76,000
FY 2004-05	City of Petaluma	Construction of pedestrian & bicycle path	\$ 54,876
FY 2004-05	City of Rohnert Park	Install 80' long bicycle & pedestrian path	\$ 160,000
FY 2004-05	City of Santa Rosa	Install directional signage & ADA signs	\$ 18,900
FY 2004-05	County of Sonoma	Construct 1.5 miles of Class I Bikeway	\$ 160,000
FY 2004-05	County of Sonoma	Conduct bicycle safety education workshop	\$ 10,000
FY 2004-05	County of Sonoma	Install 27 "Share Road" bicycle sign	\$ 15,000
FY 2004-05	County of Sonoma	Purchase 37 front loading bicycle	\$ 5,000
FY 2005-06	San Carlos	Class II bike lanes on Alameda de Las Pulgas and on Brittan Avenue; Class III bike lanes on Old County Road	\$ 20,000
FY 2005-06	San Mateo	Design of a pedestrian and bicycle bridge in the vicinity of the Hillsdale interchange of highway U.S. 101	\$ 100,000
FY 2005-06	South San Francisco	Bicycle and pedestrian crosswalk and signals at intersection of Spruce Ave. and South San Francisco Linear Park	\$ 150,000
FY 2005-06	Half Moon Bay	Construct 6600 foot Class I trail in the right of way of Highway 1 between Highway 92 and Higgins Purisima Rd.	\$ 220,000
FY 2005-06	Brisbane	Install 45 feet by 8 feet asphalt cement path adjacent to Shoreline Court; sign and restripe existing Class II bikeway	\$ 25,739

TCM B: Bicycle/Pedestrian Program
TDA ARTICLE 3 [Transportation Development Act Funds for Bicycle and Pedestrian Projects]

	SPONSOR	PROJECT NAME	AMOUNT
FY 2005-06	South San Francisco	Construct 363 feet by 12 feet asphalt bicycle and pedestrian trail near the Oyster Point Marina	\$ 36,000
FY 2005-06	San Bruno	Construct a Class II bike lane in both directions of Sneath Lane from El Camino Real to Skyline Boulevard	\$ 60,000
FY 2005-06	Daly City	Install bike lanes on Callan Blvd from King Dr to Serramonte Blvd and along Serramonte Boulevard	\$ 82,000
FY 2005-06	Burlingame	Install bike lane directional signs at 52 locations along north-south bicycle routes throughout the city	\$ 17,400
FY 2005-06	Burlingame	Install an in-pavement lighted crosswalk system across Carolan Avenue at Morrell Avenue, including new push buttons	\$ 30,000
FY 2005-06	Menlo Park	Install video detection for bikes at 3 intersections: Willow at Middlefield, Marsh at Bohannon, Marsh at Bay	\$ 44,000
FY 2005-06	San Mateo	Install bridge railing fencing on the north side of the Nineteenth Avenue Bridge over highway U.S. 101	\$ 50,000
FY 2005-06	Menlo Park	Create bicycle lanes on Bay Road between Berkeley Avenue and Willow Road, plus signage	\$ 13,600
FY 2005-06	San Mateo	Install bike detection loops at: 3rd + Claremont, 3rd + Delaware, 4th + Claremont, 4th + Delaware	\$ 40,000
FY 2005-06	Daly City	Install in-pavement lights and warning signs: Park Plaza Dr. north of Belmar, and Mission St. at Evergreen Ave.	\$ 120,000
FY 2005-06	San Mateo	Install pedestrian countdown signal heads at 27 existing signalized intersections throughout the city	\$ 50,000
FY 2005-06	Daly City	Install pedestrian countdown signal heads at 15 signalized intersections; and audible warnings at 11 of them	\$ 20,000
FY 2005-06	Burlingame	Install pedestrian countdown signal heads with audible pedestrian warnings at 8 signalized intersections	\$ 30,900
FY 2005-06	Menlo Park	Create bicycle lanes on Middlefield Road between Willow Road and San Francisquito Creek	\$ 2,400
FY 2005-06	San Mateo	Install in-pavement lighted crosswalks: 5th Ave. at Central Park; Bovet Rd. betw. Borel Ave. and El Camino Real	\$ 110,000
FY 2005-06	South San Francisco	Install pedestrian countdown signal heads at 12 existing signalized intersections throughout the city	\$ 22,000
FY 2005-06	County of San Mateo	Bike detection loops, countdown signal heads with audible warnings, upgrade pedestrian signal actuators	\$ 80,509
FY 2005-06	Sebastopol	Construct .5 mile Class I trail between Joe Rodota trail and Sebastopol Avenue and Morris Street intersection	\$ 51,356
FY 2005-06	Santa Rosa	Construct connector ramp between Joe Rodota trail and Pierson Reach of Prince Memorial Greenway trail	\$ 350,000
FY 2005-06	Windsor	Construct a 950 foot Class I trail within Keiser Park, including bridge crossing a tributary of Starr Creek	\$ 112,000

TCM B: Bicycle/Pedestrian Program
TDA ARTICLE 3 [Transportation Development Act Funds for Bicycle and Pedestrian Projects]

	SPONSOR	PROJECT NAME	AMOUNT
FY 2005-06	Contra Costa County, Health Services	Provide bicycle and pedestrian safety education to low-income county residents, particularly children	\$ 20,000
FY 2005-06	Concord	Construct 500 foot Class I trail adjacent to Galindo Crk. + Ygnacio Valley Rd betw. Alberta Way + Pebble Glen Dr	\$ 60,000
FY 2005-06	Lafayette	1030 feet x 5 feet sidewalk Sweet Dr. betw Walnut + Woodview; Woodview Dr. betw. St Mary's + Sweet Drive	\$ 110,000
FY 2005-06	Antioch	Construct curb ramps and sidewalks at Hillcrest Avenue, Somersville Road, "G" Street, and Dallas Ranch Road	\$ 110,000
FY 2005-06	Brentwood	Install pedestrian countdown signal heads + large diameter pedestrian push buttons at 12 signalized intersections	\$ 66,000
FY 2005-06	Contra Costa County, Public Works	Construct 240 feet x 5 feet sidewalk and curb ramps on Camino Tassajara and on Hansen Lane	\$ 20,000
FY 2005-06	Orinda	Replace 12 existing non-compliant curb ramps in downtown Orinda with ADA compliant ramps	\$ 45,000
FY 2005-06	San Pablo	Install in-pavement lighted crosswalks: Market Avenue at 21st St.; 23rd St. at Wilcox Ave.; 23rd St. at Stanford Ave.	\$ 180,000
FY 2005-06	Brentwood	Restripe Minnesota Ave. bike lane; install lighted crosswalk; construct 1300 feet of sidewalk, curb and gutter	\$ 31,000
FY 2005-06	San Francisco	Public sidewalk repair and reconstruction	\$ 180,000
FY 2005-06	San Francisco	Preliminary engineering of curb ramps	\$ 270,000
FY 2005-06	San Francisco	Safety brochures, maps, public outreach concerning bicycle pavement arrows, hotline, and bicycle safety advertising	\$ 45,000
FY 2005-06	San Francisco	Purchase and install bicycle racks at various locations in San Francisco as requested by the public	\$ 100,000
FY 2005-06	San Francisco	Stripe and sign bike lanes: Conservatory Drive East, San Jose Avenue ramps, Townsend Street, and elsewhere	\$ 305,000
FY 2005-06	Berkeley	Bicycle & Pedestrian Injury Prevention Program	\$ 30,000
FY 2005-06	Berkeley	Ninth Street Bicycle Boulevard extension (Project from FY01/02)	\$ 135,000
FY 2005-06	Oakland	ADA Compliant Wheelchair Accessible Ramps (Project Completed FY01/02)	\$ 294,548
FY 2005-06	Oakland	Laurel Pedestrian Project, Phase I (Project Completed FY01/02)	\$ 200,000
FY 2005-06	Oakland	MacArthur Blvd. Bicycle Lane Design (Project Completed FY01/02)	\$ 55,000
FY 2005-06	Oakland	Grand Avenue Transit and Pedestrian Improvements (Project from FY 04/05)	\$ 245,847
FY 2005-06	Oakland	ADA Compliant Wheelchair Accessible Ramps Program	\$ 121,144
FY 2005-06	Oakland	Market Street Bikeway	\$ 165,000
FY 2005-06	Oakland	Bancroft Bikeway Gap Closures	\$ 25,000
FY 2005-06	Piedmont	ADA Wheelchair Accessible Ramps and Pedestrian enhancements at Rose/Arroyo & Grand Ave	\$ 8,353
FY 2005-06	Hayward	ADA Wheelchair Accessible Ramps	\$ 109,309

TCM B: Bicycle/Pedestrian Program
TDA ARTICLE 3 [Transportation Development Act Funds for Bicycle and Pedestrian Projects]

	SPONSOR	PROJECT NAME	AMOUNT
FY 2005-06	San Leandro	Pedestrian Accessibility Improvements & Sidewalk Gap Closures	\$ 74,177
FY 2005-06	Fremont	Citywide ADA Compliant Wheelchair Accessible Ramps	\$ 158,067
FY 2005-06	Newark	History Center Complex Sidewalks and ADA Wheelchair Accessible Ramps	\$ 33,072
FY 2005-06	Union City	San Francisco Bay Trail Specific Plan (Project Completed FY01/02)	\$ 63,585
FY 2005-06	Dublin	Bicycle Master Plan	\$ 45,144
FY 2005-06	Livermore	Chestnut and N. P Street Bicycle Lanes	\$ 113,044
FY 2005-06	Alameda Co. Congestion Management Agency	Alameda Countywide Bicycle Master Plan	\$ 20,000
FY 2005-06	County of Alameda	Pedestrian Safety Improvements in the vicinity of Schools	\$ 75,775
FY 2005-06	County of Alameda	Pedestrian Safety Improvement Projects - Sidewalk Improvements	\$ 75,600
FY 2005-06	County of Alameda	Restriping Bicycle Lanes Along Various Roadways	\$ 30,000
FY 2005-06	Benicia	Stripe and sign bike lanes: Military East between East 5th Street and Park Road	\$ 25,000
FY 2005-06	Fairfield	Design McGary Road segment of Solano Bikeway Extension and complete extension feasibility study	\$ 100,000
FY 2005-06	Suisun City	Construct curb ramps and sidewalks at Whispering Bay Lane and Francisco Dr.	\$ 5,400
FY 2005-06	Suisun City	Replace existing non-compliant curb ramps in downtown Suisun City with ADA compliant ramps	\$ 11,856
FY 2005-06	Solano County	Reconstruct deck and railings, seismic retrofit, lighting and pathways to railroad trestle bridge over Putah Creek	\$ 180,000
FY 2005-06	Campbell	Implement bike lanes on Harriet Ave and Union Ave, Replace Los Gatos creek bridge, and widen Campbell Ave bridge	\$ 27,859
FY 2005-06	Campbell	Design and construct sidewalk and bike lanes and edge striping, curb and gutter along Westmont Avenue	\$ 39,992
FY 2005-06	Campbell	Widen Campbell Ave. bridge over Los Gatos Creek for bike lane and sidewalk; and reconstruct sidewalk under SR 17	\$ 240,000
FY 2005-06	Cupertino	Construct pedestrian and bicycle bridge across Interstate 280 along Mary Avenue between Homestead Rd and Meteor Dr	\$ 38,361
FY 2005-06	Los Altos Hills	Replace pedestrian bridge adjacent to the Foothill College entrance road connecting to El Monte Road	\$ 11,310
FY 2005-06	Los Gatos	Replace existing College Avenue sidewalk and fencing; and repair Los Gatos Creek Trail footbridge decking	\$ 20,000
FY 2005-06	Milpitas	Install ADA pedestrian ramps with truncated dome landings along suggested routes to schools	\$ 47,112
FY 2005-06	Morgan Hill	Identify where additional bicycle and pedestrian trails can be established adjacent to creeks and streams	\$ 32,000
FY 2005-06	Mountain View	Bicycle boulevard from Mayfield Mall area to Stevens Creek Trail, including signs, markings and signal modifications	\$ 25,000

