

APPENDIX A – 4

Air Quality Conformity Analysis MTC Resolution No. 4274



Date: September 28, 2016
W.I.: 1412
Referred by: PAC

ABSTRACT

Resolution No. 4274

This resolution approves the Transportation Air Quality Conformity Analysis for the Amended Plan Bay Area (Plan) and the 2017 Transportation Improvement Program (TIP).

Further information is contained in the Programming & Allocations Committee summary sheets dated September 14, 2016.

Date: September 28, 2016
W.I.: 1412
Referred by: PAC

RE: Approval of the Transportation Air Quality Conformity Analysis for the Amended Plan Bay Area and the 2017 Transportation Improvement Program

METROPOLITAN TRANSPORTATION COMMISSION
RESOLUTION NO. 4274

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to California Government Code Section 66500 et seq.; and

WHEREAS, MTC is the designated Metropolitan Planning Organization (MPO) for the nine-county San Francisco Bay Area region (the region); and

WHEREAS, the current Regional Transportation Plan (RTP) is Plan Bay Area, adopted by the Commission on July 18, 2013 (MTC Resolution No. 4111); and

WHEREAS, MTC has prepared the 2017 Transportation Improvement Program (TIP) (MTC Resolution 4275), to be approved the same day as this Resolution; and

WHEREAS, the RTP and the TIP must conform to the State Implementation Plan (SIP), the federal air quality plan for the Bay Area; and

WHEREAS, the San Francisco Bay Area air basin was designated by U.S. Environmental Protection Agency (U.S. EPA) as nonattainment for the fine particulate matter (PM_{2.5}) standard in December 2009, and so MTC must demonstrate conformance to this standard through an interim emission test until a PM_{2.5} SIP is approved by U.S. EPA:

WHEREAS, MTC has conducted a transportation air quality conformity analysis for the 2017 TIP and RTP in accordance with U.S. EPA conformity regulations and the Bay Area Air Quality Conformity Protocol (MTC Resolution No. 3757); and

WHEREAS, the Transportation Air Quality Conformity Analysis for the Amended Plan Bay Area and the 2017 Transportation Improvement Program updates the Transportation Air Quality Conformity Analysis of the Amendment to Plan Bay Area and Amendment to 2015 Transportation Improvement Program to reflect updated project delivery information for those projects whose completion years have shifted since the original adoption of Plan Bay Area and the 2015 TIP; and

WHEREAS, said conformity redetermination analysis is referenced in Attachment A of this resolution, and is incorporated herein as though set forth at length; and

WHEREAS, the conformity analysis has been circulated for the required 30-day public comment review period per MTC Resolution No. 4274; now, therefore be it

RESOLVED, that MTC makes the following conformity findings for the Amended Plan Bay Area and 2017 Transportation Improvement Program:

- (A) Conforms to the applicable provisions of the State Implementation Plan and the applicable transportation conformity budgets in the State Implementation Plan approved for the national 8-hour ozone standard and carbon monoxide standard, and to the interim emissions test for the national fine particulate matter standard; and
- (B) Provides for the timely implementation of transportation control measures (TCMs) pursuant to the applicable State Implementation Plan;

RESOLVED, that MTC adopts the Transportation Air Quality Conformity Analysis for the Amended Plan Bay Area and the 2017 Transportation Improvement Program, as set forth in Attachment A; and be it further

RESOLVED, that Executive Director shall forward a copy of this Resolution to the U.S. Department of Transportation for its approval of MTC's conformity findings, along with a copy of the 2017 Transportation Improvement Program and to such other agencies as appropriate.

METROPOLITAN TRANSPORTATION COMMISSION



Dave Cortese, Chair

The above resolution was entered into by the Metropolitan Transportation Commission at a regular meeting of the Commission held in San Francisco, California, on September 28, 2016.

Date: September 28, 2016
W.I.: 1412
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Attachment A
Resolution No. 4274
Page 1 of 1

Transportation Air Quality Conformity Analysis for the Amended Plan Bay Area (Plan) and the 2017 Transportation Improvement Program (TIP)

A copy of the Conformity Redetermination is on file at the MTC-ABAG Library located in the Bay Area Metro Center, 375 Beale Street, Suite 800, San Francisco, California 94105.

**Final Transportation-Air Quality Conformity Analysis for the Amended
Plan Bay Area and the 2017 Transportation Improvement Program**

Final: September 28, 2016



**METROPOLITAN
TRANSPORTATION
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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 updates its Transportation Improvement Program (TIP) or adds or deletes regionally significant, non-exempt projects into TIP.

The purpose of this conformity analysis is to reconfirm the Amended Plan Bay Area and to conform the 2017 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 2008 national ambient air quality standard (NAAQS) for 8-hour ozone, the 8-hour national carbon monoxide standard, and the 2006 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 for the Amended Plan Bay Area and 2017 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 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 176 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. "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 four 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 through 2040. 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 originally adopted Plan Bay Area on July 18th, 2013 (MTC Resolution No. 4111). Subsequently, the FHWA and FTA approved MTC's Final Amendment to Plan Bay Area (to include the Richmond-San Rafael Bridge Access Improvement Project), Resolution No. 4198 in October 2015.

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 2017 TIP contains 700 projects totaling about \$6.6 billion over the four-year period from fiscal year 2016-17 to 2019-20. This conformity analysis serves to conform the 2017 TIP and the Amended Plan Bay Area.

Refer to **Appendix A1** for detailed project listing of projects/programs in the 2017 TIP. Note that specific funding sources are identified in the TIP itself. **Appendix A2** lists the projects in the Final 2017 Transportation Improvement Program with updated conformity analysis years.

Refer to **Appendices A1 and B** for detailed project listing of projects/programs included in the proposed 2017 TIP and Amended Plan Bay Area. See MTC's Plan Bay Area for full details about the plan².

II. BAY AREA AIR POLLUTANT DESIGNATIONS

National 1-Hour Ozone Standard

On November 6, 1991, the 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 ozone violations had occurred and requested CARB to forward a redesignation request and an ozone maintenance plan to 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 EPA published a Notice of Final Rulemaking redesignating the Bay Area back to an

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

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 November 1, 2001, CARB approved the San Francisco Bay Area 2001 Ozone Attainment Plan for the 1-Hour National Ozone Standard (2001 Plan) as a revision to the SIP. The BAAQMD and its co-lead agencies, MTC) and ABAG adopted the 2001 Plan on October 26, 2001.

BAAQMD prepared the 2001 Plan because the Bay Area failed to attain the federal ozone standard by its 2000 deadline. As a result, EPA disapproved the Bay Area's 1999 Plan and required a new plan with an updated volatile organic compounds (VOC) and nitrogen oxides (NOx) emissions inventory, new transportation conformity budgets, and that shows attainment of the federal ozone standard by 2006.

The 2001 Plan contains a control strategy with seven new stationary source measures, five transportation control measures (TCMs), and eleven further-study measures. In the 2001 Plan, the District also commits to strengthen the Smog Check program by requesting the State Bureau of Automotive Repair to implement two VOC-reducing program elements. The new measures and on-going programs will provide 271 tons per day of combined VOC and NOx emission reductions between 2000 and 2006. The 2001 Plan also includes a new attainment assessment based on currently available data for the Bay Area. The Bay Area co-lead agencies have committed to reassess the attainment assessment in 2003 using data from the Central California Ozone Study and to submit a revised SIP to EPA in 2004 with any needed modifications to the control strategy.

On November 30, 2001, ARB submitted the 2001 Plan to EPA for approval as a revision to the California SIP. To support the on-road motor vehicle emission inventory and transportation conformity budgets in the Plan, CARB also transmitted the San Francisco Bay Area-EMFAC2000 model to EPA for approval for the Bay Area.

On October 31, 2003, 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, 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

In July 1997, EPA revised the ozone standard, setting it to 80 parts per billion (ppb) in concentration-based specifically on 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. 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.

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.

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 which was June 15, 2005 for 8-hour ozone areas.

In March 2008, EPA lowered the national 8-hour ozone standard from 80 ppb to 75 ppb. On March 12, 2009, CARB 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 CARB 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.

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 ended on July 20, 2013.

On February 13, 2015, EPA issued a final rule that addresses a range of implementation requirements for the 2008 National Ambient Air Quality Standards (NAAQS) for ground-level ozone. The EPA set the final primary and secondary standards at 75 ppb on March 12, 2008.

This final action specifically:

- Establishes due dates for air agencies to submit state implementation plans (SIPs) demonstrating how areas designated as nonattainment for the 2008 ozone NAAQS will meet the standards by the appropriate attainment date;
- Clarifies attainment dates for each nonattainment area according to its classification (established based on air quality thresholds);
- Provides guidance on nearly all aspects of the attainment planning requirements for designated nonattainment areas;
- Revokes the 1997 ozone NAAQS; and
- Establishes anti-backsliding requirements for areas remaining nonattainment for the 1997 ozone NAAQS.

This final rule addresses a range of nonattainment area state implementation plan (SIP) requirements for the 2008 ozone NAAQS, including requirements pertaining to attainment demonstrations, reasonable further progress (RFP), reasonably available control technology (RACT), reasonably available control measures (RACM), major new source review (NSR), emission inventories, and the timing of SIP submissions and of compliance with emission control measures in the SIP.

On Oct. 1, 2015, EPA strengthened the National Ambient Air Quality Standards (NAAQS) for ground-level ozone to 70 ppb, based on extensive scientific evidence about ozone's effects on public health and welfare. The updated standards will improve public health protection, particularly for at-risk groups including children, older adults, people of all ages who have lung diseases such as asthma, and people who are active outdoors, especially outdoor workers. They also will improve the health of trees, plants and ecosystems.

States are to make recommendations to EPA by October 1, 2016, regarding whether their areas meet or do not meet the new NAAQS. EPA intends to issue final designations by October 1, 2017. Depending on the extent of the ozone problem, nonattainment areas would have from 2020 to 2037 to meet the health standard. Areas with longer to attain must meet increasing levels of stringency set forth in the Clean Air Act.

In addition, because marginal 8-hour ozone areas are not required to submit an attainment demonstration SIPs (containing motor vehicle emission budgets required to demonstrate conformity), the conformity finding in this report is based on the approved 1-hour ozone motor vehicle emission budgets contained in the Bay Area's 2001 Plan².

² See EPA's *Transportation Conformity Guidance for 2008 Ozone Nonattainment Areas* at: <http://www.epa.gov/otaq/stateresources/transconf/regs/420b12045.pdf>

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 ($\mu\text{g}/\text{m}^3$) to 35 $\mu\text{g}/\text{m}^3$. The annual fine particle standard at 15 $\mu\text{g}/\text{m}^3$ 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 areas designated as nonattainment areas must undergo a regional conformity analysis for PM_{2.5}. Furthermore, the procedures also mandate 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). 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 May 28, 2015, MTC elected to use the “baseline year test”. In this test, conformity is demonstrated if in each analysis year, the transportation emissions reflected the RTP or TIP (the “build” scenario) is less than or equal to emissions from the transportation system in the “baseline year” on-road source emission inventory. The “baseline year” for the 2006 24-hour PM_{2.5} standard is the year 2008⁴.

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 0.5)*, released in January 2015, calibrated to year 2000 conditions and validated against year 2000, year 2005, and year

³ See <http://www3.epa.gov/otaq/stateresources/transconf/baseline.htm>

2010 conditions . In conjunction with *Travel Model One*, MTC will also use the CARB’s model for determining motor vehicle emissions (EMFAC2014).

The EMFAC2014 model is used to show how California motor vehicle emissions have changed over time and are projected to change in the future. This information helps CARB evaluate prospective control programs and determine the most effective, science-based proposals for protecting the environment. EMFAC2014 includes the latest data on California’s car and truck fleets and travel activity. The model also reflects the emissions benefits of CARB’s recent rulemakings, including on-road diesel fleet rules, Advanced Clean Car Standards, and the Smartway/Phase I Heavy Duty Vehicle Greenhouse Gas Regulation. The model also includes updates to truck emission factors based on the latest test data. More details about the updates in emissions calculation methodologies and data are available in the EMFAC2014 Technical Support Document.⁴

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*⁵ 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. 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 year 2008 in Plan Bay Area requires a multi-stop process. First, regional control totals for each attribute for the year 2008 is 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 amendments to the 2017 TIP (see **Appendix A1**) and the Amended Plan Bay Area (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 (2010) EMFAC2014 default VMT information provided by the CARB. For conformity purposes, MTC continues to employ the agreed to protocol for estimating VMT with updated 2010 base year data.

⁴ <http://www.arb.ca.gov/msei/categories.htm>

⁵ <http://onebayarea.org/related-materials/Document-Archive.html>

Refer to **Appendix C** for detailed travel modeling assumptions⁶ 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, the analysis years are 2020, 2030 and 2040 for the 2008 ozone and 2006 PM_{2.5} standards. For CO, the analysis years are 2018, 2020, 2030 and 2040. Travel forecast data for year 2018 were interpolated between 2015 and 2020 data. 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 EPA, CARB, 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:

January 2016 through March 2016

- PM_{2.5} Project-Level Conformity Interagency Consultations
- Discussions on Projects with Regional Air Quality Conformity Concerns

April 2016

- PM_{2.5} Project-Level Conformity Interagency Consultations
- Discussions on Projects with Regional Air Quality Conformity Concerns
- Approach to Conformity Analysis for the 2017 Transportation Improvement Program and Amended Plan Bay Area

May and June 2016

- PM_{2.5} Project-Level Conformity Interagency Consultations

⁶ Additional information is available here: <http://analytics.mtc.ca.gov/foswiki/Main/Development>.

This document is part of the new Plan Bay Area 2040 scenario planning/development effort and the technical methods and assumptions used in this effort are consistent with what is applied in this conformity analysis.

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	<u>(0.5)</u>
2006 Emissions Budget	164.0
 NO_x	
2006 On Road Motor Vehicle Emissions	271.0
2006 TCM Benefits	<u>(0.7)</u>
2006 Emissions Budget	270.3

The motor vehicle activity forecasts for the 2017 TIP and Amended Plan Bay Area for the planned transportation system scenarios across the various analysis years for conformity to the 2008 ozone standard are shown in Table 2. Travel demand forecast model data (from MTC's Travel Model One) was inputted into CARB's EMFAC2014 emissions model, thereby generating regional vehicle activity and emissions estimates.

**TABLE 2
VEHICLE ACTIVITY FORECASTS**

	2020	2030	2040
VEHICLES IN USE	4,667,677	5,398,799	6,091,077
Daily VMT (1000s)	166,488	179,142	191,489
Daily Engine Starts	29,111,633	33,456,974	37,650,747

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 the 2017 TIP and Amended Plan Bay Area for the various horizon years are converted to motor vehicle emission estimates by MTC using EMFAC2014.

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
2020	164.0	35.69	(0.3)	35.39
2030	164.0	23.53	(0.3)	23.23
2040	164.0	18.05	(0.3)	17.75

Year	NO_x Budget	On-Road Motor Vehicles NO_x	TCMs***	Net Emissions
2020	270.3	64.80	(0.5)	64.30
2030	270.3	32.23	(0.5)	31.73
2040	270.3	28.34	(0.5)	27.84

* 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.

FIGURE 1

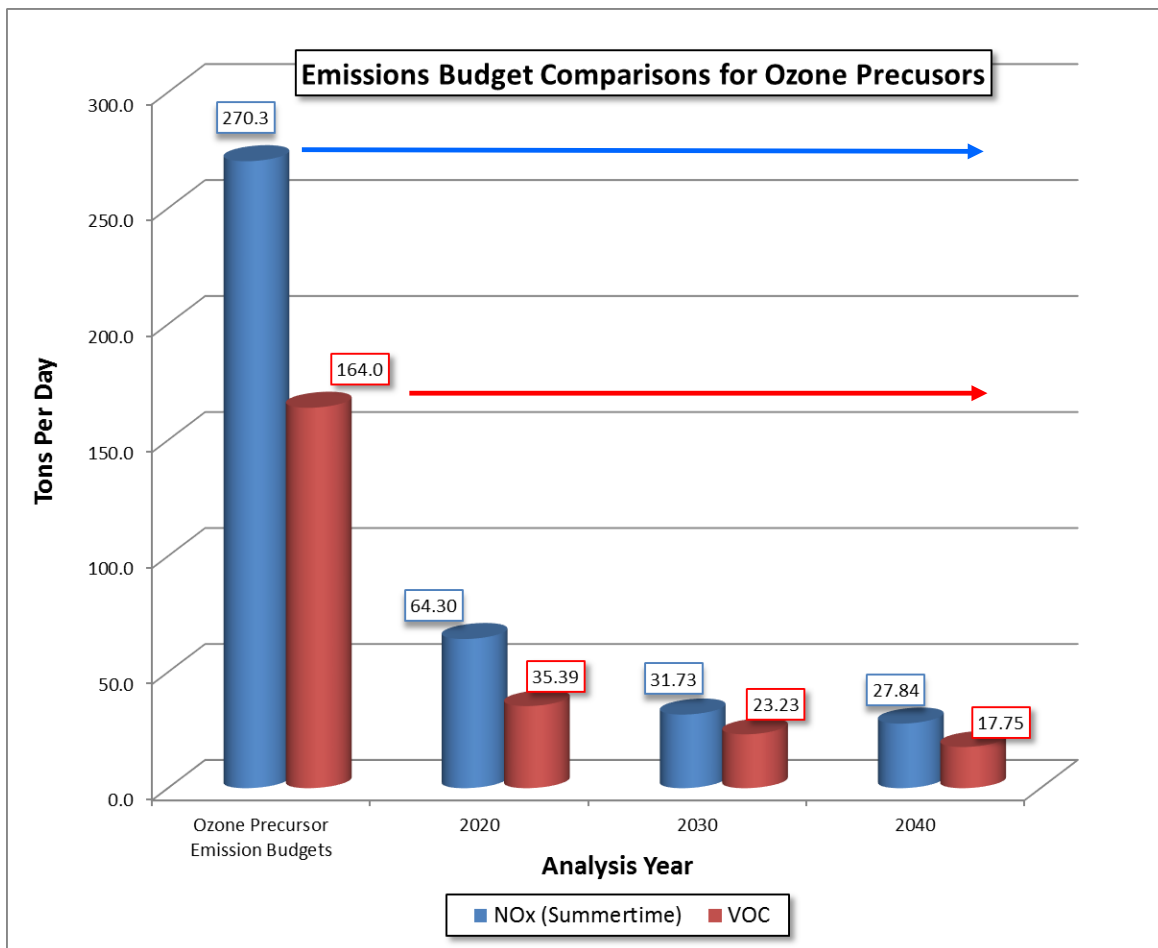


TABLE 3B
EMISSIONS BUDGET COMPARISONS FOR CARBON MONOXIDE
(TONS/DAY)*

Year	2004 CO Budget**	Estimated CO
2018	1,850	313.12 ***
2020	1,850	249.39
2030	1,850	144.22
2040	1,850	115.36

*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 year data.

FIGURE 2

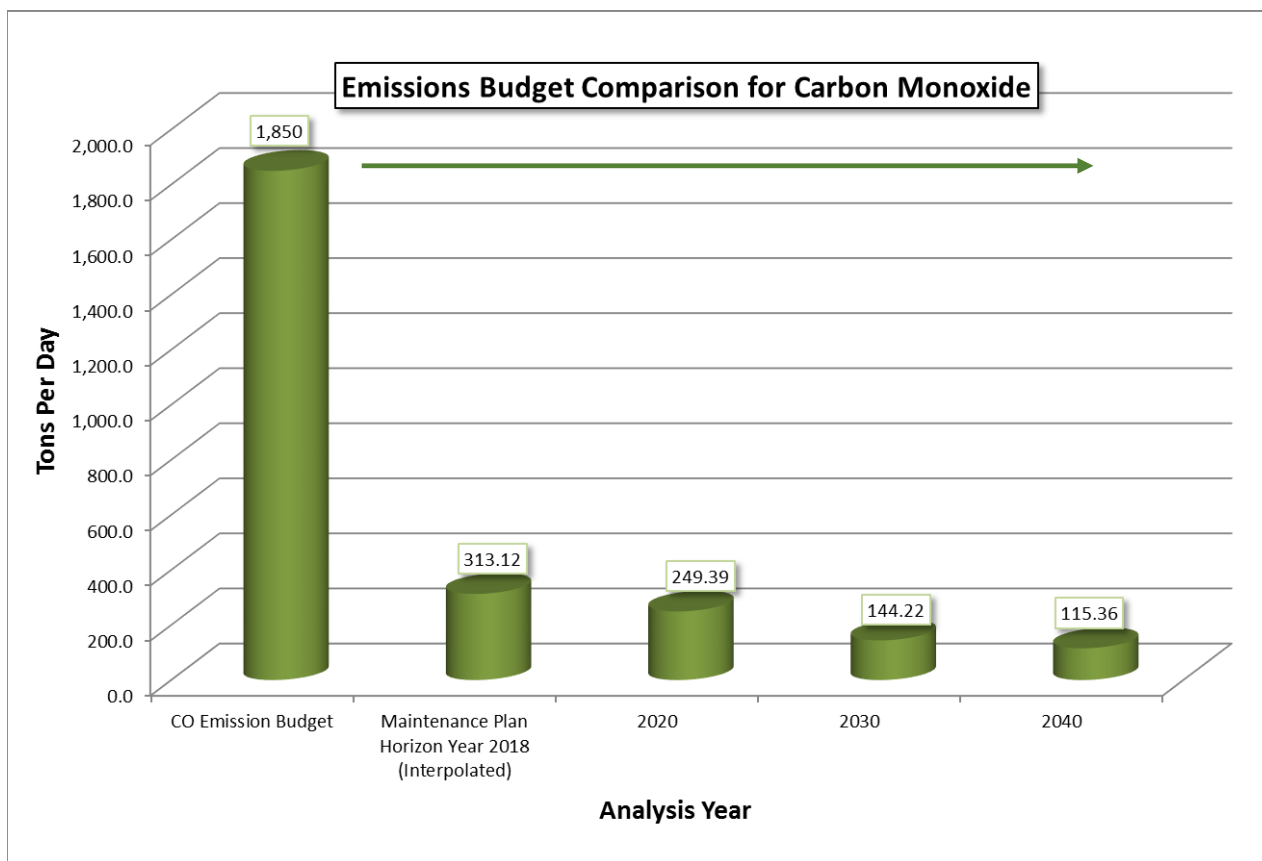


TABLE 4
EMISSIONS REDUCTIONS FOR TRANSPORTATION CONTROL MEASURES (TCMS) A – E IN STATE IMPLEMENTATION PLAN THROUGH DECEMBER 2006 (TONS PER DAY)

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 the 2017 TIP and Amended Plan Bay Area for the planned transportation system scenarios across the various analysis years and the PM_{2.5} baseline year (2008) are shown in Table 5. Travel demand forecast model data (from MTC's Travel Model One) was inputted into CARB's EMFAC2014 emissions model, thereby generating regional vehicle activity and emissions estimates.