TCM B: Bicycle/Pedestrian Program
TDA ARTICLE 3 [Transportation Development Act Funds for Bicycle and Pedestrian Projects]

	SPONSOR	PROJECT NAME	AMOUNT
FY 2005-06	Mountain View	ADA Compliant Wheelchair Accessible Ramps Program	\$ 17,000
FY 2005-06	Mountain View	Produce bicycle and pedestrian education and awareness materials, and a new bike map and multilingual flyers	\$ 5,000
FY 2005-06	Mountain View	Install "bikes wrong way" signs on existing poles along California Street and adjacent streets	\$ 5,217
FY 2005-06	Palo Alto	Bicycle boulevard along Maybell Ave and Donald Dr.: signs, markings, speed tables, & median refuge islands	\$ 75,000
FY 2005-06	San Jose	Install sidewalk, curb and gutter to improve access to Lynhaven Elementary School	\$ 90,000
FY 2005-06	San Jose	Install sidewalk, curb and gutter to fill gap on Borina Ave. at Saratoga Ave.	\$ 70,000
FY 2005-06	San Jose	Install sidewalk, curb and gutter to improve access on both sides of Yerba Buena Road at Thompson Creek	\$ 47,000
FY 2005-06	San Jose	Install sidewalk, curb, gutter and ADA ramps on Carola Avenue at Clarita Avenue	\$ 110,000
FY 2005-06	San Jose	Install sidewalk, curb, gutter, pedestrian crossing and median island to provide access to Penitencia Creek County Park	\$ 62,000
FY 2005-06	San Jose	Install sidewalk, curb and gutter on Senter Road at Burke Street	\$ 58,000
FY 2005-06	San Jose	Install sidewalk, curb and gutter to improve access to Toyon Elementary School	\$ 45,000
FY 2005-06	San Jose	Citywide ADA Compliant Wheelchair Accessible Ramps	\$ 100,000
FY 2005-06	San Jose	Sign and stripe bicycle and pedestrian facilities, including bike lanes, bike routes, crosswalks, and bike paths	\$ 58,397
FY 2005-06	San Jose	Provide bicycle and pedestrian safety education to elementary school children and adults, purchase educational material	\$ 35,000
FY 2005-06	Santa Clara	Install and maintain bicycle and pedestrian facilities, including bike lanes, bike routes, crosswalks, and bike paths	\$ 78,180
FY 2005-06	Saratoga	Acquire right-of-way to upgrade UPRR railroad crossing in a bulb configuration to allow bicycles to cross at 90 degrees	\$ 95,000
FY 2005-06	Sunnyvale	Improve Calabazas Creek Trail with additional gates, signs, fences, ramp modifications, and a bridge across creek	\$ 182,048
FY 2005-06	County of Santa Clara	Restripe four co. expressways' shoulders with 8 inch stripes and sign to allow functioning as bicycle shoulder	\$ 50,000
FY 2005-06	Brentwood	Crosswalk and sidewalk improvements on Minnesota Avenue between Deer Creek and Sand Creek	\$ 31,000
FY 2005-06	Union City	Construct 1750 feet by 15 feet textured decorative concrete sidewalks plus 5 foot bike lanes on both sides of 11th Street	\$ 53,142
FY 2005-06	TAM	Update and complete bicycle and pedestrian master plans countywide and for cities and towns in Marin County	\$ 160,000

TCM B: Bicycle/Pedestrian Program
TDA ARTICLE 3 [Transportation Development Act Funds for Bicycle and Pedestrian Projects]

	SPONSOR	PROJECT NAME	AMOUNT
FY 2005-06	Campbell	Construct bike lanes on Harriet Avenue north of Westmont Avenue and on Union Avenue south of Campbell Avenue	\$ 24,308
FY 2005-06	Larkspur	Design + construct 13 ft wide Class I bike/pedestrian path and modify signals on Magnolia Ave. + Doherty Dr	\$ 136,668
FY 2005-06	County of San Mateo	Develop bike route data for GIS, integrate into countywide GIS files, and maintain bike route GIS data	\$ 40,000
FY 2005-06	City of Napa	Class I path along Napa Valley Wine Train right of way between Redwood Rd/SR 29 and Vallejo St/Soscol Av	\$ 85,271
FY 2005-06	American Canyon	Construct bike lanes and Class I trail adjacent to Commerce Boulevard	\$ 34,729
		Total	\$ 21,785,915

TCM C: Transportation for Livable Communities

FY 2004-05 MTC TLC Planning Program

Project Sponsor	Project Title	TLC Grant
Alameda County		
City of Oakland	Revitalizing Foothill / Seminary: A Model for Oakland's Regional Transit Streets	\$ 75,000
City of Berkeley	Downtown Berkeley BART Plaza and Transit Area	\$ 75,000
Contra Costa County		
City of Lafayette	BART-Downtown Lafayette Pedestrian Linkages Project	\$ 20,000
San Francisco County		
San Jose/Guerrero Coalition to Save Our Streets	The San Jose/Guerrero Neighborhood Plan	\$ 75,000
San Mateo County		
Redwood City	Transit Station Sub-area Precise Plan	\$ 71,760
SamTrans	Transforming the El Camino Real to Link Caltrain Stations with Vibrant Downtowns in Redwood City, San Carlos and Belmont	\$ 63,840
Santa Clara County		
City of Sunnyvale	Murphy Avenue Streetscape Revitalization	\$ 75,000
Sonoma County		
City of Santa Rosa	Downtown Pedestrian Linkages Study	\$ 44,400
Total		\$ 500,000

FY 2004-05 MTC TLC Capital Program

Project Sponsor	Project Title	TLC Grant
City of Oakland, CEDA	Revive Chinatown – Phase 1	\$ 2,200,000
City of Union City	Union City Intermodal Station –Pedestrian connections and New East Plaza	\$ 1,124,000
Public Works Dept.		
Richmond Redevelopment Agency	Richmond Transit Village: Intermodal Transit Station	\$ 1,581,000
County of Marin	Cal-Park Hill Tunnel Rehab and Class I Bikeway	\$ 1,500,000
City of Gilroy	Monterey Streetscape Improvements – Fourth Street to Sixth Street	\$ 2,500,000
City of Morgan Hill	Morgan Hill – Depot Street Capital Improvements	\$ 2,627,000
Bay Area Rapid Transit District	Daly City BART- St. Charles Pedestrian & Bike Project	\$ 501,000
City & Co. of San Francisco	Broadway Streetscape Improvements Project – Phase II	\$ 2,000,000
Dept. of Public Works		
City of South San Francisco	BART Linear Park-Huntington Avenue to Orange Avenue	\$ 1,933,000
City of Vallejo	Vallejo Station Pedestrian Links	\$ 2,071,000
City of Petaluma/Eden Housing Inc.	Downtown River Apts Riverwalk and Streetscape Improvements	\$ 358,000
Total		\$ 18,394,000

Contingency Projects

City of Union City	Union City Intermodal Station – West Plaza Enhancements	\$ 1,713,500
Public Works Dept.		
City of Oakland, CEDA	MacArthur Transit Hub Streetscape Improvement Project	\$ 1,918,000
Town of Los Gatos	Streetscape & Gateway	\$ 2,400,000
Parks & Public Works Dept.		
City of San Leandro	East 14 th Street South Area Revitalization Project – La Palma District	\$ 1,600,000
Community Dev. Dept.		
County of Contra Costa Redevelopment Agency	North Richmond Third Street Upgrades	\$ 1,966,000

TCM C: Transportation for Livable Communities

FY 2005-06 Marin County TLC Capital Program

Project Sponsor	Project Title	TLC Grant
Town of Fairfax	Center Boulevard Streetscape Redesign Project	\$ 500,000
County of Marin	Fireside Pedestrian and Traffic Safety Project	\$ 198,906
Town of Corte Madera	Bayside Trail Improvement Project	\$ 371,826
Total		\$ 1,070,732

FY 2005-06 Alameda County TLC Capital Program

Project Sponsor	Project Title	TLC Grant
City of Oakland	Coliseum BART Streetscape	\$ 500,000
City of Oakland	Oakland Coliseum Pedestrian Walkway	\$ 885,000
City of Oakland	W. Oakland Transit Village Streetscape Project	\$ 1,300,000
City of Oakland	MacArthur Entry Plaza & 40th Streetscape Project	\$ 1,147,000
City of Berkeley	Ashby/Ed Roberts Bicycle/Pedestrian Improvements	\$ 1,200,000
City of Union City	Pedestrian/Bicycle Improvements	\$ 2,000,000
Total		\$ 7,032,000

FY 2005-06 Sonoma County TLC Capital Program

Project Sponsor	Project Title	TLC Grant
City of Petaluma	Petaluma Blvd. Pedestrian Enhancements	\$ 485,000
City of Rohnert Park	Rohnert Park City Center Drive Improvements	\$ 1,150,000
Town of Windsor	Windsor Pedestrian Enhancements & Traffic Calming	\$ 235,000
Sonoma County Reg'l Parks	Sonoma County Santa Rosa Creek Trail	\$ 550,000
Town of Windsor	Windsor Old Redwood Hwy Pedestrian Linkages	\$ 338,000
Sonoma County Reg'l Parks	Sonoma County Bodega Bay Bicycle & Pedestrian Trail	\$ 535,000
City of Santa Rosa	Santa Rosa Courthouse Square Off-Site Improvements & Gateway Street	\$ 1,000,000
Total		\$ 4,293,000

Grand Total	\$ 31,289,732
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TCM D: Additional Freeway Service Patrol

The Bay Area FSP is a joint project of the Metropolitan Transportation Commission Service Authority for Freeways and Expressways (MTC SAFE), the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans). The service is provided by private tow truck companies, selected through a competitive bid process, under contract to MTC SAFE. During the hours of operation, the vehicles and drivers are exclusively dedicated to patrolling their freeway beat. The program is intended to augment the MTC SAFE network of motorist-aid call boxes in the nine Bay Area counties.

Current Profile (as of February 2009)

A fleet of 83 trucks patrols some 550 miles of the Bay Area's freeways. Patrol routes are selected based on several factors, including a high rate of traffic and congestion, frequent accidents or stalls, and lack of shoulder space for disabled vehicles.

The FSP tow trucks operate primarily during morning and afternoon commute hours, generally from 6 a.m. to 9 a.m. or 10 a.m. and from 3 p.m. to 6 p.m. or 7 p.m., Monday through Friday. Weekend service is provided in Napa, as well as seasonally along Highway 17, and in some other locations on Sunday.

FSP tow trucks are equipped for nearly any contingency. In addition to the standard auto repair and towing equipment, they carry 5 gallons of diesel fuel, 5 gallons of unleaded gasoline, and 5 gallons of water, as well as an external speaker and public address system.

Funding

The tow trucks are financed with federal, state and local moneys. Local funds come from the MTC SAFE, which is financed by a \$1 annual vehicle registration fee in participating counties. The service costs approximately \$7 million a year to operate. Another \$2 million is invested in sophisticated communications equipment, including an automatic vehicle location system that enables CHP and Caltrans to monitor the location of the trucks and improve dispatching efficiency.

Implementation Plan

See the attached Implementation Plan, which is also available at:
http://www.fsp-bayarea.org/implementation_plan/lplan.pdf

**BAY AREA FREEWAY SERVICE PATROL PROGRAM
IMPLEMENTATION PLAN**

Revised 06/01/07

BEAT ID	CONTRACTOR	LOCATION		BEAT LIMITS	CALTRANS ONE WAY LENGTH (IN MILES)	START DATE	ENDING DATE	WEEKDAYS			SUNDAY PM SHIFT	# OF TOW TRUCKS	# OF PICKUP TRUCKS	# OF FLATBED TRUCKS	# OF BACKUP TRUCK	NOTES	TOTAL CONTRACT HOURS	BEAT ID
		COUNTY	ROUTE					AM SHIFT	MIDDAY SHIFT	PM SHIFT								
1	Redhill Towing	ALA	980	Interstate 580 to Interstate 880	2.03	07/01/07	07/26/09	6:00-10:00		15:00-18:30	13:00-19:00	2	1			b	12,395	1
		ALA	880	7th Street to Jackson Street	2.04													
		ALA	24	Interstate 580 to Contra Costa County Line	4.39													
		CC	24	Contra Costa County Line to Oak Hill Road	6.25													
		CC/ALA	13	State Route 24 to Redwood Avenue	(4.23)											e		
2	A-One Towing Service	ALA	80	Powell Street to Contra Costa County Line	4.25	07/01/07	07/26/09	6:00-10:00	10:00-15:00	15:00-19:00	13:00 - 19:00	2	1		1	a, b, c	15,755	2
		CC	80	Alameda County Line to San Pablo Dam Road	4.34													
		ALA/CC	580	Interstate 80 to Western Drive/Pt. Molate	6.01													
3	Palace Garage	ALA	880	Alvarado-Niles Road to State Route 238	7.66	06/25/07	06/26/11	06:00-10:00		15:00-19:00	13:00-19:00	2				b,c	17,132	3
		ALA	92	Interstate 880 to Clawiter Road	1.91													
4	Palace Garage	ALA	880	Broadway to State Route 238	10.55	07/01/07	07/26/09	6:00-10:00		15:00-19:00	13:00-19:00	2	1			b	13,170	4
		ALA	238	Interstate 880 to Interstate 580	2.11													
5	K&S Tow	CC	680	Stone Valley Road to Marina Vista Road	13.89	07/02/07	07/04/11	06:00-09:00		14:00-18:30		2	1		1	b	22,523	5
		CC	24	Oak Hill Road U/C to Interstate 680	2.87													
6	B&A Body Works & Towing	SM	101	State Route 92 to SF City Limit/101 to Foster City Boulevard	14.23	07/01/07	07/05/09	6:00-10:00	10:00-15:00	15:00-19:00		2	2		1	a, b	18,754	6
		SM	92	Interstate 101 to Foster City Boulevard	1.47													
7	Redhill Towing	MRN	101	Alexander to 3rd Street/Irwin Street (Central San Rafael Exit)	10.28	07/03/05	07/06/08	6:00-10:00		15:00-19:00	13:00 - 19:00	2			1	b, c	13,090	7
		MRN	580	Highway 101 to Interstate 580 San Quentin	1.60													
8	Campbell's Towing	SCL	101	Blossom Hill Road to Ellis Street	18.40	07/01/07	07/05/09	6:00-10:00		15:00-19:00	13:00 - 19:00	2	2		1	b, c	16,808	8
		SCL	237	Highway 101 to Lawrence Expressway	2.12													
9	Campbell's Towing	SCL	280	Interstate 680/Highway 101 to Foothill Exp.	11.45	06/11/07	06/10/11	6:00-10:00		15:00-19:00		3	1		1	b	32,032	9
		SCL	85	Junction Route 280 to El Camino Real	3.3													
		SCL	87	State Route 85 to Hwy. 101	9.22													
10	Sunrise Enterprise 87	SCL-SM	101	Ellis Street to State Route 92	17.44	06/11/07	06/10/11	6:00-10:00		15:00-19:00		2	1			a, b	24,024	10
		SCL	92	Junction Route 101 to El Camino Real	0.93													
11	B&A Body Works & Towing	SF	101	Cesar Chavez to San Mateo Co. Line	2.92	06/11/07	06/12/11	6:00-10:00	10:00-15:00	15:00-19:00	10:00-16:00	2				a, b, c	22,473	11
		SF	280	San Mateo Co. Line to Highway 101	4.34													
		SM	101	Harney Way to San Francisco Co. Line	0.41													
		SM	280	Geneva/Ocean Avenue to San Francisco Co. Line	1.77													
	(Bridge Tow Coverage)	SF	280	Highway 101/Interstate 280 Interchange to Sixth Street	(3.2)											c		
	(Bridge Tow Coverage)	SF	80	Cesar Chavez to Interstate 80/Fourth Street	(1.5)											e		
12	Ken Betts Towing	CC	80	San Pablo Dam Road to Cummings Skyway	8.39	07/09/07	07/10/11	6:00-10:00	10:00-15:00	15:00-19:00	13:00-19:00	2				a, b, c	22,473	12
13	Bill's Towing	MRN	101	Interstate 580 to Junction Route 37	9.13	06/25/07	06/26/11	6:00-10:00		14:30-18:30	13:30-18:30	2				b, c	17,282	13
14	All Ways Tow & Transport	ALA	880	Mowry Avenue to Alvarado Niles Road	5.84	07/01/07	07/24/09	6:00-10:00		15:00-19:00		2				b	8,272	14
		ALA	84	Thorman Avenue to Interstate 880	2.26													
15	Yarbrough Bros. Towing	SON	101	Wilfred Avenue to River Road	10.8	07/02/07	07/01/11	6:30-9:30		15:30-18:30		1					6,006	15
16	Lima Tow	SCL	17	Junction Route 9 to Summit Road	7.07	07/09/07	07/10/11	6:30-9:30		15:30-18:30		1				b, c, f	7,974	16
17	Sierra Hart	SOL	12	Interstate 80 to Napa Co. Line	2.95	07/23/07	07/24/11	6:00-10:00		15:00 - 19:00	8:00-16:30 Sat. & Sun.	1 wkdy, 2 wknd			1 wkdy		15,573	17
		NAP	12	Napa Co. Line to Sonoma Co. Line	11.60													
		NAP	20	State Route 37 to Oakville Cross Road	24.0													
		SON	12	Sonoma Co. Line to Junction 116	4.90													
		NAP	29	Oakville Cross Road to State Route 128	(1.8)											e		
18	All Ways Tow & Transport	SCL	880	Junction Route 237 to Alameda County Line	2.08	07/01/07	07/10/09	6:00-10:00		15:00-19:00		2				b	8,112	18
		ALA	880	SCL County Line to Mowry Avenue	7.18													
19	Lima Tow	SCL	880	Junction Route 237 to Junction Route 17	8.42	07/01/07	07/10/09	6:00-9:00		15:00-19:00		2	1			b	10,647	19
		SCL	17	Junction Interstate 880 to Junction Route 9	6.88													
		SCL	237	Junction Interstate 880 to Lawrence Expressway	4.70													
20	Nelson's Tow	SM	280	Geneva/Ocean Avenue to Interstate 380	8.18	07/01/07	07/10/09	6:30-9:30		15:00-18:00		2				b	6,084	20
		SM	380	Interstate 280 to Highway 101	1.07													
21	Matos Towing & Transport	ALA	680	Scott Creek to Alcosta Boulevard	21.35	07/01/07	07/10/09	5:30-9:30		15:00-19:00		1	1	1	1	b	12,168	21
22	Palace Garage	ALA	580	Vasco Road to Santa Rita	8.25	07/23/07	07/24/11	5:30-9:30		15:30-19:00	13:00-19:00	2	1			b, c, d	25,683	22
		ALA	580	Grant Line Road to Vasco Road	8.23													
23	Campbell's Towing	SCL/ALA	680	Highway 101 to Scott Creek Road	10.17	07/01/07	07/10/09	5:30-9:30		15:00-19:00		2				b	8,112	23
24	Roadrunner Tow	SOL	680	Interstate 80 to Junction 780	14.30	07/23/07	07/22/11	6:00-9:00		15:30-18:30		1				g	6,036	24
		SOL	780	Junction 680 to Junction 80	6.42													
25	B&D Towing	CC	4	Hilkeret Avenue to Pacheco Blvd.	20.39	07/01/07	07/11/09	5:30-9:30		15:30-19:00		2	1			b	11,220	25
		CC	242	State Route 4 to Interstate 680	3.4													
26	A-One Tow Service	ALA	580	Harrison Street/Oakland Avenue to Junction Route 238	13.47	07/01/07	07/17/09	6:30-9:30		15:30-18:30		1		1		b	6,144	26
		ALA	13	Redwood Avenue to Interstate 580	(0.0)											c		
27	Palace Garage	ALA	580	Santa Rita Road to Junction 238	12.86	06/25/07	06/26/11	6:00-9:30		15:30-18:30	13:00-19:00	2	1			b,c	21,020	27
28	Bill's Towing	MRN/SON	101	State Route 37 to East Washington Boulevard	13.1	07/01/07	07/17/09	5:30-9:30		15:30-18:30		1				b	3,584	28
29	Roadrunner Tow	SOL	80	Magazine Street to Abernathy Road	14.04	07/09/07	07/10/11	6:00-9:00		15:30-18:30	13:00-19:00	2				b, c, h	15,020	29
30	Nelson's Tow	SM	92	State Route 1 to Highway 280	8.03	07/23/07	07/22/11	6:00-9:30		15:30-18:30		2				b	13,013	30
		SM	280	Interstate 380 to State Route 92	10.20													
		SM	92	Interstate 280 to Highway 101	4.83													
31	Campbell's Towing	SCL	101	Blossom Hill Road to East Dunne Avenue	12.6	07/01/07	07/19/09	6:00-9:00		16:00-19:00	13:00 - 19:00	2				b, c	6,900	31
32	Dick's Automotive Transport	SCL	85	Interstate 280 to Cottle Road	16.48	07/01/07	07/17/09	6:00-9:00		16:00-19:00		2				b	6,144	32
33	Yarbrough Bros. Towing	SON	101	East Washington Boulevard to Wilfred Avenue	10.26	07/24/05	07/20/08	6:00-9:00		15:30-18:30		1				b	4,482	33
34	Vacaville Tow	SOL	80	Abernathy Road to I-505 Vaca Valley Road	12.54	07/09/07	07/10/11	6:00-9:00		15:30-18:30	13:00-19:00	2				b, c, h	15,020	34
35	Palace Garage	CC	680	Alcosta Boulevard to Stone Valley Road	10.36	07/09/07	07/08/11	6:00-9:00		15:00-18:30		1				b	6,507	35
36	Ken Betts Towing	CC	4	Interstate 80 to Pacheco Blvd.	11.8	07/23/07	07/22/11	6:00-9:30		15:30-19:00		1					7,007	36
37	Vacaville Tow	SOL	80	Junction I-505 to Richards Blvd.	16.4	07/23/07	07/24/11	6:00-9:00		15:30-18:30	13:00-19:00	2				b, c, h	15,032	37
					539.67							65 wkdy, 66 wknd	15	2	8 wkdy, 7 wknd		493,973	

TCM E: Transit Access to Airports

BART to San Francisco International Airport:

S. San Francisco: From Colma BART station to the new SFO station; Extend BART system to the San Francisco International Airport.