Table 6 presents the results of the Baseline Year test for the PM_{2.5} emissions and the NO_x precursor for the 2006 24-hour PM_{2.5} standard. Regional conformity analyses must be completed for directly emitted PM_{2.5} (40 CFR 93.102(b)(1)). Directly emitted PM_{2.5} includes exhaust, brake and tire wear emissions.

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

	2008 Baseline Year	2020	2030	2040
Vehicles In Use	4,631,001	4,667,677	5,398,799	6,091,077
Daily VMT (1000s)	154,100	166,488	179,142	191,489
Engine Starts	29,299,933	29,111,633	33,456,974	37,650,747

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

	2008 Baseline Year	2020	2030	2040
PM_{2.5}	8.26	4.50	4.36	4.50
NO_x	194.58	59.76	26.58	22.58

*Emissions for wintertime only

FIGURE 3

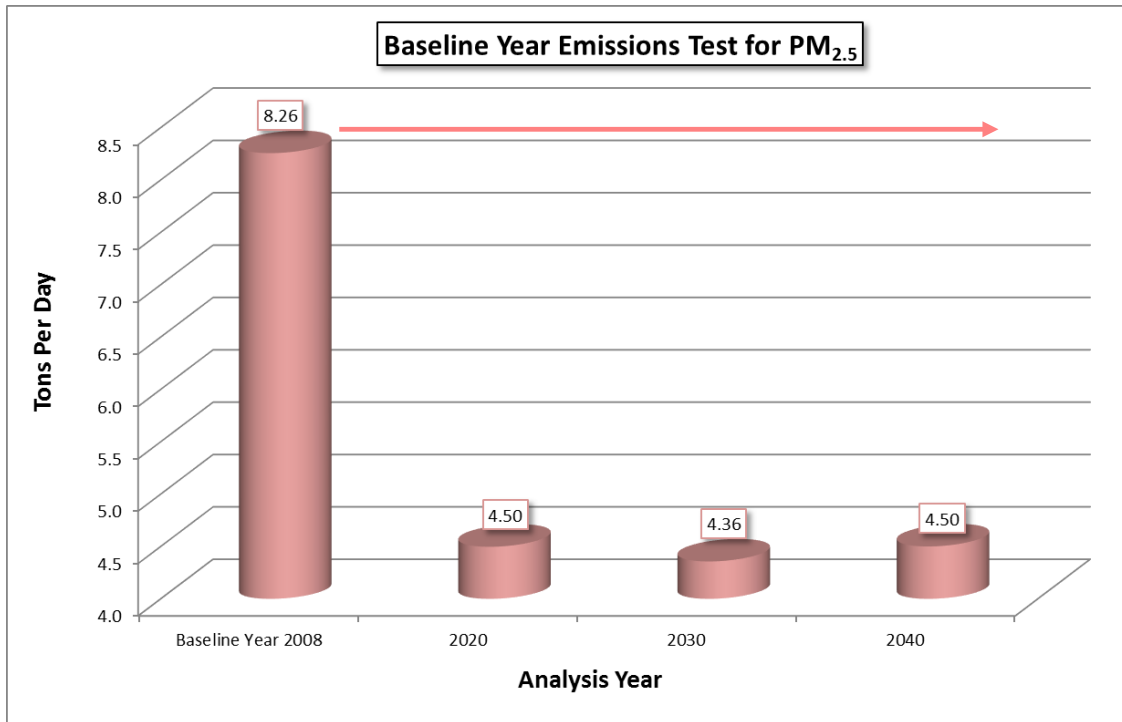
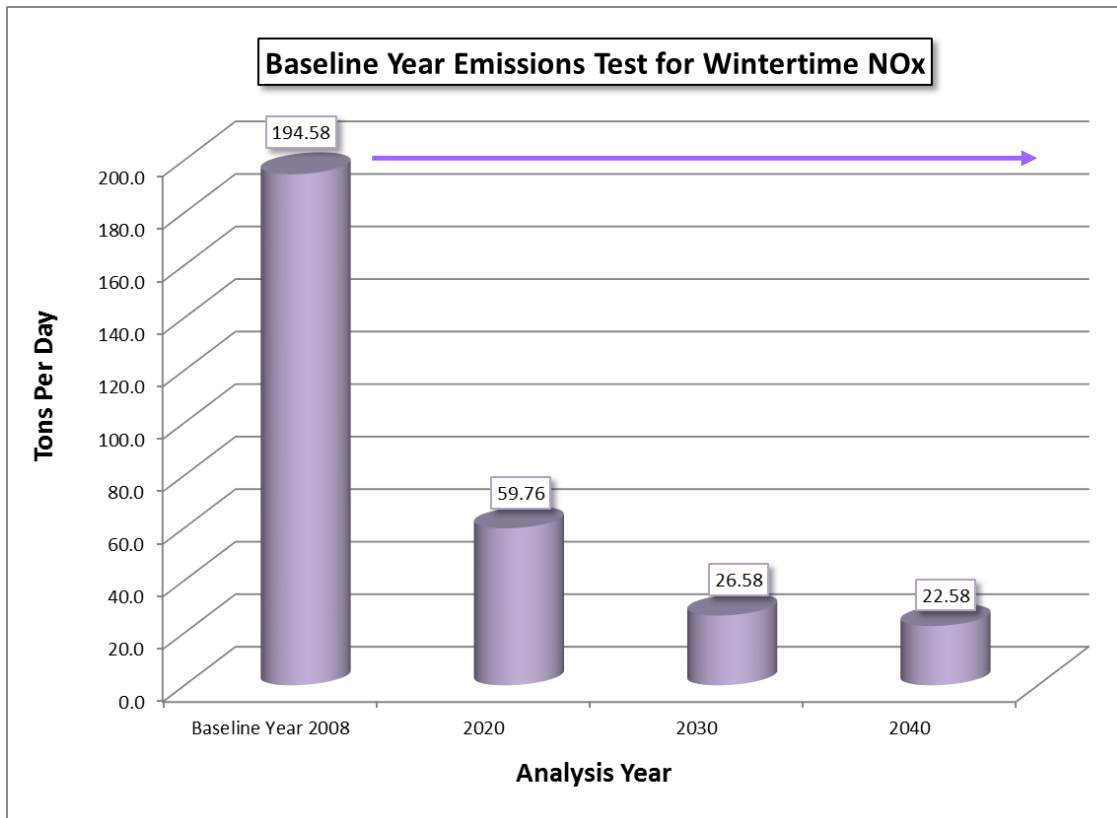


FIGURE 4



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 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 CARB 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.
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 CARB 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

Programming and Allocations Committee

September 14, 2016

Item 4a – Adoption of the 2017 TIP and Transportation- Air Quality Conformity Analysis for the Amended Plan Bay Area and the 2017 TIP

Appendix 1 – Comments Received

From: Andrea Mirenda [REDACTED]
Sent: Wednesday, July 27, 2016 4:18 PM
To: MTC Info <info@mtc.ca.gov>
Subject: El Camino bus lane is a bad idea

Please review the impact of all residents of the area. El Camino is so crowded today and removing a lane for a bus lane is a bad idea.

Regards, Andrea
Mirenda

[REDACTED]
Mountain View CA

-----Original Message-----

From: Cathy Jennings [REDACTED]

Sent: Friday, July 29, 2016 6:25 PM

To: MTC Info <info@mtc.ca.gov>

Subject: Express/HOV lanes on Peninsula hwy101

I am very much in favor of continuing HOV lanes north of Whipple Ave. These days it should be 24 hours and not just 7-9AM and 4-7PM. Anybody who must move along as a single occupant should have the option of paying for the privilege. Anybody driving alone who can't afford to pay will benefit from others paying to get out of the free lanes. The idea is to make it more attractive for people to carpool and if the HOV/Express lanes are moving while the others aren't, hopefully those that cannot afford the fees will find someone to carpool with instead.

As a professional who drives these roads routinely (with an assistant) I am in favor of anything that decreases traffic!

Cathy Jennings, DVM
[REDACTED]

SO PAX CAN/COULD REST/SOBE BACK, KNEES
BREATHE AS TWO OF THE LEGS STAYING
SIT DOWN FODS ON 4" IN DIAMETER HAUB BEEN
NOW REMOVED (TO PUT IN A NEW FLOOR) - STUPID
& NEXT BART, (UNIT) - ? SINCE MAY 2016
IN THE PUBLIC AREA

(A) TRUSTING THE ABOVE COMMENTS ISSUES CAN
& W/BE ADDRESSED IN ATTACHMENT (B)
pg 48 & REG. TLC PROGRAM IN RES. 3925
APPENDIX A - 14 STD. 6/17/2016.