BART Fares and Schedules

The latest BART fares and schedules (as of January 2008) can be found at:
<http://www.bart.gov/guide/brochures.aspx>

Service Adjustments

See attached document for service adjustments overtime since June 2003 through December 2006.

SFO Service Changes Over Time

Below is a list and description of service changes that have been implemented since the San Francisco Extension opening on June 22, 2003 through December 31, 2006. Some of these changes are major system changes. Other changes are more minor involving train sizing.

June 22, 2003 - SFO Initial Service

Bay Point trains provide service to Millbrae during all hours of operation, all week. Dublin trains provide service to the San Francisco Airport (SFO) during all hours of operation, all week. These routes operate on 15 minute headways during the weekday, and on 20 minute headways during evenings and on weekends. A shuttle train provides service between Millbrae and SFO on 20 minute headways during all hours of operation, all week. In addition to the base 15 minute service, three AM peak period rush trains provide service from Bay Point to Daly City, then operate express from Daly City to SFO. These three trains return during the evening peak period and operate express from SFO to Daly City, then on to Bay Point.

1. Direct service to/from Millbrae and direct service to/from SFO
2. Peak rush trains provide Bay Point line passengers direct service to/from SFO during the peak periods
3. 20 minute shuttle does not synch with the 15 minute base service during the day

February 9, 2004

Bay Point trains provide direct service to SFO, then continue to Millbrae. On the return trip these trains follow the same route back to Bay Point. This service route has been called the "Reverse L" service because the shape of the service on the SFO extension resembles a backward or reverse "L" shape. During the 3-1/2 hour AM and PM peak period on weekdays, Richmond trains provide direct service to Millbrae, then continue to SFO. On the return trip these trains follow the same route back to Richmond. This service route is referred to as the "L" service. The Richmond trains do not operate on the weekend. When the Richmond trains are operating on the extension during the week the Bay Point trains terminate at SFO and do not continue to Millbrae. At all other times (off-peak, evenings and weekends) the Bay Point trains complete the "Reverse L" service pattern. There are no other direct peak period rush trains. Service during the day (and during the peak rush) is 15 minutes, while evenings and weekends operate at 20 minute headways.

1. Provides for direct service on all extension routes to Millbrae and SFO, no need to transfer
2. 20 minute shuttle (during normal 15 minute service) replaced by 15 minute direct trains
3. During off-peak, evenings and weekends, direct service to Millbrae is through the SFO station

March 8, 2004

Train sizing adjustments: Train 361 increased from 4 to 5-car train off-peak. Train 441 changed to 10-car peak size for all PM trips instead of breaking to 5-car train on last trip. Other minor adjustments were made to the 200s and 500s.

September 13, 2004

Bay Point trains provide direct service to SFO, then continue to Millbrae. This service provides "Reverse L" service and operates during all hours of operation, all week. During the 3 hour AM and PM peak period on weekdays, Richmond trains provide direct service to SFO, then continue to Millbrae in a "Reverse L" service configuration. During the 3 hour AM and PM peak period (weekdays only) the Richmond and Bay Point trains both provide service directly to and from Millbrae/SFO. The Richmond trains do not operate on the weekend. Service during the day on each route (and during the peak rush) is 15 minutes, while evenings and weekends operate at 20-minute headways.

1. Provides for direct service on all extension routes to Millbrae and SFO, no need to transfer

2. During all hours, direct service to Millbrae is through the SFO station (but is effectively every 7.5 minutes during the 3 hour AM and PM peak periods)

December 13, 2004

Train sizing adjustments were made to better match capacity with demand, generally to shorter trains.

April 23, 2005

Train sizing adjustments: The 300 series trains on Saturday were increased from 8 to 9-car trains.

June 13, 2005

Train lengths were generally shortened to an 8-car plan in two phases, in June and August, 2005, with peak size trains running all day on the Bay Point line.

August 15, 2005

Second phase of implementing the "8-car" plan.

September 12, 2005

Dublin trains provide direct service to SFO, then continue to Millbrae in a "Reverse L" service configuration. Only the Dublin trains will provide service to the extension on weekdays and weekends. Richmond and Bay Point trains will truncate at Daly City. Service during the day (and during the peak rush) is 15 minutes, while evenings and weekends operate at 20-minute headways. Although direct service from Bay Point has been replaced with this new service, the transfer time from a Bay Point base train to SFO train (from Dublin) is only 3-4 minutes in each direction.

September 22, 2005

Extend service from Richmond and lengthen trains. Up to six consists will be lengthened from 4 to 8-car trains. Richmond trains to Daly City will be extended to Colma for two hours in the morning and two hours in the evening.

October 10, 2005

The following adjustments were made:

Weekday

100s - three trains lengthened
200s - one train lengthened, Make/Break timing changed
300s - several trains lengthened with a few trains reduced in size
400s - one train lengthened
500s - No change since September 22, 2005 (Make/Break timing)

Saturday

300s - some trains lengthened

Sunday

300s - some trains lengthened

December 5, 2005

The following adjustments were made:

Weekday

100s – 115 becomes the last AM Break train
300s – Train 323 and 363 increased from 8-car to 9-car trains

Saturday

200s – All trains are now 6-car trains during the day

January 30/31, 2006e

The following adjustments were made:

Weekday

100 Series Trains (net +1)

Train 101 +1 (9 to 10 cars) peak increase

Train 115 off peak increase 4 to 5 cars

200 Series Trains (net 0)

No change

300 Series Trains (net -2)

Train 365 off peak decrease only on dispatches of 20:58, 22:19, and 23:38

Train 367 +1 (9 to 10 cars) off peak decrease only on dispatches of 21:18, 22:39, and 24:00

Train 371 -1 (10 to 9 cars)

Train 377 -1 (10 to 9 cars)

Train 381 -1 (10 to 9 cars)

Train 331 -2 (10 to 8 cars)

Train 335 +2 (8 to 10 cars)

400 Series Trains (net +2)

Train 443 -1 (9 to 8 cars) for AM peak period only

Train 445 +1 (8 to 9 cars)

Train 453 -1 (9 to 8 cars) for PM peak period only

Train 455 +2 (8 to 10 cars) and off peak increase 4 to 5 cars

500 Series Trains (net +10)

Train 501 +1 (8 to 9 cars) peak increase and off peak increase 4 to 5 cars

Train 503 +1 (8 to 9 cars) peak increase and off peak increase 4 to 5 cars

Train 505 +1 (8 to 9 cars) peak increase

Train 507 +1 (8 to 9 cars) peak increase

Train 509 +1 (8 to 9 cars) peak increase

Train 511 +1 (8 to 9 cars) peak increase

Train 513 +1 (8 to 9 cars) peak increase and off peak decrease 8 to 5 cars

Train 519 +1 (8 to 9 cars) peak increase

Train 521 +1 (8 to 9 cars) peak increase and off peak increase 4 to 5 cars

Train 523 +1 (8 to 9 cars) peak increase

Saturday

100s – no change

200s – no change

300s – All 8-car trains are now 9-car trains

400s – no change

500s – Four trains increased from 4 to 5-cars (501, 505, 511, and 515)

Sunday

200s – no change

300s – no change

500s – All trains 9-car midday and some offpeak increased from 4 to 5-cars (503, 505, and 515)

Appendix E
Comments on the Draft Conformity Analysis

MTC received one comment on the Draft Conformity Analysis during the comment period. However, upon review, this comment was not related to the Draft Conformity Analysis and will be addressed as part of the Draft Plan Bay Area Environmental Impact Report comment process.

Appendix F

Methodology for Bay Area Conformity Determinations



Winston H. Hickox
Agency Secretary

Air Resources Board

Alan C. Lloyd, Ph.D.
Chairman

1001 I Street • P.O. Box 2815 • Sacramento, California 95812 • www.arb.ca.gov



Gray Davis
Governor

November 30, 2001

Mr. Wayne Nastri
Regional Administrator
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, California 94105

Dear Mr. Nastri:

The Air Resources Board (ARB/Board) hereby transmits the Bay Area emission factor model (SF Bay Area-EMFAC 2000) to the U.S. Environmental Protection Agency (U.S. EPA) for approval and use in the 2001 San Francisco Bay Area State Implementation Plan (Bay Area SIP) and subsequent Bay Area conformity determinations.

SF Bay Area-EMFAC 2000 is tailored specifically to the San Francisco Bay Area. The emission factors contained in SF Bay Area-EMFAC 2000, along with updated activity data from the Metropolitan Transportation Commission (MTC), provide the basis for the mobile source emissions budgets in the 2001 Bay Area SIP. SF Bay Area-EMFAC 2000 will be used for subsequent Bay Area conformity determinations. At a public meeting on November 1, 2001 the ARB Board approved SF Bay Area-EMFAC 2000 for these purposes following a 30-day public notice. At the time the Bay Area SIP was being developed, this model was the most current emission factor model available. SF Bay Area-EMFAC 2000 was based on EMFAC2000. The documentation for EMFAC2000 was publicly available beginning in May 2000 and made available for use by the Bay Area Air Quality Management District when it began developing the 2001 Bay Area SIP in November 2000.

The three Bay Area co-lead agencies responsible for developing the Bay Area SIP have committed to do a mid-course review of the Bay Area SIP by December 31, 2003 and revise the 2001 SIP by March 2004. ARB has committed to submit the revised Bay Area SIP to U.S. EPA by April 15, 2004. The mid-course review will use the most current emission factor model available at that time to develop the mobile source emissions budgets. This model will be EMFAC2001 or its successor.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

This transmittal provides documentation of the emission factors and activity data used in SF Bay Area-EMFAC 2000 to develop the 2001 Bay Area SIP. In addition, it includes the methodology ARB will be using to conduct Bay Area conformity determinations.

SF Bay Area-EMFAC 2000 Emission Factor Model Documentation

Comparison between MVEI7F/7G and SF Bay Area-EMFAC 2000

The emission factors used in the SF Bay Area-EMFAC 2000 emission factor model represent a major improvement over emission factors used in older models such as MVEI7F and MVEI7G. SF Bay Area-EMFAC 2000 exhaust hydrocarbon emission rates are significantly higher than the emission rates included in the older models. The increase in exhaust hydrocarbon rates is mainly a result of the following changes:

- More accurately reflecting real-world driving by using the Unified Cycle (UC) driving cycle rather than the Federal Test Procedure (FTP);
- Using new speed adjustment factors to better reflect how emissions change as average driving speeds change;
- Representing 45 model years, rather than only 35; and
- Incorporating new vehicle test data.

Evaporative hydrocarbon emission rates in SF Bay Area-EMFAC 2000 are also significantly higher than the older models' emission rates. The most important changes causing the increase in evaporative hydrocarbon emission rates include:

- Higher hot soak emission rates, especially for older catalyst-equipped vehicles;
- Higher running loss emission rates, based on new data; and
- Including emissions for vehicles with liquid fuel leaks.

Emission rates for oxides of nitrogen (NO_x) are also significantly higher in SF Bay Area-EMFAC 2000 than in the older models. The increased estimates of NO_x emission rates are primarily due to the following changes:

- Inclusion of "off-cycle NO_x" (i.e., NO_x emissions that were not represented in the certification driving cycle); and
- Incorporation of new vehicle test data for catalyst equipped passenger cars and light trucks.

Incorporation of Latest Standards

SF Bay Area-EMFAC 2000 also includes the effects of recently adopted standards on the emissions of the on-road fleet. The future year emission rates in SF Bay Area-EMFAC 2000 reflect the adopted standards described below.

Supplemental Federal Test Procedure

Two supplemental test procedures to the FTP were adopted by the Board in July of 1997. These new standards are applicable to passenger cars, light-duty trucks, and medium-duty vehicles weighing 8,500 pounds or less. These standards require the

control of excess emission of hydrocarbon and oxides of nitrogen during “off-cycle” operations (high speed and hard acceleration), and excess emissions associated with the use of air conditioning. The new standards are to be phased-in between 2001 and 2005.

Low Emission Vehicles (LEVII)

The second phase of Low Emission Vehicle Standards (LEVII) was adopted by the Board in November of 1998. This action imposed more stringent hydrocarbon, carbon monoxide, NOx and exhaust particulate matter emissions standards for passenger cars, light-duty trucks and medium-duty vehicles up to 14,000 pounds sold in California beginning in 2003.

Near Zero Evaporative Standards

Also in November 1998, the Board adopted new standards for the emissions of evaporative hydrocarbons (diurnal, hot soak and resting loss). The standards were reduced from 2 grams per test (hot soak plus diurnal) for passenger cars, to 0.5 grams per test.

New On-Road Motorcycle Standards

In December of 1998, the Board adopted lower exhaust emission standards for on-road motorcycles. These standards, which may require future motorcycles to utilize catalytic converters, are applicable to new motorcycles sold in California beginning in 2004.

Off-Cycle NOx Mitigation

In a settlement reached between the federal government, the Air Resources Board and heavy-duty engine manufacturers, several mitigation measures were agreed to regarding off-cycle NOx emissions. In addition to ending the practice of defaulting to an advanced timing condition during extended cruise operation, several manufacturers have agreed to perform “low emission” rebuilds for in-use engines. These rebuilds will lower the emissions of the in-use fleet.

New Exhaust Emissions Standards for Urban Transit Buses

In February of 2000, the Board adopted a regulation that allows transit agencies the choice between either a diesel or alternative fuel “path” to lower emissions. Beginning in 2002, over the course of 10 years, this regulation requires increased introduction of

cleaner engine buses in transit agencies' fleets, use of cleaner diesel fuel, retrofits to reduce exhaust particulate matter (PM) emissions from older diesel buses, and use of zero-emission buses (ZEBs).

Public Review

The emission factors used in SF Bay Area-EMFAC 2000 were developed in a 3-year process and were subject to public review and comment during three workshops held in 1998, 1999, and 2000. Throughout the comment period, ARB received a number of written and verbal comments, which were addressed in the development of the emission factor model.

Further detail regarding the development of the SF Bay Area-EMFAC 2000 emission factor model may be found in the attached Technical Support Documentation. The Technical Support Documentation refers to broader work on the statewide EMFAC2000 emission factor model, but also applies to the region specific SF Bay Area-EMFAC2000.

Activity Data Documentation

The Bay Area vehicle miles traveled (VMT), VMT growth rates, and VMT-speed distributions incorporated into SF Bay Area-EMFAC 2000 represent the best current activity data estimates available. The derivation of these estimates are explained below.

Vehicle Miles of Travel

Bay Area VMT estimates for calendar year 2000 are based on the ARB VMT estimation methodology using mileage accrual rates derived from Smog Check odometer data and Department of Motor Vehicle vehicle populations (see Section 7 of the attached Technical Support Documentation for further detail on the ARB VMT estimation methodology).

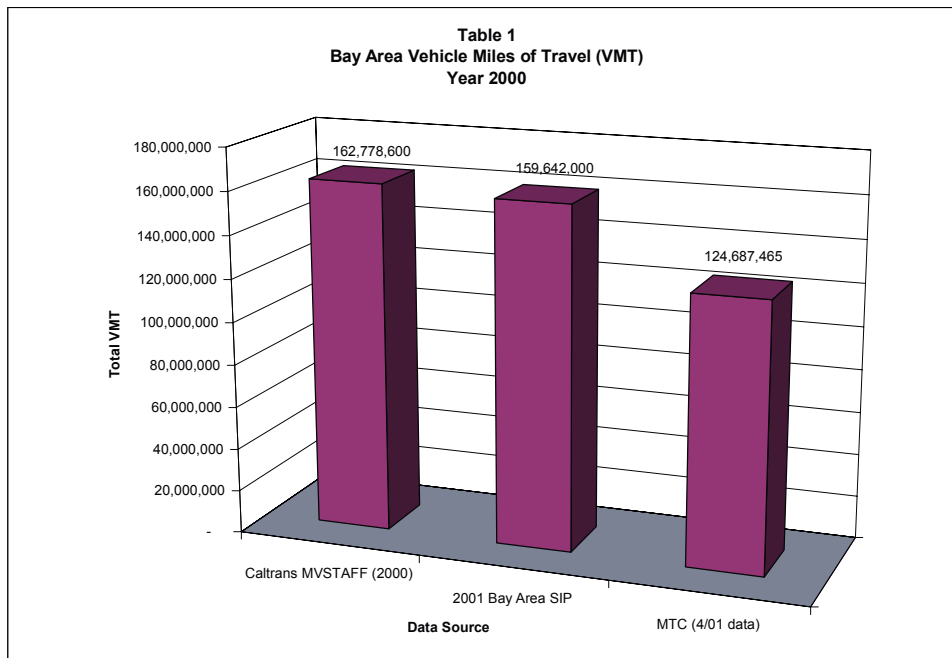
The decision to use ARB's VMT estimate instead of the VMT estimate from MTC's BAYCAST-90 travel demand model for calendar year 2000 was made in an agreement between MTC and ARB. As Table 1 illustrates, MTC's 2000 VMT estimate for the region is about 22 percent lower than both ARB and Caltrans' estimates. The ARB and Caltrans¹ methods for estimating VMT were developed independently of each other, yet fall within 1 percent of each other.

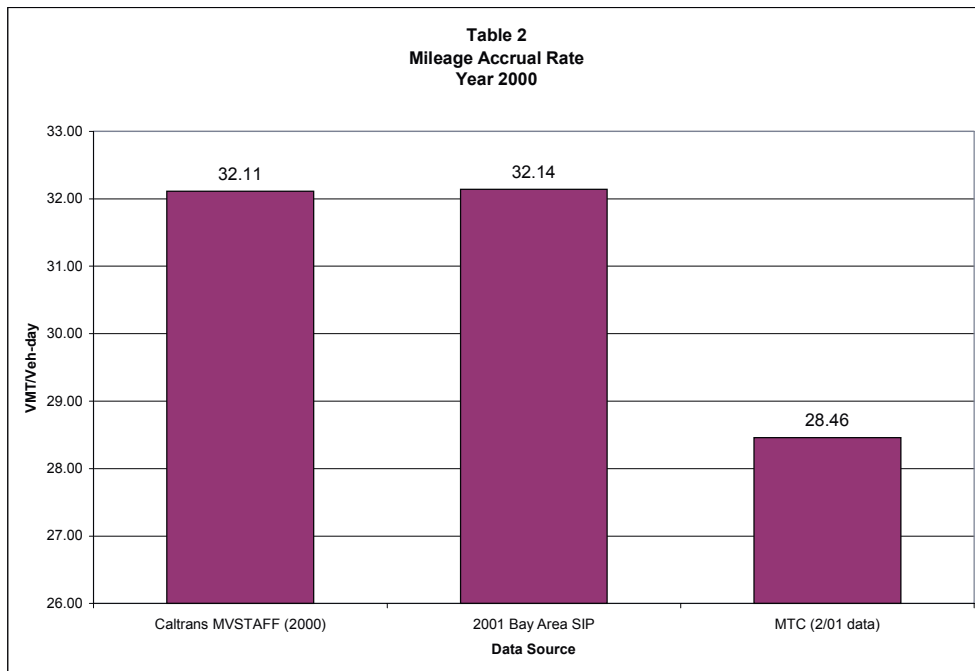
Additional justification for using the ARB VMT estimation methodology is found in the estimate of the number of miles driven by each vehicle per day (i.e., the mileage accrual

¹ Caltrans' VMT estimate was taken from the annual "Motor Vehicle Stock, Travel, and Fuel Forecast" (MVSTAFF) report. The MVSTAFF report forecasts statewide VMT based on statewide vehicle population data from the DMV, fuel consumption estimates from the Board of Equalization, and fuel economy estimates derived from the national fuel economy standards. Statewide VMT estimates are then disaggregated to the county level using county auto registration and road system mileage ratios.

rate). Table 2 compares mileage accrual rates from various data sources. MTC's estimates appear too low to be consistent with odometer readings collected in the Smog Check program. MTC's mileage accrual estimates are 11 percent lower than both Caltrans' ARB's estimates for the Bay Area.

For the purposes of the 2001 Bay Area SIP, MTC agreed to use ARB's 2000 VMT estimate. It was also agreed that the difference in VMT between ARB's and MTC's calendar year 2000 VMT estimates would be used as a "correction" for all future analysis years.





VMT Growth Rates

In the agreement between ARB and MTC, ARB agreed to use MTC's VMT growth rate as implied by the VMT estimates produced by BAYCAST-90. The rationale for this is that while ARB questions the level of travel in calendar year (CY) 2000 as estimated by MTC's travel demand model, ARB is not questioning future year growth projections included in the travel demand model.

VMT-Speed Distributions

The final pieces of activity data provided by MTC and incorporated into SF Bay Area-EMFAC 2000 are the VMT-speed distributions for two calendar years (2000 and 2005). Based on consultation between MTC and ARB staff, ARB incorporated the VMT-speed distributions into SF Bay Area-EMFAC 2000 by applying CY2000 speed distributions to CYs 2000-2003, and CY2005 speed distributions to CYs 2004+.