(2) MAY 6 PLS ASK WAST & ID THE UNION CITY
INTERMODAL PROJ. ON THE 2013 TIP? I WAS IN
FAVOR THEN AS THE DESIGN WAS TO BE A PROPOSED
TO BE A FINGER/ISLAND TYPE W/ SAW TOOTH
BAYS FOR THE BUSES, AS FAR BACK AS: MAY 31, 1900
THE DESIGN WAS TO BE THIS WAY WITH
CONSULTANTS OF BOARD: SHYLM, OVE ARUP,
FEHR & PEERS, NELSON NYGAARD &
WINDIE & ASSO. A TRANSIT WAS HAPPY
W/ THE FINGER ISLAND DESIGN (ISLAND DOG EATTA
BART WAS NOT CONSIDERED ON THE PHASE I
WEST SIDE W/ A LOT OF TEMP CONC. CHG. & W/ A
"L" SHAPE (DOG LEG TO THE RIGHT) TEMP. DESIGN
NOW PERMANENT "L" SHAPE DESIGN (DOG LEG
TO THE RIGHT) & LONG WALKS TO BUSES &
CABS, & NOT REALLY ANY SIT DOWN AREAS TO
HANDLE THE WK LOAD, FURTHER DISABLE
YOUNG & KIDS W/ RBS.

(2A) TRUST THATS OUTSIDE THE BART BUILDING
& STRONG ARM TALLIES, TO THE FORCE & 375
& W/ 2/22 (2) ONE BAY AREA GRAM
PROGRAM I HAVE NOW LED TO THIS BYESS,
& WHITE/PINK ELEPHANT.

2 AMERSON
7/22/2016
Ely
pg 247

COMBINATION:

ITEM 3 APPENDIX A-67 on page
ALA, TIP 130025

THE CORRECT SPELLING FOR THIS WORD
IS CAPITAL AVE. IN FACT, CA NOT
AS PRINTED UP AS CAPITAL AVE.

(DID FREEMAN SUGGEST THATS PEOPLE
SPOT CHECK THIS?)

From
AT ALA
TRANS
MISSISSIPPI

4 IN APPENDIX A-16, & MIC
RES 4202 AS TO ME & ALL OTHER
US PEOPLE THAT USE & COMMUTE
THROUGH THE U/CITY BASSIA, IN
PROJ. PHASE I & III AS 9/11/2015

(DID WE, ARE DOWNE SIGN OFF
ON THIS) & ALSO ITEM 1-8 & 1
ATTACHMENTS, & IN MIC PUBLIC
INVOLVEMENT PROCESS?

5 NOW REALLY LIKE IN
VOL # 1 SECT 4 FOR A/E TRANSIT

1 SECT 4 FOR BANS 5-4 - Pg 5

ALA TIP ALA. 150038 NEW
DOUBLE DECKER BUSES FOR A/E TRANSIT

BANS 5-5 LADDERAS TO OPPORTUNITY
W/ CARRIES IN TRANSIT ALA 150030

& ALL OTHER PROJ. IN ALA. OF THAT
DID SPOT CHECK,

-----Original Message-----

From: Robert Moss [REDACTED]
Sent: Thursday, July 28, 2016 10:13 AM
To: MTC Info <info@mtc.ca.gov>
Subject: Bus Lanes on El Camino

The proposal for bus-only lanes on El Camino is a TRULY AWFUL idea!! MTC routes and service levels are inadequate and don't even serve areas like Stanford Research Park, Cal-train station at California Ave. and local residential neighborhoods. Traffic on El Camino is jammed now, especially during rush hours but even in mid-day. Removing a driving lane will make traffic far worse and encourage many drivers to cut down nearby narrow residential streets. Bus occupancy won't improve if a traffic lane is changed to a bus lane, it will just divert more car traffic from EL Camino.

Please drop this idea now. If MTC wants to improve transit service, start running small buses down residential streets and to Caltrain stations and Stanford Industrial Park and Stanford University. When Palo Alto ran it's own bus service, before 1973, local areas were served by bus lines, but within a few months after MTC took over the service those local bus lines were dropped and bus service began to deteriorate. Since then it has not improved. A bus-only lane on El Camino won't make the service more desirable or significantly increase ridership, it will only make traffic for everyone else more unbearable.

Please drop this proposal.

Regards, Bob Moss

From: Rand Strauss [REDACTED]
Sent: Thursday, July 28, 2016 9:25 PM
To: MTC Info <info@mtc.ca.gov>
Subject: a better design for VTA

Most of the VTA plans seem very bad.

Let's do it right, rather than slowing down all our streets for a half-baked solution. I know it's more expensive, but we're one of the richest towns in the country.

In **Mountain View**, the worst would be to have a bus-only lane on El Camino.

- This only modestly help busses
- it slows down the rest of the traffic
- It worsens the traffic-light situation if the lane is in the center since all riders must then cross the street
- Thus it worsens the problem with cross streets.

A much better plan is to lower, or embed, Central Expressway and the railroad tracks and make bridges for the cross streets. Faster busses can run on Central.

The lights on El Camino could be shortened by running one lane of cross streets under it. The light can then be used just for cars making left-hand turns.

If there are just two lanes on the side street,
well before the intersection, the left lane is for through traffic and the right lane is for left and right turns.
The left lane then sinks down to go under the intersection. When it's low enough, it's covered again by the street and the right lane then splits for left and right turns.

The light allows left turns, and people turning right must yield.
Either the light can pause a bit longer - all red - to let people turn right, or they can simply turn when traffic pauses.

A lot of the lights are slow on El Camino because of pedestrian traffic.
This can be avoided by adding stairs and a pedestrian walkway under the street, or by adding an overhead walkway.

Let's do it right, rather than slowing down all our streets for a half-baked solution. I know it's more expensive, but we're one of the richest towns in the country.

-Rand Strauss

From: Alex Hakso [REDACTED]
Sent: Friday, July 29, 2016 2:34 PM
To: MTC Info <info@mtc.ca.gov>
Subject: In Support of Toll Lanes on the 101

I read the WSDOT toll lanes white paper, which can be found here:

https://www.wsdot.wa.gov/NR/rdonlyres/EF771287-A27A-48CB-914F-0C1E0441D78D/0/i405_ML_White_Paper_Final_Update_Apr07.pdf

These lanes strike me as an imminently reasonable solution to a real problem.

In particular, I hope we can implement dynamic pricing to achieve maximum utilization of the lanes.

*Final Transportation-Air Quality Conformity Analysis for the Amended Plan Bay Area and the 2017
Transportation Improvement Program*

From: ANNENICHOLS09 [REDACTED]
Sent: Wednesday, July 27, 2016 9:10 PM
To: MTC Info <info@mtc.ca.gov>
Subject: NO DESIGNATED BUS LANES

PLEASE DO NOT PROCEED WITH DESIGNATION OF BUS LANES. ANNE NICHOLS

*Final Transportation-Air Quality Conformity Analysis for the Amended Plan Bay Area and the 2017
Transportation Improvement Program*

From: Jean [REDACTED]
Sent: Sunday, July 03, 2016 1:23 PM
To: MTC Info <info@mtc.ca.gov>
Subject: Comments on Draft 2017

Dear MTC,

RE: Comments for Draft 2017 Transportation Improvement Program (TIP) and Draft Transportation-Air Quality Conformity Analysis for Plan Bay Area and the Draft 2017 TIP

Please focus funding on Protected/Separated Bikeways, with "Protected-Only Phase Signals" at crosswalks, and Bicycle Signal Faces, that form basic transportation spines of comfortable and safe connected NETWORKS that are inviting to the 60% of our population to leave cars at home and walk and bike for transportation.

The SF Bay Area needs prioritization of such protected networks. Cities make a mistake in building bicycle infrastructure such as Class 2 lanes for the 2-14% of the population who are comfortable sharing roads with motor vehicles. We can do better in prioritizing funds to create connections safe for the ages '8-80,' in lieu of piecemeal bits of paint.

Crosswalks should provide truly "protected" signal phases for pedestrians and red turn arrows instead of asking pedestrians and cars to share the light, with pedestrians losing.

Our air quality and climate deserve radical re-prioritization now to reduce CO2. Thank you.

Best wishes,
Jean Severinghaus
Caltrans District 4 Bicycle Advisory Committee, Marin Member At Large

[REDACTED]

From: Karim Hyder [REDACTED]
Sent: Thursday, July 28, 2016 10:06 AM
To: MTC Info <info@mtc.ca.gov>
Subject: Agree with Linda Curtis - no dedicated bus lanes!

Hello,

I don't have much time to write in length because I work 60+ hours a week with few breaks in order to afford to live in MV. I wholeheartedly agree with Linda Curtis, who is opposed to dedicated bus lanes.

Thank you,
Karim

[REDACTED]

--

Karim Hyder
Director of Operations

[REDACTED]

[REDACTED]

This email message is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply email and destroy all copies of the original message.

From: Holly Westphal [REDACTED]
Sent: Wednesday, July 27, 2016 10:49 AM
To: MTC Info <info@mtc.ca.gov>
Subject: STOP PLAN FOR DESIGNATED BUS LANES

To Whom It May Concern,

I am strongly against the plan to establish a designated bus lane on the El Camino Real.

The creation of a designated bus lane would add to traffic and create more delays for drivers without significantly speeding up bus travel. A designated bus lane would increase gridlock and frustration with no serious long term solutions for transportation. Just because the VTA wants people to take the bus, doesn't mean they will. This isn't the Field of Dreams notion that if you build it, they will come. The reality is that bus travel is inefficient and impractical in the South Bay. One bus lane, on one road will not fix that.

Moreover, population growth in this area is based predominately on higher income earning households where the workers drive cars, not ride the bus. This is in part due to the efficiency of driving, but also due to the fact that unless you both live and work on the same bus line, driving is the only practical method of transportation.

Realistically, the only long term solution for encouraging people to stop driving would be to provide a faster method of transportation (i.e. underground subway with both east/west and north/south routes). This would be costly and a nightmare to build, but long term it is the only solution for limiting traffic and reducing the pollution caused by driving.

The designated bus lane plan is impractical and would be an economic waste of transportation funds.

Sincerely, Holly

Westphal
Mountain View Resident

-----Original Message-----

From: Mark Fassett [REDACTED]
Sent: Friday, July 29, 2016 11:35 AM
To: MTC Info <info@mtc.ca.gov>
Subject: 101 toll lanes

I am writing to express my extreme opposition to the addition of "toll lanes" to highway 101 on the peninsula.

I am a big supporter of HOV lanes, even though I don't use them in my daily commute. They do provide appropriate incentive to get individuals out of their cars and provide a less obstructed route for mass transit. Both of these things are VERY important.

But creating "toll lanes" is creating yet another place where we are creating more differences between rich and poor America. Rather than trying to solve the problem, we are putting a band-aid on the problem. The rich will be able to afford to avoid traffic and not regular Americans who have to sit in this traffic routinely. Frankly it's completely un-American, and I FIRMLY object to more of these toll lanes.

Please stop. Please focus on building much better public transportation for the region. Please focus on getting public transportation out of shared roadways and into their own dedicated routes like light rail etc. Your job is to plan, finance, and coordinate transportation for the bay area. Your job is to build LONG TERM solutions for our traffic, not simplistic and prejudicial band-aids that make things even worse for working class northern Californians.

Thank you.