Methodology for Bay Area Conformity Determinations

For all Bay Area conformity determinations based on the mobile source emissions budgets set in the Bay Area SIP (using SF Bay Area-EMFAC 2000), the following step-wise methodology will be followed:

1. MTC will submit to ARB updated VMT-speed distributions and updated VMT estimates by county for all relevant analysis years. ARB will follow the procedures below for analysis years for which MTC does not submit new activity data (i.e. for which activity data does not change from MTC's original SIP submittal):
 - ARB will use the speed distributions submitted by MTC for the most recent calendar year prior to the analysis year of interest. For example, if MTC submits new VMT-speed distributions for 2005 and 2010, but not for the 2006 analysis year, the 2006 analysis year will use the speed distributions submitted for 2005. VMT-speed distributions will not be interpolated.
 - The VMT estimate for each county will be interpolated using county-specific compounded growth rates.² The interpolated VMT will then be used for the following steps.
2. ARB will calculate VMT for the portions of Sonoma and Solano Counties that fall in the San Francisco (S.F.) Air Basin. This is necessary since the SIP budgets are based on the S.F. Air Basin (which covers only the southern portions of Solano and Sonoma Counties), while the MTC VMT estimates include the full nine Bay Area counties. The county portions will be calculated by multiplying the full county VMT submitted by MTC by the VMT ratio (partial county/county) derived from SF Bay Area-EMFAC 2000.³ In year 2000, about 71 percent of Solano County, and 77 percent of Sonoma County VMT occurred in the S.F. Basin.
3. ARB will calculate the year 2000 difference in VMT between the VMT estimate included in the SF Bay Area-EMFAC 2000 runs⁴ and the VMT estimate submitted by MTC for conformity.⁵ The resulting differences by county represent the VMT "correction" between ARB and MTC's VMT estimates.
4. The VMT correction will be added by county to the submitted VMT for all analysis years, resulting in the "target" VMT estimate that will be used for the conformity modeling runs.⁶

² For example, 2006 VMT is interpolated from 2005 and 2010 VMT estimates submitted by MTC by the following equation: $VMT_{2006} = (VMT_{2010} / VMT_{2005})^{0.2} * VMT_{2005}$

³ For the S.F. Basin portions of Solano and Sonoma County VMT:

S.F. Basin County Portion $VMT_{MTC} = [S.F. \text{ Basin County Portion } VMT_{SF\text{BayArea-EMFAC}2000} / \text{Total County } VMT_{SF\text{BayArea-EMFAC}2000}] * \text{Total County } VMT_{MTC}$

⁴ SF Bay Area-EMFAC 2000 calculates VMT based on Smog Check odometer readings and DMV vehicle registration data for light duty vehicle classes, and instrumented truck data for the truck classes.

⁵ $VMT \text{ correction}_{\text{county a}} = SIP \text{ } VMT_{CY2000} - MTC \text{ } VMT_{CY2000}$

⁶ $\text{Target } VMT_{\text{county a}} = MTC \text{ } VMT_{\text{county a}} + VMT \text{ correction}_{\text{county a}}$

5. The county-specific target VMT in the conformity modeling runs will be achieved in SF Bay Area-EMFAC 2000 by modifying the county-specific vehicle populations in SF Bay Area-EMFAC 2000 using the What-if-Scenario (WIS) option. Since vehicle population and VMT are linearly related in SF Bay Area-EMFAC 2000, to obtain the “target” vehicle population, ARB staff will take the ratio between the SIP VMT estimates and the target VMT for each analysis year and apply them to the SIP vehicle population estimates for each respective analysis year.⁷
6. Once the target vehicle populations have been calculated, ARB staff will run SF Bay Area-EMFAC 2000 using the WIS option to adjust vehicle populations by county, and incorporate any updated speed distributions.
7. ARB staff will then apply control factors to the model output to adjust for emission reduction measures not included in the SF Bay Area-EMFAC 2000 emission factor model or changed since the model was developed.
8. Finally, ARB staff will compare the results to the SIP budgets for the conformity demonstration.

If you have questions regarding this submittal, you may contact me at (916) 445-4383, or have your staff contact Ms. Cynthia Marvin, Chief of the Air Quality and Transportation Planning Branch, at (916) 322-7236.

Sincerely,

/s/

Michael P. Kenny
Executive Officer

Enclosures

cc: See next page.

⁷ Target Veh Pop = [((Target VMT – SIP VMT) / SIP VMT) * SIP Veh Pop] + SIP Veh Pop

cc: (w/o Enclosures)
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Ms. Cynthia Marvin
Air Resources Board

Recommended Methods for Use of EMFAC2002 To Develop Motor Vehicle Emissions Budgets and Assess Conformity

As the agency charged with estimating motor vehicle emissions for air quality plans, the Air Resources Board (ARB) has improved the EMFAC modeling tool for use in combination with estimates of vehicle population and activity to develop motor vehicle emissions budgets and assess transportation conformity. The most recent version of this tool, EMFAC2002, has been transmitted to the U.S. Environmental Protection Agency (U.S. EPA) for approval for use in State Implementation Plans (SIPs) and conformity assessments. This paper describes the recommended practices for ARB, air districts, metropolitan planning agencies (MPOs) and regional transportation planning agencies (RTPAs) to use vehicle activity in conjunction with EMFAC2002 emission rates to calculate emissions budgets and conduct conformity assessments.

The vehicle activity indicators commonly used to develop emissions inventories are vehicle trips and vehicle miles of travel (VMT) by speed, vehicle class and time of day. Though not a direct measure of travel activity, vehicle population may also be a variable for these purposes, as described below.

Vehicle trips. In California, MPOs and RTPAs use demographic forecasts and travel demand models to develop estimates of current and future daily VMT, daily vehicle trips and average travel speeds for links in the transportation network. ARB separately estimates daily vehicle trips, but defines trips as the number of times a vehicle is started, rather than a number of specific daily destinations. This distinction is important; ARB and U.S. EPA studies find that vehicles are started five to six times per day, while trips associated with destinations as reported through travel surveys and predicted in travel demand models occur three to four times per day. Because start emissions and the duration of time between starts are crucial to emissions estimation, ARB equates vehicle trips with vehicle starts. Though EMFAC2002 permits model users to alter estimates of vehicle trips used to estimate emissions, ARB recommends that the model's default estimates of vehicle trips (starts), developed from instrumented vehicle studies, be used for air quality planning and conformity purposes.¹ Alternatively, for vehicle classes where appropriate local data are made available for review through the interagency consultation process, use of trip factoring or other methods to fully account for vehicle starts may be employed. Such alternative approaches should be discussed in the interagency consultation process.

¹ An exception would occur when a user chooses to factor these start-based trips to account for trip reduction programs. EMFAC2002 start-based trips rather than destination-based trips should serve as the baseline for this adjustment. The adjustment would be made through the What-If Scenario (WIS) function of EMFAC2002 as follows, where TRS denotes the trip reduction scenario:

$$WIS \text{ Input TRS Trips} = EMFAC \text{ Default Trips} * (RTPA \text{ TRS Trips} / RTPA \text{ Baseline Trips})$$

Vehicle speeds. Most travel demand models provide output of estimated average speed by time period and link that may be summarized for use in EMFAC2002. For each major vehicle class and up to 24 hourly time periods, total VMT is divided into 13 different speed “bins” (5 mph through 65 mph) and used as input to EMFAC2002. ARB recommends continuation of this current practice to develop emissions budgets and assess conformity. Travel from intrazonal trips should be assigned to the appropriate speed bin based on the speed assigned to that travel in the travel demand model. VMT for each speed bin and time period can be used as input through the WIS function of EMFAC2002. It is also possible to input this data specific to vehicle class if adequate and defensible local data are available.

Vehicle population. Vehicle trips (starts) in EMFAC2002 are estimated as a function of the number of vehicles, or vehicle population, by county. The population of each class of motor vehicle is estimated and forecast from Department of Motor Vehicles (DMV) registration data. EMFAC2002 assumes there is a relationship between vehicle population and VMT, carried through mileage accrual rates.² In the default case, the model assumes *vehicle population * mileage accrual = VMT*. ARB-preferred practice is to maintain this internal consistency, for reasons explained below.

Vehicle miles of travel. Daily VMT is both an emissions model input usually provided by MPOs/RTPAs and a model output used to estimate exhaust emissions. ARB staff reviews MPO/RTPA estimates of VMT and vehicle speeds, and supports these estimates for use in air quality plans whenever we agree they are reasonable and defensible. Use of the latest estimates of MPO/RTPA VMT and speeds in plan development facilitates the subsequent federal transportation conformity process. This is particularly important for any year for which the plan creates emissions budgets, as conformity rules allow no emissions budget exceedance, regardless of how small. As there may be some variance between default EMFAC2002 VMT and more recent MPO/RTPA estimates to be used for SIP development, we are recommending a procedure to more exactly incorporate into emissions budgets revised VMT estimates for emissions budget analysis years.

Although it is possible to directly input VMT into EMFAC2002 through the model’s WIS function, it is generally not recommended to do this independent of vehicle population because of the desire to properly estimate start and evaporative emissions tied to the size of the vehicle fleet. A change in total forecasted miles of travel implies a change either in the number of vehicles traveling those miles or in mileage accrual rates. For future years, we generally recommend making vehicle population the variable, rather than mileage accrual. Thus, VMT adjustment would usually occur through vehicle population adjustment in the model’s WIS function, according to this formula:

$$\text{WIS Input Population} = \text{EMFAC Default Population} * (\text{RTPA VMT} / \text{EMFAC Default VMT})$$

² Accrual rates are miles traveled per year as a function of vehicle age, derived from the Bureau of Automotive Repair Smog Check database as described in Section 7.1 of the EMFAC2000 Technical Support Document, found via http://www.arb.ca.gov/msei/on-road/latest_revisions.htm#pcaccrual.

The result of this modification is that emissions estimates more precisely incorporate the daily VMT provided by each MPO/RTPA to calculate exhaust emissions, and vehicle population is adjusted for consistency with this assumption of higher or lower VMT, providing similarly modified start and evaporative emissions.³ Though the emissions impact of using this approach will often be small, we believe the approach is appropriate given the desire to fully reflect the impacts of changes in travel activity on all emissions processes. Use of consistent methods in air quality plans and conformity assessments will both reduce potential conformity problems and preserve the integrity of the SIP and conformity processes.

Alternatively, local data may indicate that changes in VMT are tied more closely to changes in household or business rates of travel than to changes in vehicle ownership. Or, improved travel demand modeling may project auto ownership rates with a high degree of confidence. In such cases it may be appropriate to adjust total mileage accrual rather than vehicle population. It is also possible to derive a modified VMT forecast from adjustments to both variables in EMFAC2002. Planning agencies are encouraged to present alternative approaches for consideration in the interagency consultation process.

Recommendations

1. ARB recommends that the EMFAC2002 default estimates of vehicle trips, based on starts per day, be used for SIP development and conformity purposes. Model defaults for trips may be factored to account for trip reduction scenarios, but should not be replaced with estimates that do not account for all vehicle starts. Alternative approaches, such as the factoring of travel demand model trip outputs for appropriate classes to account for additional starts, may be considered through interagency consultation.
2. We recommend continuation of current practices for input of latest speed distributions for SIPs and conformity assessments. Travel from intrazonal trips should be assigned to the appropriate speed bin based on the speed assigned to that travel in the travel demand model.
3. To fully reflect the impacts of modified VMT forecasts on all emissions processes, in the calculation of SIP emissions budgets, and in the assessment of conformity with those budgets, vehicle population should be adjusted in EMFAC2002 proportional to the estimated VMT change. Local circumstances may alternatively support adjustment of mileage accrual rates, subject to interagency consultation.

³ After adjusting VMT through use of the population variable in the WIS function of EMFAC, a user who desires to match VMT even more exactly (to the mile instead of the tens of miles) can then adjust VMT in the WIS without disturbing the population adjustment. This is unlikely to have a discernible impact on emissions, however.

Appendix G

Adjustments to Draft Conformity Report



METROPOLITAN
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Memorandum

TO: Air Quality Conformity Task Force

DATE: June 25, 2013

FR: Harold Brazil

W.I.:

RE: Adjustments to Draft Conformity Report

Background

Housing and Jobs Distribution

ABAG has made minor modifications have been made to the housing and employment distributions in the Draft Plan Bay Area (“Draft Plan”). Specifically, the modifications reflect: (1) corrections to datasets that were used to develop the jobs and housing distributions in the Draft Plan; (2) adjustments to ensure consistency with Regional Housing Needs Allocation (RHNA); and (3) adjustments to local jurisdictions growth based on corrections to how the distribution methodology was applied. The changes are minor and do not impact any of the regional significance findings in the Draft Environmental Impact Report, nor do they impact the Air Quality Conformity findings. See *Attachment A* for more details on the housing and employment distributions.

EPA Approved Version of EMFAC2011

EMFAC2011 is the new version of CARB’s emission model and provides planners a tool for assessing emissions under different forecast scenarios. This includes conformity analyses of transportation plans and programs with the State Implementation Plans (SIPs) required by federal law, SIP inventories, alternative growth scenarios associated with regional transportation planning for greenhouse gas reductions (SB375), and regional transportation plan, environmental impact report (EIR) emission inventories.

The most important improvement in EMFAC2011 is the integration of the new data and methods to estimate emissions from diesel trucks and buses. EMFAC2011 uses the same diesel truck and bus vehicle populations, miles traveled and other emissions-related factors developed for the Truck and Bus Rule approved by CARB in 2010. The model includes the emissions benefits of the Truck and Bus Rule and the previously adopted rules for other on-road diesel equipment. Also, the impacts of the recession on emissions that were quantified as part of the truck and bus rulemaking are included.

In July 2012, ARB staff identified a typographical error in the EMFAC2011-LDV module code that incorrectly assigned trips in gasoline powered school buses, urban t transit buses, other buses, motorcycles, and motorhomes in Santa Clara County. These trips were overestimated as a result, which led to an overestimate of ROG emissions in the Bay Area and for the statewide total. The EMFAC2011-LDV module has been corrected and re-released. New input files to SG were generated for Santa Clara

County. The module code and algorithms in the EMFAC2011-SG module were not otherwise affected by this change.

The United States Environmental Protection Agency (USEPA) approved of the EMFAC2011 emissions model for SIP and conformity purposes is effective March 6, 2013. EMFAC2011 must be used for all new regional emissions analyses and CO, PM₁₀ and PM_{2.5} hotspot analyses that are started on or after September 6, 2013.

Plan Bay Area and the 2013 Transportation Improvement Program Conformity Analysis Results						
<u>BEFORE</u> Adjustments to Draft Report						
	2008	2014	2015	2020	2030	2040
	<i>Baseline Yr</i>	<i>Attainment Yr</i>	<i>Project</i>	<i>Project</i>	<i>Project</i>	<i>Project</i>
Vehicles in Use	4,596,718	4,707,480	4,746,969	4,908,292	5,171,295	5,463,760
Daily Vehicle Miles Traveled (VMT)	166,041,242	168,767,442	170,400,786	176,711,880	185,913,103	196,927,122
Engine Starts	30,816,234	31,485,254	31,745,858	32,829,751	34,437,713	36,362,648
ROG	N/A	N/A	62.35	46.87	37.56	36.53
NOx (Summertime)	N/A	N/A	111.39	74.60	49.60	48.51
CO	1,030.65	601.47	550.13	375.03	272.50	266.47
PM _{2.5}	7.64	5.51	5.26	5.04	5.30	5.64
NOx (Wintertime)	218.80	136.82	124.72	83.35	55.17	53.71
Plan Bay Area and the 2013 Transportation Improvement Program Conformity Analysis Results						
<u>AFTER</u> Adjustments to Draft Report						
	2008	2014	2015	2020	2030	2040
	<i>Baseline Yr</i>	<i>Attainment Yr</i>	<i>Project</i>	<i>Project</i>	<i>Project</i>	<i>Project</i>
Vehicles in Use	4,596,718	4,710,130	4,740,063	4,900,323	5,168,834	5,463,106
Daily Vehicle Miles Traveled (VMT)	166,041,242	168,861,102	170,151,969	176,429,204	185,830,407	196,911,394
Engine Starts	29,321,651	29,964,074	30,140,124	31,121,589	32,631,760	34,443,678
ROG	N/A	N/A	55.56	40.81	31.67	30.24
NOx (Summertime)	N/A	N/A	110.50	73.80	48.91	47.81
CO	1,007.29	579.63	526.93	352.02	248.56	240.98
PM _{2.5}	7.63	5.51	5.25	5.03	5.30	5.64
NOx (Wintertime)	217.85	136.04	123.71	82.44	54.38	52.91

Plan Bay Area and the 2013 Transportation Improvement Program Conformity Analysis Numerical Differences <u>AFTER</u> Adjustments to Draft Conformity Report						
	2008	2014	2015	2020	2030	2040
	Baseline Yr	Attainment Yr	Project	Project	Project	Project
Vehicles in Use	0	2,650	-6,907	-7,969	-2,462	-654
Daily Vehicle Miles Traveled (VMT)	0	93,661	-248,817	-282,676	-82,697	-15,728
Engine Starts	-1,494,583	-1,521,180	-1,605,734	-1,708,161	-1,805,952	-1,918,970
ROG	N/A	N/A	-6.78	-6.07	-5.89	-6.29
NOx (Summertime)	N/A	N/A	-0.89	-0.80	-0.69	-0.71
CO	-23.35	-21.85	-23.20	-23.00	-23.94	-25.50
PM _{2.5}	-0.01	0.00	-0.01	-0.01	0.00	0.00
NOx (Wintertime)	-0.95	-0.78	-1.01	-0.91	-0.79	-0.80
Plan Bay Area and the 2013 Transportation Improvement Program Conformity Analysis Percentage Differences <u>AFTER</u> Adjustments to Draft Conformity Report						
	2008	2014	2015	2020	2030	2040
	Baseline Yr	Attainment Yr	Project	Project	Project	Project
Vehicles in Use	0.00%	0.06%	-0.15%	-0.16%	-0.05%	-0.01%
Daily Vehicle Miles Traveled (VMT)	0.00%	0.06%	-0.15%	-0.16%	-0.04%	-0.01%
Engine Starts	-4.85%	-4.83%	-5.06%	-5.20%	-5.24%	-5.28%
ROG	N/A	N/A	-10.88%	-12.94%	-15.67%	-17.21%
NOx (Summertime)	N/A	N/A	-0.80%	-1.07%	-1.39%	-1.46%
CO	-2.27%	-3.63%	-4.22%	-6.13%	-8.79%	-9.57%
PM _{2.5}	-0.11%	0.01%	-0.20%	-0.18%	-0.06%	-0.04%
NOx (Wintertime)	-0.44%	-0.57%	-0.81%	-1.09%	-1.42%	-1.50%

Draft Plan Bay Area Housing and Employment Distribution Revisions

Minor modifications have been made to the housing and employment distributions in the Draft Plan Bay Area (“Draft Plan”). These modifications take into account the considerable local input received on the land use plan to date. Specifically, the modifications reflect: (1) corrections to datasets that were used to develop the jobs and housing distributions in the Draft Plan; (2) adjustments to ensure consistency with Regional Housing Needs Allocation (RHNA); and (3) adjustments to local jurisdictions growth based on corrections to how the distribution methodology was applied. These modifications are described in more detail below. These minor modifications do not affect the conclusions of regional significance in the Draft Environmental Impact Report, nor do they impact the regional modeling results in a significant way.

Description of Modifications

1) Corrections to Data Sets

Several errors in the data used to develop the employment and housing distributions were identified both by ABAG staff and local jurisdictions. These include: errors in the number of jobs in specific jurisdictions within the National Establishment Time Series (NETS) data set that was used to develop the job distribution, errors in the U.S. Census housing data used to develop the housing distribution, and errors in local plan data that was used to develop the housing distribution.

NETS Corrections

The correction to the NETS base data was made for five jurisdictions including Hayward, Lafayette, Hillsborough, Unincorporated San Mateo County (specifically the San Francisco Airport area), Saratoga and Los Altos Hills. The corrections to the data set included a reduction of 2010 jobs for Hayward, Lafayette, Hillsborough, Saratoga and Los Altos Hills, and an increase in 2010 jobs for the San Francisco Airport.. The NETS data set is used to calculate the proportion of jobs by sector within each county for 2010. The 2010 county job totals remain the same, so corrections to the NETS data set are contained within each county (reductions in one city mean a proportional increase in 2010 jobs for other cities within the county). This modified base data was then used to recalculate 2040 jobs, resulting in shifts in the 2040 job distribution for all jurisdictions throughout the region. However, the bulk of the shifts were contained within the counties in which the corrections were made. At the regional level, the overall shift of jobs is negligible.

The specific changes to the NETS data set, by Sub-regional Study Area (SSA) and Priority Development Area (PDA), are detailed in Attachment A. The final modifications to 2010 employment for the jurisdictions noted above are detailed in Attachment B.

U.S. Census Corrections

Two fixes were made to the U.S. Census 2010 housing unit and household data set that was used in the housing distribution. These include a reduction in the 2010 housing numbers for Colma, per a statement of correction from the U.S. Census Department, and a fix to the split of housing units and households within and outside Orinda’s PDA. The result of the first correction was an increase of 2010 units to the Unincorporated San Mateo County area adjacent to Colma. The result of the second is a change only in the 2040 housing figures for Orinda’s PDA. In both cases, housing growth for these jurisdictions was not modified. These housing modifications are detailed in Attachment B.

Corrections to local plan data

A change was made to Cupertino's "local plan feedback" number, used to develop the housing distribution, to correct an error found after adoption of the Jobs-Housing Connection Strategy in May of 2012. The result of this fix was a reduction of housing growth in Cupertino. This housing modification is detailed in Attachment B.

2) Adjustments to ensure consistency with RHNA

Upon development of the Regional Housing Needs Allocation, ABAG found that the eight-year RHNA housing allocation for two jurisdictions, Clayton and Los Altos Hills, was higher than the housing growth for these jurisdictions in the thirty-year Plan Bay Area housing distribution. These jurisdictions received additional housing growth in the Plan Bay Area distribution so that total growth is equivalent to the RHNA number. These housing modifications are detailed in Attachment B.

3) Adjustments based on corrections to the application of the distribution methodology

The formal public comment period for both documents closed on May 16, 2013. A number of jurisdictions commented on the levels of employment and housing growth allocated in the Draft Plan as being too high, too low, or overly concentrated in their cities' PDAs. Twenty jurisdictions requested adjustments to their job number, sixteen requested adjustments to their housing number, and five requested shifts in growth from their PDAs to other areas within their city.

The distribution of employment and housing growth in the Draft Plan takes into account a variety of factors—including input from jurisdictions, level of transit service, Vehicle Miles Travelled by Household, in-commuting by low-wage workers, housing values, existing employment base, and concentration of knowledge-based economic activity, among others. ABAG staff thoroughly reviewed each request for modification and the overall methodology assigning job and housing growth to each jurisdiction. Staff acknowledged that the application of the distribution methodologies in certain instances was not appropriate. Several modifications for a small number of areas are noted below.

For all other jurisdictions, staff deemed that the distribution methodology was applied appropriately and consistently. Employment and housing growth in these jurisdictions was found to be consistent with and comparable to similarly-sized cities, and that this growth could be reasonably accommodated over the thirty-year time-frame of the Draft Plan.