Mark Fassett, Redwood City, CA

Re MTC Draft TIP + Air Quality Conformity for Plan Bay Area + Draft 2017 TIP

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- we need to replace "clean diesel" with clean technology because "clean diesel" is as dirty as regular diesel, because the tiny "clean" diesel particles are so small they get stuck in small arteries and or can travel to the brain!
- bring back the original # 51 which almost entirely paid for itself + was greatly popular with students + residents especially those who needed to have stops near their residences + destinations

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From: Jim Burtt [REDACTED]
Sent: Saturday, July 30, 2016 1:39 PM
To: MTC Info <info@mtc.ca.gov>
Subject: Paying for HOV Lanes on Highway 101 with Toll Lanes a Bad Idea

Dear MTC:

The proposal to add HOV lanes to highway 101 on the Peninsula is a great idea, one that has been sorely needed for years. I carpooled in HOV lanes to get from Redwood City to north San Jose for twelve years. However, I strongly object to the funding mechanism which involves toll lanes. It will only exacerbate the growing divide between the rich and poor in America. The rich will be able to afford to avoid traffic, while everybody else grinds it out in the other lanes. It will be highly symbolic and highly visible. It is a bad idea. Talk about road rage.

For this and many other transportation challenges we face in the Bay Area, why doesn't the MTC have the courage to take a stand and propose steady sources of funding such as [increasing the gasoline tax](#) or [reforming Prop 13](#)? We desperately need to: (1) add a second BART tunnel across the Bay,

(2) fund CalTrain so that it can increase the frequency of trains, (3) finish [connecting BART to Diridon Station](#) in San Jose, and (4) help [SMART](#) complete both phases of rail transit in Sonoma and Marin counties. We are already behind the curve. Anyone at the MTC who proclaims the vision and has the courage to make bold proposals to direct tax increases to specific projects like these will become a famous leader. The MTC has been quiet for far too long. Let's get moving!

Please let me know how I can help. Best

regards,

Jim Burtt, Redwood City

From: [REDACTED] [REDACTED]
Sent: Thursday, July 28, 2016 8:58 AM
To: MTC Info <info@mtc.ca.gov>
Subject: As an engineer ...

Hello,

As a human being and learned Systems Design Engineer for many years I do not see the point of VTA's insisted dedicated bus lanes along El Camino Real. They would cause increased safety hazards, especially to our local neighborhoods and to those individuals who suffer from disabilities, as they would need to cross half of a busy intersection to get onto the median just to load onto the buses. I have seen many others try to cross this busy street, as it is today, to get to the median. To expect blind and mobility challenged people, who actually now do ride the buses, to load from the median, is demanding of them a very dangerous undertaking. And slow lanes shouldn't be bus dedicated, as they are enjoyed by many drivers who prefer not to ever change lanes and who will be stranded far from bus routes if they can no longer timidly drive along El Camino Real.

Joe Biden pledged, among other important issues, to give us *safe streets*. This dedicated bus lane project from VTA will cause many drivers, angry and frustrated by sitting in the standstill of El Camino Real, to drive through the adjacent residential streets. This will put our children, ourselves, our pets, and property at risk at a never yet experienced level. This could be construed as an act of endangerment towards the citizens of the United States of America. It is an illegal lapse of morality to endanger our populous.

Drivers able to continue on El Camino Real will find very few left turn lanes as the VTA busses are using them as loading zones. It was studied and reported by VTA itself that a dedicated bus lane would shave approximately a maximum of 10 minutes off the trip from San Jose to Mountain View. That is clearly not worth it. And as an aside, the trees that VTA will have to remove along the roadway and in the median will no longer provide cleaner air and a safety factor as they help the vision of drivers by screening the direct sunlight.

My next pet peeve is the unfulfilled need to help the communities along the Cal Train soon-to-be electrified rail, and the coming High Speed Train and the to-be-extended Light Rail. The neighborhoods would greatly benefit from the below grade level of these rails, from San Jose through to San Francisco. This would keep the noise levels to a minimum, bicyclists and others can have a path above the tracks and perhaps also at a lower than grade level to provide a bicycle throughway all along this path. At grade level, all cross streets can be kept level as they continue without changing their elevation as they now are. Some more cross streets can be easily added. Central Expressway/Alma will be as an underpass for these cross streets. This would increase the traffic flow and provide a separated pathway for pedestrians and bicyclists. Above the lower train path could be housing, shops, industrial, and storage buildings to further provide services to the population and offset the cost to lower the tracks and parallel roadway. This is newly created and badly needed space above the lowered railways and parallel roadway, that then becomes like a freeway. Great flow. Gridlock conquered.

Basically we need MTC to curb VTA and to listen to local governments and populous, as our country was built to do. We know what can work, we don't need an dictatorship authority to take our money and build what they want.

Thank you,
Larry V.

From: [REDACTED] [REDACTED]
Sent: Wednesday, July 27, 2016 11:01 PM
To: MTC Info <info@mtc.ca.gov>
Subject: Better ideas than yours

MTC:

I have an important idea that would solve most of the traffic gridlock on the lower peninsula. I call it the "Transportation Corridor." It calls for embedding Central Expressway/Alma (from where it merges with El Camino Real in Palo Alto through Santa Clara) and all rails running beside it from San Francisco through Santa Clara.

To clarify my use of the word "embedded," as I described the "Transportation Corridor" that I envision, embedded refers to creating a separate grade for the length of a thoroughfare, such as Central Expwy (and tracks). Central Expressway is already sunken in Sunnyvale, with the exception of Mary Ave. As the expwy is lower than the cross streets, they ALL flow unimpeded. That is my goal for the big picture. In Mtn. View, Castro St. need not close, nor do we invest in a ped/bike UNDERpass. We go for an overpass to serve in the meantime and to stay in place when the expwy & tracks are redone on a lower grade. Also Rengstorff does not need the underpass (or was it an overpass?) that as already been approved, unfortunately. We'll work to reverse that before it happens in exchange for the superior and preferable big picture plan of the transportation corridor. It will also solve the problems of Rengstorff: The newly improved and remodeled Mi Pueblo Market on Rengstorff will be gone and people's homes along Rengstorff are slated for seizure through eminent domain. Everybody hates that, but no one sees an alternative, as we need to separate the grade crossings. So we should embed the expwy and ALL the tracks before light rail gets extended up that way and beyond, before the high speed rail is added (if it must be), and before Cal Train is redone as its tracks get electrified. It's now or never! It's a long term project that other cities are on board with. Palo Alto, Menlo Park, and Atherton agree! What a perfect, really important fix to **safety, noise, and gridlock concerns.**

This is what the people want, NOT to be forced onto buses by the intentionally created traffic gridlock, buses that don't do what people need, are cold in winter & hot in summer, are filthy (and so are the exposed bus stops), allow passengers to become victims of crime (I've experienced this first hand), have inferior suspension that re-injures previous injuries, are an enormous inconvenience, and are certainly not worth any designated bus lanes anywhere!

We do not believe VTA does what the people believe is in their best interests to serve their needs (and they know their own needs best). VTA has said (quoted in local newspapers) that they are the "authority" and will do as *they deem best*, even if every city affected decides against their plan, as with dedicated buses lanes on el Camino Real. We the people detest the plan of dedicated bus lanes on el Camino Real (or bikes along such a perilous and extremely important arterial for vehicular traffic) or anywhere! But does that count with VTA and the MTC? They have become dictators and have demolished our democracy. How dare you!!!!!!

Response demanded!

And all the construction of high density/high rise along arterials to insure that people live, as well as work, along a bus route is absurd! Each housing development removes the services and businesses that employed these people! The new housing has only a coffee shop in them for the convenience of their own residents. And all the convenient stuff that was there previously is lost to everyone who now have to travel far to obtain services and to frequent businesses. You can't take a bus to wash your car, but now you have to drive to the next city to do so, when it was hither fore at the end of your block! Some progress! NOT.

And how much does the new housing cost compared to the *older buildings that were knocked down* for the shamelessly expensive new stuff? All of it built just so folk can "live" along the stinky, noisy bus route. Those that can afford it, won't ever just ride the buses! The new building is great at only promoting **gentrification** and the **displacement** of those who first lived there. You want to displace the three support personnel for each tech worker, just to create ridership for buses in order to make VTA an even more rich department than they *already are as the most highly financed department in all of Santa Clara County!* That means at the expense of Valley Medical Hospital, Social Services, Children's Protective Services, the Sheriff's Dept., and all the others! How ludicrous!

Get real! ABAG's model of high density/high rise building along arterials is unsafe in the inevitable event of a truly major seismic event. Chile had a 9.9 with a 8.5 further north a year later. It's coming our way and all the multistory building can only hold to a certain maximum level on the Richter scale. But the Richter scale has NO maximum magnitude. Anything above a 7 something on the Richter scale, or a P wave instead of a S wave, or any wave coming at a diagonal to what what planned for in the building specs, *will drop* all of that concrete, etc., right in the way of everyone's escape out and access in for emergency responders! Selfish suicide for all of us *just to make the buses supposedly work* at the expense of everyone and for the profit of VTA is shameful.

Response demanded!

Signed:

Linda Curtis, a striving citizen who has lost a job due to the unreliability of bus service in Santa Clara County, and a financially ruined owner of 96 photovoltaic panels used to power my home and to fuel my clean electric car that I get no encouragement for, much less any kind of financial break for buying, maintaining and cleaning my solar panels and fueling my car with them!

From: [REDACTED] [REDACTED]
Sent: Thursday, July 28, 2016 10:51 AM
To: MTC Info <info@mtc.ca.gov>
Subject: Improving transportation on the lower peninsula

Many want to create grade separation for all trains, expressways (Alma included), and even EL Camino Real. I like all these ideas except for ECR. I'm thinking sinking ECR would kill all that I love along it, businesses and trees (down the median, too). Definitely don't want any designated bus lanes along ECR. As for separated grade crossings along it, how about adding just a few ped/bike elevated crossings over ECR as Las Vegas did over their strip? The costly elevators can be avoided with spiral ramps, not too steep, or straight ones when planned in conjunction with new builds like 801 ECR. But too late now for that one. Yet coming construction projects could have the ped/bike overpasses as part of their plan as their required added public benefit. They would really help mid-block on especially long blocks. Better than adding traffic signals really just to help peds cross as was done by the State at Clark & ECR in Mountain View. What a hinderance to traffic flow. Still cross traffic is not grade separated on ECR, but I don't mind. I prefer many options to turn off ECR to being stuck on it below grade. Do that only for trains and expressways. It's really needed there.

And I hate the idea of raising tracks: Their noise would travel further unimpeded (especially when light rail and high speed rail are added). Also, figures I read show that the Shoreline overpass would not clear raised train tracks. **Lowering all tracks and expressways** (Alma included) is my preference by far, as it is with the three cities (Atherton, Menlo Park, and Palo Alto) that are currently suing to allow this to happen. This is really the only way to do grade separation properly.

I just hope Rengstorff and Castro Street in Mountain View, and many other streets elsewhere, aren't messed up with rushed, inferior "solutions" for crossing or no longer crossing Central Expressway before we can orchestrate the *big picture, real* solution of grade separation done well. Save lives, save us from noise, and save us from gridlocked traffic by grade separation done right.

I would vote for lots of money for that, but none for designated bus lanes.

LC



SIERRA CLUB

July 26, 2016

Chair David Cortese and Commissioners Metropolitan
Transportation Commission (MTC) Bay Area Metro Center
San Francisco 94105 Via

info@mtc.ca.gov

Re: Comments on Draft 2017 Transportation Improvement Program (TIP)

Dear Chair Cortese and Commissioners:

The Sierra Club has reviewed the \$6.6 billion [draft 2017 Transportation Improvement Program](#) that will run through fiscal year 2020. As MTC notes on its web pages, the TIP is the Bay Area's comprehensive spending plan that lists the projects and programs for which Federal agency action is anticipated, plus all major regional projects that are not dependent on federal funds.

The Sierra Club submits the following comments for your consideration.

AN ALTERNATIVE PLANNING STRATEGY MAY BE REQUIRED FOR THE 2017 REGIONAL TRANSPORTATION PLAN (RTP)

The Technical Summary of Predicted Traveler Responses to Planning Scenarios of the next RTP (PBA 2040), contained within the [Draft Transportation–Air Quality Conformity Analysis for the Amended Plan Bay Area and the 2017 Transportation Improvement Program](#), indicates that the draft 2017 TIP will *not* result in the GHG reduction per capita target for the year 2035 as required by the Air Resources Board under [The California Sustainable Communities and Climate Protection Act of 2008](#) (SB 375).

Table 6 of the Technical Summary (Attachment A) contains an important set of data including GHG projections as of 2035. The base year in Table 6 is 2005, and the figure given for that year for GHGs is 18.5 pounds per capita per typical weekday. For Plan Bay Area 2040, the MTC– sponsored scenario with the greatest reduction is “Big Cities.” The figure for 2035 is 17.7 pounds of GHGs per typical weekday per capita. This works out to a reduction per capita of about 4.4%, well below the required 15%. An additional scenario that conforms with ARB's requirement for the SCS needs to be developed and analyzed. If MTC decides to proceed with a scenario that does not meet the 2035 target, it must then prepare an “[Alternative Planning Strategy](#),” to show how it could meet the target.

3921 East Bayshore Road, Suite 204 Palo Alto, CA 94303 Tel. (650) 390–8411 www.lomapieta.sierraclub.org t

FUNDS SHOULD NOT GO TO HIGHWAY AND ROAD CAPACITY EXPANSION

MTC should not use the 2017 TIP to fund state highway and road capacity expansion projects. A review of the state highway capacity expansion projects in the draft 2017 TIP that are sponsored by the Congestion Management Agencies of the largest counties— Alameda, Contra Costa and Santa Clara—show total future funds required will be about

\$1.9 billion. Directing funds to these projects will only make the Vehicles Miles Traveled (“VMT”) problem of the Bay Area worse. Funding for state highway and roadway capacity expansion projects in all counties should instead go to supporting the Sustainable Communities Strategy.

THE DRAFT 2017 TIP SHOULD BE SUPPORTIVE OF THE SCS

As then-Attorney General Brown noted more than seven years ago, funds should go to pedestrian, bicycle, and transit projects and not to highway and roadway capacity expansion. In 2008, the Attorney General commented on the Notice of Preparation for the Draft Environmental Impact Report for MTC’s Transportation 2035 Plan. The letter discussed “smart” land–use strategies that can reduce VMT. The letter also noted that greenhouse gas emissions (GHGs) from the transportation sector are a significant problem in the Bay Area, and that “if we fail to make better transportation and land–use decisions

—at all levels of government and at every opportunity—in a very short time, our climate goals may be out of reach.” (A copy of the 2008 letter is attached—Attachment B—and its recommendations on how MTC can help to reduce GHGs with the draft 2017 TIP are incorporated into our comments by reference.)

The Attorney General cited the Air Resources Board in the letter—

“[the] key to addressing the VMT challenge is providing people with more choices through diversified land use patterns, greater access to alternative forms of transportation including transit, biking and walking, and creating cities and towns where people can live, work and play without having to drive great distances.” In addition, the way a transportation plan allocates funds among potential transportation projects can make a significant difference in the amount of transportation–generated GHG emissions in the future.

MTC’s own description of SB 375 as given in the [Notice of Preparation](#) of the Draft Environmental Impact Report for Plan Bay Area 2040—the Regional Transportation Plan (RTP) / Sustainable Communities Strategy (SCS) provides a similar perspective: “SB 375 is intended to more effectively reduce emissions by integrating land use and transportation planning to reduce overall passenger vehicle miles traveled.”

CALTRANS’ NEW PERSPECTIVE ON HIGHWAY AND ROAD CAPACITY EXPANSION

There are a number of road and state highway capacity expansion projects in the TIP. However, few listings show Caltrans as the sponsor, perhaps because Caltrans has a new

perspective on road and highway expansions—they are costly and accomplish little over the long run:

It's pretty settled science that capacity expansion induces demand. We know that while it relieves traffic in the short term, there's pent-up demand that suggests it just fills up again in short order. There's ample evidence that if you lower costs, demand increases. ([Steven Cliff, Assistant Director of Sustainability](#) at Caltrans, November 2015)

MTC MUST CHANGE ITS LONG-STANDING PRACTICE OF FRONT-LOADING ROAD PROJECTS

The draft 2017 TIP is an opportunity for MTC to change its long-standing practice of front-loading highway and roadway capacity expansion projects. Following the guidance in the Attorney General's letter, the draft 2017 TIP should maximize the use of its funds for pedestrian, bicycle, and transit projects and other actions to reduce VMT and therefore GHGs, and which will bring the region into compliance with the 2035 GHG target set by the ARB.

THE TIP SHOULD ALSO BE EQUITABLE

In the [TIP Overview](#) there is a section entitled "TIP Investment Analysis" that indicates low income and minority transit riders are at a disadvantage in terms of equitable funding. The TIP and its underlying projects should be changed to eliminate this inequitable result.

MTC SHOULD BEGIN MITIGATING AGAINST CLIMATE CHANGE DANGERS

As noted above, the current draft 2017 TIP fails to reduce GHGs as required. Additionally, it fails to recognize that the Bay Area needs to take action to protect transportation and transit infrastructure against the effects of climate change.

In 2009, MTC, along with Caltrans and other agencies, sponsored "[Impacts of Sea-Level Rise on the California Coast](#)." There is a section within the 2009 report that provides information, by county, of highways and roads vulnerable to sea level rise. In 2014 the Little Hoover Commission published "[Governing California Through Climate Change](#)." This thoughtful report states that planning agencies (such as MTC) will encounter "entirely new and perplexing questions."

[California Transportation Plan 2040](#) also addresses threats to transportation infrastructure from climate change:

California's infrastructure is already stressed and will face additional burdens from climate risks. The frequency of extreme weather events—such as heat waves, sustained droughts, and torrential rains are expected to increase over the next century, potentially causing flooding, landslides, wild fires, pavement damage, bridge damage, transit vehicle stress, and rail buckling. Even if global GHG emissions were to cease today, some of these effects would still be unavoidable. California must aggressively address threats to its transportation infrastructure to decrease these risks and significant damages.

The draft 2017 TIP should identify projects and funding that will mitigate climate change impacts on Bay Area transportation infrastructure.

*Final Transportation-Air Quality Conformity Analysis for the Amended Plan Bay Area and the 2017
Transportation Improvement Program*

4

If you have any questions or desire further information regarding these comments, please do not hesitate to contact Matt Williams, Chair of the San Francisco Bay Chapter Committee on Transportation and Compact Growth, at mwillia@mac.com

Sincerely,



Michael J. Ferreira
Loma Prieta Chapter Chair



Victoria Brandon Redwood
Chapter Chair



Rebecca Evans
San Francisco Bay Chapter Chair

cc: Legislative Delegation, San Francisco Bay Area Chair, Air
Resources Board
Association of Bay Area Governments
Loma Prieta, Redwood and San Francisco Bay Chapters

ATTACHMENT A

Table 6: Year 2035 On-Road Mobile Source Emission
Estimates for the MTC Air Basin.

Contained within the Draft Transportation-Air Quality
Conformity Analysis for the Amended Plan Bay Area and
the 2017 Transportation Improvement Program, June 24,
2016.

Attachment A

Table 6: Year 2035 On-Road Mobile Source Emission Estimates for the MTC Air Basin

Tons per typical weekday for all vehicles (unless otherwise noted)

Scenario	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	64,640	18.5	64,640	8.54	14.09	221.4	112.0	995.8
Year 2035, No Project	84,780	18.8	65,060	4.60	11.12	24.54	20.91	132.3
Year 2035, Main Streets	83,490	18.5	64,330	4.58	11.09	24.41	20.79	130.4
Year 2035, Connected Neighborhoods	81,100	17.9	62,490	4.47	10.81	23.80	20.26	127.4
Year 2035, Big Cities	79,810	17.7	61,330	4.40	10.64	23.32	20.00	125.4

† – Passenger vehicle emissions for the nine-county Bay Area, excluding – per SB 375 – expected reductions from fuel and vehicle regulations. Excludes expected reductions from MTC’s Climate Initiatives program.

‡ – Passenger vehicle emissions for the nine-county Bay Area, including reductions expected from existing vehicle and fuel regulations. Excludes expected reductions from MTC’s Climate Initiatives program.

* – Does not include road dust.

ATTACHMENT B

Letter from the Office of Edmund G. Brown Jr, Attorney
General, to Metropolitan Transportation Commission,
October 1, 2008.

RE: Comments on the Notice of Preparation for Draft
Environmental Impact Report For the Transportation
2035 Plan.

Attachment B

EDMUND G. BROWN JR.
Attorney General

State of California
DEPARTMENT OF JUSTICE



1515 CLAY STREET, 20TH FLOOR
P.O. BOX 70550
OAKLAND, CA 94612-0550
Telephone: 510-622-2174
Facsimile: 510-622-2270
E-Mail: laura.zuckerman@doj.ca.gov

October 1, 2008

By Facsimile and U.S. Mail (510)
817-5848

Ms. Ashley Nguyen EIR
Project Manager
Metropolitan Transportation Commission 101 Eighth
Street
Oakland, CA 94607

RE: Comments on the Notice of Preparation for Draft Environmental Impact Report For the Transportation 2035 Plan

Dear Ms. Nguyen:

The Attorney General submits these comments to the Metropolitan Transportation Commission ("MTC") on the Notice of Preparation for the Draft Environmental Impact Report ("DEIR") for the proposed Transportation 2035 Plan ("Proposed Transportation Plan").