Job Adjustments

Upon review of the employment methodology and employment figures for Dublin and Livermore, additional job growth was assigned to these cities. Staff found that the employment distribution methodology is slightly under-allocating certain sectors of employment growth in these cities, given that the model bases growth largely on cities' existing jobs base and does not account well for current and anticipated employment growth rates. Dublin and Livermore are currently small job centers but have growing jobs in the knowledge-based sector. These cities were assigned proportionately fewer jobs than cities with larger current job bases but less capacity and slower expected rates of growth, such as Hayward and Unincorporated Alameda County. Growth in Hayward and Unincorporated Alameda County was reduced commensurate to the increases in Dublin and Livermore.

Housing Adjustments

Housing growth for the portion of the El Camino Real Priority Development Area (PDA) in Burlingame was reduced. This is a reduction of the growth that was assigned to the Burlingame El Camino Real PDA as part of the additional housing growth allocation to several key job centers and locations along the core transit network in the Jobs-Housing Connection Strategy¹. Staff found that this PDA was inappropriately assigned this additional housing growth given its close proximity to the San Francisco Airport. The balance of housing from this adjustment was distributed to all other cities and towns within the region per the growth distribution methodology.

Housing growth in the Plan was deemed to be quite low for Brentwood. The level of housing was adjusted upward to reflect a more reasonable rate of growth considering current development rates. The increase in housing growth in Brentwood is commensurate with the decrease in Cupertino.

Housing growth in the PDAs was reduced for the following jurisdictions: Lafayette, Walnut Creek, San Mateo, and Sunnyvale. In the case of Lafayette and Walnut Creek, staff acknowledges that a portion of the housing growth allocated to these jurisdictions' PDAs, given their small size, could be accommodated in the transit-accessible areas adjacent to the PDAs. In the case of San Mateo and Sunnyvale, it was recognized that housing growth was somewhat over-concentrated in the cities' PDAs in relation to the regional concentration of growth in the PDAs. Growth in San Mateo's PDAs was adjusted to achieve a lower concentration of growth, down from 81% to 77% of total city growth, and for Sunnyvale, growth in the PDAs was adjusted down from 83% to 79% of total city growth. The total growth for all four of these cities was not modified.

These housing and employment modifications are detailed in Attachment B.

Conclusions

These changes do not affect the regional significance conclusions in the Draft Environmental Impact Report, nor do they result in significant changes in the regional modeling results, including the conclusion that the Draft Plan achieves the greenhouse gas emissions reduction targets.

Attachments

Attachment A: Employment and Housing Revision Requests by Jurisdiction and Final Modifications

¹ http://onebayarea.org/pdf/Draft_Plan_Bay_Area/Draft_PBA_Forecast_of_Jobs_Population_and_Housing.pdf, p.

Table 1: Employment and Housing Modifications by Jurisdiction

County	City	PDA or sub-area	Housing Unit Modification		Job Modification		Shifted to/from	Rationale
			2010	2040	2010	2040		
Alameda	Oakland	Downtown		-72			to Clayton and Los Altos Hills	Adjustment to ensure that Clayton and Los Altos Hills RHNA growth from 2014-2022 does not exceed total 30- year growth
Alameda	Dublin					2300	swap jobs to Dublin from City of Hayward and Livermore Lab in unincorporated area	Response to comment from City of Dublin. Expect greater job growth in certain sectors than jobs distribution model predicts (model based largely on existing concentrations of jobs which are currently small in this city in comparison to other job centers)
							swap jobs to Livermore from City of Hayward and Livermore Lab in unincorporated area	Response to comment from City of Dublin. Expect greater job growth in certain sectors than the jobs distribution model predicts (model based largely on existing concentrations of jobs which are currently small in this city in comparison to other job centers)
Alameda	Livermore					1500		Correction to NETS. Response to comment form City of Hayward that employment growth is too high. Already fairly densely-built and areas of growth are limited.
Alameda	Hayward	Downtown			-961	-1000		
Alameda	Alameda County Unincorporated					-2800	swap jobs to Dublin and Livermore from Lab in unincorporated area	Response to comment from County of Alameda. Expect lower job growth in certain sectors than the jobs distribution model predicts.
Contra Costa	Brentwood			1040			from Cupertino	Response to comment from City of Brentwood. Expect greater housing growth than housing distribution allocates; increased growth rate to more closely align with local plans.
Contra Costa	Clayton			37			from Oakland	Adjustment to ensure that Clayton RHNA growth from 2014-2022 does not exceed total 30- year growth.
Contra Costa	Walnut Creek	West Downtown		-436			to rest of WC	Response to City of Walnut Creek comment that too much of city's growth in in the PDA. PDA is small, so growth can be shifted to downtown core area surrounding PDA.
Contra Costa	Walnut Creek	rest of city		436			from West Downtown PDA	
Contra Costa	Lafayette	Downtown		-35	-702		to rest of Lafayette	Response to City of Lafayette comment that too much of city's growth in in the PDA. Slight adjustment of units to areas outside of PDA. Correction to NETS.
Contra Costa	Lafayette	rest of city		35			from Downtown Lafayette PDA	
Contra Costa	Orinda	Downtown	114					Correction to housing data set. Prior PDA Housing unit figures did not match households and vacancy rates. Adjustment made to housing units, but households remain the same
Contra Costa	Orinda		-114					
San Mateo	San Mateo	Rail Corridor		-368			to rest of San Mateo	Response to City of San Mateo comment that that city's growth is overconcentrated in the PDA. Shifted PDA level of growth from 81% to 77% of overall city growth, to achieve level closer to regional concentration of growth in PDAs.
San Mateo	San Mateo	rest of city		368			from Rail Corridor	
San Mateo	Burlingame	El Camino Real		-844				Response to City of Burlingame comment that city's growth is overconcentrated in PDA. Corrected application of housing distribution methodology to increase housing growth in key job centers and locations along core transit network, given limited room for growth and intensification in a PDA in close proximity to SFO.
San Mateo	Colma	El Camino Real - South San Francisco	-152					Correction to 2010 Census Data. Housing level appropriate but 2010 number reduced so 2040 total will be reduced.
San Mateo	Unincorporated Daly City	El Camino Real - Unincorporated Daly City	153					Correction to NETS
San Mateo	Unincorporated Daly City		-1					Correction to NETS
San Mateo	Hillsborough				-338			Correction to NETS
San Mateo	San Francisco Airport				6222			Correction to NETS
Santa Clara	Los Altos Hills			35			from Oakland	Adjustment to ensure that Los Altos Hills RHNA growth from 2014-2022 does not exceed total 30- year growth. Correction to NETS.
Santa Clara	Sunnyvale	Lawrence Station		-786			to rest of Sunnyvale	Response to City of Sunnyvale comment that that city's growth overconcentrated in the PDAs. Shifted PDA level of growth from 83% to 79% of overall city growth, closer to regional concentration of growth in PDAs.
Santa Clara	Sunnyvale			786			from Lawrence Station	
Santa Clara	Cupertino			-1040			to Brentwood	Correction to "locally-planned growth" data for the city.
Santa Clara	Saratoga				-1959			Correction to NETS
Santa Clara	Los Altos Hills				-1521			Correction to NETS

Note: NETS corrections involved the identification of incorrect or misplaced data in the NETS dataset. Any corrections to NETS 2010 base year data will change both the 2010 distribution of jobs and the share of growth allocated for these areas.

Note: Unless a housing unit correction is a direct swap between two areas, any corrections to housing units are distributed among all other areas in the region.

Table 2: Revision Requests from all other Jurisdictions

County	City	PDA or sub-area	Housing Unit Modification		Job Modification		Request and Rationale
			2010	2040	2010	2040	
Alameda	Livermore			none			Requested lower housing growth. No adjustment as housing growth appropriate and reasonable given level of job growth.
Alameda	Oakland			none		none	Desired regional distribution of housing more closely aligned with EIR Alternative 4 ("EEU"), and greater concentration of employment along core transit in Inner East Bay, but did not specify specific adjustments to city levels of growth. No large-scale regional adjustments to growth distribution were made.
Contra Costa	Antioch					none	Requested higher employment growth. No adjustment as no trends support more job growth here.
Contra Costa	Brentwood					none	Requested higher employment growth. No adjustment as no trends support more job growth here.
Marin	Belvedere					none	Requested lower employment growth. No adjustment as job growth is appropriate given expected growth in population, and therefore need for population-serving jobs, and reasonable capacity to accommodate this growth.
Marin	Corte Madera					none	Requested lower employment growth. No adjustment as job growth is appropriate given expected growth in population, and therefore need for population-serving jobs, and reasonable capacity to accommodate this growth.
Marin	Larkspur					none	Requested lower employment growth. No adjustment as job growth is appropriate given expected growth in population, and therefore need for population-serving jobs, and reasonable capacity to accommodate this growth.
Marin	Marin Unincorporated					none	Requested lower employment growth. No adjustment as job growth is appropriate given expected growth in population, and therefore need for population-serving jobs, and reasonable capacity to accommodate this growth.
Marin	Novato					none	Requested lower employment growth. No adjustment as job growth is appropriate given expected growth in population, and therefore need for population-serving jobs, and reasonable capacity to accommodate this growth.
Marin	San Rafael					none	Requested lower employment growth. No adjustment as job growth is appropriate given expected growth in population, and therefore need for population-serving jobs, and reasonable capacity to accommodate this growth.
Santa Clara	Gilroy					none	Requested higher employment growth. No adjustment as High Speed Rail outcome is unclear.
Santa Clara	Los Altos			none			Requested lower housing growth. No adjustment as housing growth appropriate given similarly sized cities with similar transit, employment and housing characteristics. Reasonable capacity to accommodate growth in downtown and other areas of city.
Santa Clara	Los Gatos			none		none	Requested lower employment and housing growth. No adjustment as employment growth appropriate given the size of the existing employment base in comparison to similarly sized cities in the county, as well as the base of knowledge-sector employment. Housing growth also appropriate given similarly sized cities with similar transit, employment and housing characteristics. Growth could be reasonably accommodated.
Santa Clara	Palo Alto			none		none	Requested lower employment and housing growth. No adjustment as growth is appropriate given population and existing employment base, in comparison to similarly-sized cities such as Redwood City. Reasonable capacity to accommodate growth within city, such as along El Camino Real.
Santa Clara	Santa Clara	PDA		none		none	Requested lower housing and employment growth, and lower concentration of growth in PDAs. Employment growth appropriate in comparison to similarly sized cities (population and employment base) and given existing concentration of employment. Capacity to accommodate jobs in PDAs, specifically locations along El Camino and the VTA Corridor PDA. Housing growth appropriate in comparison to similarly sized cities with similar employment levels and can be reasonably accommodated in PDAs. In terms of PDA concentration: Downtown/Santa Clara Station Area growth is no more than locally-planned level of growth; El Camino could see redevelopment so Plan growth reasonable and appropriate. City also incorrectly cites concentration of growth in PDAs as 77% and 66% for housing, jobs respectively; However, it is only 61% & 29% in the Plan, so no adjustment to PDA concentration provided.
Sonoma	Windsor	PDA		none		none	Requested less concentration of employment and housing growth in PDA. No adjustment as there is reasonable capacity to accommodate growth in the PDA.

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