Although the deadline for comments on the Notice of Preparation has passed, we request that MTC consider these comments in preparing the DEIR.

We commend MTC for committing to evaluate the climate change impacts of the investments identified in the Proposed Transportation Plan. We also commend MTC for working to provide funding for "smart growth" development strategies that will reduce vehicle emissions associated with new development, for working to expand the bicycle network, and for including other elements of a Climate Change Program in the Proposed Transportation Plan. As climate change is one of the most critical environmental challenges to face our communities today, we urge MTC to embrace the opportunity it has in the Proposed Transportation Plan and the accompanying DEIR to show further leadership by identifying a comprehensive transportation strategy that will reduce emissions of the greenhouse gasses ("GHG") that cause global warming.

Global Warming in California

The Intergovernmental Panel on Climate Change of the United Nations has found

Ms. Ashley Nguyen
October 1, 2008
Page 2

overwhelming evidence that global warming is occurring and is caused by human activity.¹ The California Climate Change Center reports that temperatures in the State are expected to rise 4.7 to 10.5°F by the end of the century.² Such increases would have serious consequences, including substantial loss of snowpack, an increase of as much as 55% in the risk of large wildfires, reductions in the quality and quantity of agricultural products, exacerbation of California's air quality problems, and adverse impacts on human health from increased heat stress, including heat-related deaths, as well as increases in asthma, respiratory, and other health problems.³

California recognizes that global warming is an urgent problem. As reflected in the California Global Warming Solutions Act of 2006 ("AB 32") and Executive Order S-3-05, we must substantially reduce our total GHG emissions by mid-century in order to stabilize atmospheric concentrations of GHGs at a level that will avoid dangerous climate change. This makes it imperative to address GHG emissions from the transportation sector, which account for 38% of the GHG emissions in the State.⁴ In the Bay Area, emissions from the transportation sector are even greater, accounting for 50% of the total.⁵ If we fail to make better transportation and land-use decisions – at all levels of government and at every opportunity – in a very short time, our climate goals may be out of reach. According to Rajendra Pachauri, Chairman of the United Nations Intergovernmental Panel on Climate Change ("IPCC"), "If there's no action before 2012, that's too late. What we do in the next two to three years will determine our future. This is the defining moment."⁶

¹United Nations Intergovernmental Panel on Climate Change, *Fourth Assessment Report: Climate Change 2007* (February 2007) *Working Group I Report, The Physical Science Basis, Summary For Policymakers* ("IPCC 4th").

²California Climate Change Center, *Our Changing Climate: Assessing the Risks to California* (July 2006) page 2, available at <<http://www.energy.ca.gov/2006publications/CEC-500-2006-077/CEC-500-2006-077.PDF>> (as of September 29, 2008). The report was prepared by the Climate Change Center at the direction of CalEPA pursuant to its authority under Governor's Executive Order No. S-3-05 (June 1, 2005) ("Exec. Order S-3-05").

³*Id.* at pp. 2, 10; Exec. Order S-3-05.

⁴California Air Resources Board, *Climate Change Draft Scoping Plan* (June 27, 2008) page 7 ("Draft Scoping Plan").

⁵Bay Area Air Quality Management District, *Source Inventory of Bay Area Greenhouse Gas Emissions* (November 2006) page 7.

⁶Rosenthal, *U.N. Chief Seeks More Leadership on Climate Change*, N.Y. Times (November 18, 2007).

Ms. Ashley Nguyen
October 1, 2008
Page 3

California Environmental Quality Act

As the Legislature has recognized, global warming is an “effect on the environment” under the California Environmental Quality Act (“CEQA”), and an individual project’s incremental contribution to global warming can be cumulatively considerable.⁷ The projects authorized in the Proposed Transportation Plan will result in significant increases in the GHG emissions that contribute to global warming.

CEQA was enacted to ensure that public agencies do not approve projects unless they include feasible alternatives or mitigation measures that substantially reduce the significant environmental effects of the project.⁸ CEQA requires that “[e]ach public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so.”⁹ This requirement is recognized as “[t]he core of a DEIR....”¹⁰ Therefore, a DEIR must identify mitigation measures and examine alternatives that would reduce the emissions of greenhouse gases that contribute to global warming.¹¹ These requirements of CEQA are consistent with federal law, which requires the Proposed Transportation Plan to consider projects and strategies that will “protect and enhance the environment” and “promote energy conservation” and to discuss “potential environmental mitigation activities.”¹²

An EIR like the DEIR for the Proposed Transportation Plan must provide an accurate depiction of existing environmental conditions.¹³ “Before the impacts of a project can be assessed and mitigation measures considered, an EIR must describe the existing environment. It is only against this baseline that any significant environmental effects can be determined.”¹⁴

⁷See Cal. Pub. Res. Code, § 21083.05, subd. (a); see also Sen. Rules Comm., Off. Of Sen. Floor Analyses, analysis of Sen. Bill No. 97 (2007-2008 Reg. Sess.), Aug. 22, 2007.

⁸Pub. Resources Code, § 21002.

⁹Pub. Resources Code, §§ 21002.1, subd. (b), and 21081; see also *Mountain Lion Foundation v. Fish and Game Commission* (1997) 16 Cal.4th 105, 134.

¹⁰*Citizens of Goleta Valley v. Board of Supervisors of Santa Barbara County* (1990) 52 Cal.3d 553, 564-65.

¹¹Pub. Resources Code, § 21002.1(a); Cal. Code Regs., tit. 14, § 15130, subd. (b)(5).¹²23 U.S.C. §§ 134(h) and 134(i)(2)(B)(i). (See text accompanying fn. 19, *infra*.)¹³Cal. Code Regs., tit. 14, § 15125, subd. (a).

¹⁴*County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 952.

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The DEIR Should Consider Climate Change Impacts, As Well As Effective Methods of Mitigation and Alternatives to Reduce Such Impacts

The Proposed Transportation Plan will authorize expenditure of approximately \$223 billion for transportation projects, including road construction and improvements that will provide additional road capacity and accommodate more vehicles. These projects will contribute cumulatively to the Bay Area's existing GHG load. In addition, implementing the Proposed Transportation Plan will result in increased GHG emissions during construction of the authorized projects, resulting in a significant cumulative impact on climate change. The DEIR should evaluate all the anticipated climate change impacts of GHG emissions from these actions, including emissions of black carbon from diesel-powered vehicles, as black carbon also contributes significantly to global warming.¹⁵

"Smart" land-use strategies can result in a reduction in vehicle miles traveled ("VMT") over the long term, which in turn is critical to reducing GHG emissions from the transportation sector. Statewide, VMT increased approximately 35% from 1990 to 2007, and under a business-as-usual scenario, VMT is currently expected to increase another 20% by 2020.¹⁶ According to the California Energy Commission, if we do not slow this anticipated growth in VMT, the increase will completely nullify the other advances that the State is making to control transportation-related emissions, including lowering the carbon content of fuel.¹⁷

As the Air Resources Board notes, "[t]he key to addressing the VMT challenge is providing people with more choices through diversified land use patterns, greater access to alternative forms of transportation including transit, biking and walking, and creating cities and towns where people can live, work and play without having to drive great distances."¹⁸ In addition, the way a transportation plan allocates funds among potential transportation projects can make a significant difference in the amount of transportation-generated GHG emissions in the future. The DEIR should discuss whether the Proposed Transportation Plan *maximizes* the use of available funds for public transit, alternative fuel vehicles, carpool, vanpool, rideshare, pedestrian and bicycle projects (including "Safe Routes to School" programs), and other measures that reduce VMT and/or GHG emissions.

¹⁵Black carbon is a strong absorber of solar radiation, and black carbon particles mixed with dust and chemicals in the air may be the second biggest contributor to global warming. (See California Air Resources Board, Health Effects of Diesel Particulate Matter pages 4-5, available at <http://www.arb.ca.gov/research/diesel/dpm_draft_3-01-06.pdf> [as of September 29, 2008].)

¹⁶Draft Scoping Plan Appendices page C-22.

¹⁷California Energy Commission, The Role of Land Use in Meeting California's Energy and Climate Change Goals, Final Staff Report (August 2007) pages 10, 18.

¹⁸ Draft Scoping Plan Appendices page C-22.

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CEQA requires that an EIR evaluate the potential environmental impacts of an entire project, which in this context we believe represents the entire \$223 billion of authorized expenditures – not just the \$31.6 billion for projects MTC identifies as “discretionary,” but also the \$191 billion for projects identified as “committed,” projects included in the prior Transportation Plan but not yet constructed. The EIR for the prior Transportation Plan was prepared before AB 32, with its GHG-emission reduction goals, was enacted. The prior Transportation Plan and EIR also were adopted before the enactment of the federal act (effective August 2005) (SAFETEA-LU) that requires a Transportation Plan to address projects and strategies that will “protect and enhance the environment, promote energy conservation, improve the quality of life”¹⁹ Finally, the California Transportation Commission (“CTC”) recently adopted the Addendum to the 2007 Regional Transportation Plan Guidelines, “Addressing Climate Change and Greenhouse Gas Emissions During the RTP Process;” this guidance also did not exist when the EIR for the prior Transportation Plan was adopted.²⁰

Accordingly, CEQA requires evaluation in the DEIR of climate change impacts both of the “committed” projects and the “discretionary” projects, and ways to eliminate or reduce such impacts. It also requires consideration of an alternative that, where feasible, eliminates from the Proposed Transportation Plan so-called “committed” projects that would contribute to adverse cumulative impacts on climate.²¹

The Proposed Transportation Plan includes projects that MTC has selected for funding with \$31.6 billion in “discretionary” funds. To select these projects, MTC stated it used a performance rating system to evaluate the projects’ anticipated effectiveness at meeting the region’s transportation goals. Among other things, the adopted goals include “climate protection,” and the “performance objectives” include reducing VMT and reducing emissions (including GHGs). We commend MTC for adopting these goals and objectives.

The Proposed Transportation Plan also includes an additional \$191 billion for projects that were authorized in the last Transportation Plan, which MTC refers to as “committed” projects. MTC indicates that the “committed” projects include about \$29 billion for transit and road expansion and \$162 billion to maintain the existing transportation system. We understand that the \$29 billion of “committed” projects for transit and roadway expansion have been proposed for inclusion in the new Transportation Plan without renewed evaluation of the relative need for, benefits of, or impacts of these projects vis-à-vis others, and regardless of how well they meet MTC’s identified goals and performance objectives. We urge MTC to rectify this omission with respect to the “committed” transit and roadway expansion projects (which reflect only 15% of the “committed” funding). MTC’s own research shows that achieving reductions in

¹⁹23 U.S.C. § 134(h)(1)(E).

²⁰It was adopted by the California Transportation Commission on May 29, 2008.

²¹If there is a contractual obligation or other overriding reason to complete a particular low-performing “committed” expansion project, the DEIR should discuss this.

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GHG emissions consistent with the goals of AB 32 will be extremely difficult:²² this highlights the need for careful and complete evaluation of impacts on VMT and GHG emissions of *all* expenditures for road and transit expansion in the Proposed Transportation Plan.

MTC staff's analysis indicates that many of the "committed" expansion projects support only one, in some cases *none*, of the identified performance goals. If low-performing "committed" projects were eliminated where feasible to do so, funding would be available to cover transit shortfalls, particularly for BART, Muni, and AC Transit, which together carry 80% of the transit riders in the Bay Area.²³ If these shortfalls are not addressed, or if they are addressed through fare increases, as recently proposed,²⁴ ridership may fall, with a concomitant increase in GHG emissions. The DEIR should address the implications of the potential transit shortfalls on GHG emissions and whether those impacts could be reduced by using funds currently proposed to be allocated to low-performing "committed" projects. This would be consistent with the direction in the CTC's guidelines for addressing climate change in RTPs to "[c]onsider shifting transportation investments towards improving and expanding urban and suburban core transit, programs for walkability, bicycling and other alternative modes, transit

²²See Therese W. McMillan, Deputy Executive Director, Policy, Metropolitan Transportation Commission, presentation to California Transportation Futures Symposium (September 3, 2008), Transportation 2035: S.F. Bay Area - Targeting Health Through Environment, available at <http://www.dot.ca.gov/hq/tpp/offices/osp/presentations/McMillan.T.ppt> (as of September 30, 2008).

²³There is currently a projected \$19 billion shortfall in transit capital and operating needs for transit in the Bay Area over the life of the Proposed Transportation Plan, and a projected \$4.2 billion shortfall in BART core capacity improvements. (See Commission Meeting presentation (July 23, 2008), Transportation 2035: Financially Constrained Investment Plan, page 22, available at http://apps.mtc.ca.gov/meeting_packet_documents/agenda_1116/T2035_Recommendations_sh_ort_v.3.ppt [as of October 1, 2008].) These figures were generated before recent increases in public transit ridership due to high gasoline prices. The American Public Transportation Association reports more than a 5% increase in BART ridership in 2008. (See <http://www.apta.com/research/stats/ridership/index.cfm> [as of September 29, 2008].) Thus, the funding needs for existing transit service may well exceed these estimates.

²⁴See, e.g., *Consider congestion pricing for BART*, San Francisco Chronicle (September 15, 2008), available at <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2008/09/15/EDIJ12T13A.DTL&hw=BART+fare&sn=001&sc=1000> (as of September 30, 2008); Gordon, *BART considers higher fares*, San Francisco Chronicle (September 12, 2008), available at <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2008/09/12/MNS412SGBC.DTL&hw=BART+fare&sn=002&sc=491> (as of September 30, 2008), which noted that BART trains are currently near capacity in peak hours.

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access, housing near transit, and local blueprint plans that coincide with the regional blueprint.”²⁵ The DEIR should also address, at a minimum, the following issues:

1. ***The impact of high-occupancy toll (“HOT”) lanes on carpooling, transit ridership, VMT, and GHG emissions.*** A principal benefit of the HOT lane network is savings in travel time for people driving alone (both in the HOT lane and in other lanes). Some commentators have expressed concerns about the effect of HOT lanes on “induced travel,” noting that “at the same time that some drivers are encouraged to stay away from congestion or higher peak-period tolls, others are drawn to use the HOT lanes because they are relatively less congested than other options.”²⁶ At least one expert panel has expressed concerns that a proposed increase in freeway lane miles for a “managed lane” network similar to the HOT lane network proposed here would “perpetuate auto-oriented development and reduce transit’s competitiveness.”²⁷

In recognition of these concerns, the DEIR should evaluate, for each corridor, the effect of (1) creation of a new lane to be used as a HOT lane, or (2) conversion of an existing HOV lane to a HOT lane, whichever is applicable, including any increase in the carpool requirement from 2 to 3 occupants,²⁸ on the following: (a) carpooling rates, (b) VMT, (c) induced travel (commuters, carpoolers, telecommuters, etc., who are thereby induced to start driving alone), and (d) long- term housing distribution patterns (i.e., “induced growth” of housing in areas

²⁵ California Transportation Commission, Addendum to the 2007 Regional Transportation Plan Guidelines: Addressing Climate Change and Greenhouse Gas Emissions During the RTP Process (May 29, 2008) page 2 (emphasis added).

²⁶ Dahl, *The Price of Life in the Fast Lane* (2003) 111 *Envtl. Health Persp.*, Number 16, available at <<http://www.ehponline.org/members/2003/111-16/spheres.html>> (as of September 30, 2008), citing the director of the Bridge Tolls Advocacy Project in New York.

²⁷ See Independent Transit Planning Review Services December 2006 Final Report, prepared for the San Diego Association of Governments (December 2006) pages ES-5 and 3-32, available at <http://www.sandag.cog.ca.us/uploads/publicationid/publicationid_1274_6239.pdf> (as of September 30, 2008). The panel also observed, “Smart Growth efforts will likely be weakened by managed lanes’ alleviation of congestion and its encouragement of auto-oriented growth away from transit corridors.” (See *id.* at pp. 6-16.)

²⁸ The Bay Area High-Occupancy/Toll (HOT) Network Study Final Report notes that implementing HOT lanes will likely require increasing carpool occupancy requirements. MTC, Bay Area High-Occupancy/Toll (HOT) Network Study Final Report (September 2007) page 7.

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where HOT lanes can be used to commute to employment centers).²⁹ The DEIR should provide both short-term and long-term evaluation of the environmental impacts/benefits of the HOT lane network. In particular, the EIR should evaluate the potential effects of induced travel where the freeway is expanded to create a HOT lane.³⁰

2. ***The effect on GHG emissions of different prioritizations of uses of HOT lane revenues.*** MTC recently adopted “HOT Network Implementation Principles” that indicate HOT lane revenues will be used “to finance and construct the HOT network” and “provide transit services and improvements in the corridors.” However, it is not clear when *any* excess revenues will be generated from the HOT lane network, and what the priority will be for investment of such revenues. We understand that, if completing the area-wide HOT lane network is the priority use for HOT lane revenues, the anticipated benefits of excess revenue from the HOT lane network would not accrue to public transit until the network is completed in 2025. The EIR should disclose the anticipated timing and amount of excess revenues (i.e., revenues not need to cover network expenses), and

²⁹The California Department of Transportation’s (“Caltrans”) own guidance for preparing an EIR recognizes the need to evaluate how a project will influence growth. (See Caltrans, EIR/EA Annotated Outline (April 2008) pages 37-39, available at http://www.dot.ca.gov/ser/downloads/templates/eir_ea_SER.doc [as of September 30, 2008]; Caltrans, Guidance for Preparers of Growth-related, Indirect Impact Analyses (May 2006), available at http://www.dot.ca.gov/ser/Growth-related_IndirectImpactAnalysis/gri_guidance.htm [as of September 30, 2008].)

³⁰The Superior Court for the County of Sacramento recently invalidated Caltrans’s EIR for an HOV lane project in Sacramento, in part because it did not adequately evaluate the impacts of induced travel. (See *Environmental Council of Sacramento v. Caltrans* (July 15, 2008, 07CS00967) <http://nastsacramento.blogspot.com> [as of September 29, 2008].) There are numerous reports and studies on the “induced travel” impacts of new freeway lanes and recommended methods of analysis. (See, e.g., U.S. Department of Transportation Federal Highway Administration, *Induced Travel: Frequently Asked Questions*, available at <http://www.fhwa.dot.gov/Planning/itfaq.htm> [as of September 30, 2008]; Cervero & Hanson, *Induced Travel Demand and Induced Road Investment* (2002) 36 J. Transp. Econ. & Pol’y, Part 3, pp. 469-490; Litman, *Generated Traffic and Induced Travel: Implications for Transport Planning* (September 17, 2007), available at <http://www.vtpi.org/gentraf.pdf> [as of September 30, 2008]; Litman, *Smart Transportation Investments: Reevaluating the Role of Highway Expansion for Improving Urban Transportation* (October 6, 2006), available at http://www.vtpi.org/cong_relief.pdf [as of September 30, 2008]; Cervero, *Road Expansion, Urban Growth, and Induced Travel: A Path Analysis* (Spring 2003) 69 APA Journal, No. 2, pp. 145-163; Noland, *Relationships between highway capacity and induced vehicle travel* (2001), 35 Transp. Res. Part A: Policy and Practice, Issue 1, pp. 47-72.)

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should compare the anticipated effect on GHG emissions of this planned prioritization of the use of these revenues to the anticipated effect on GHG emissions of an alternative that applies a significant percentage of HOT lane revenues to unfunded transit needs as the revenue is generated (rather than after the HOT network is completed). In particular, the EIR should evaluate the benefits of using HOT lane funds for transit improvements that would maintain and increase transit ridership in the completed HOT lane corridors.³¹

3. ***The projected effects of the different alternatives on VMT and GHG emissions.***

In addition, the DEIR should provide and evaluate at least one alternative designed to maximize the reduction of GHG emissions. As you are aware, there are many policies and/or projects that MTC could consider to help achieve this goal, some of which it is already considering and could fund at a significantly higher level. While this letter is not intended to provide a complete list, some of the possibilities include the following: focus on eliminating transit shortfalls; increase service capacity to meet increased demand for public transit in core urban areas; increase funding for transportation infrastructure to serve infill and mixed use development located near employment centers and provide incentives for such development; increased incentives for use of public transit, ridesharing and carpools; and expanded public transit frequency of operation.

4. ***Green Construction Policy.*** To further reduce the impact of the projects in the Proposed Transportation Plan on air quality and climate change, the EIR should evaluate the effect of including a mandatory “green construction” policy. Such a policy could require, for example,

- use of an emissions calculator in the planning of every construction project, one that uses the proposed equipment fleet and hours of use to project nitrogen oxides, particulate matter, and carbon dioxide emissions, then quantifies the reductions achievable through the use of cleaner/newer

³¹ The way the revenue is used could impact the effectiveness of HOT lanes. (See Dahl, R., *The Price of Life in the Fast Lane* (December 2003), 111 Environmental Health Perspectives, Number 16, available at <<http://www.ehponline.org/members/2003/111-16/spheres.html>> [as of September 29, 2008], citing the transportation director of Environmental Defense, who stated that “[t]he key element for truly effective congestion pricing [] is dedication of HOT lane fees to public transit and public health purposes in the same transit corridor.”) Along similar lines, the California Air Resources Board’s Draft Scoping Plan identifies congestion pricing as a GHG- reduction measure under consideration, emphasizing that the GHG emission reductions would come from “relief of severely congested traffic, some reduction in vehicle travel, and from the investment of funds in transit infrastructure that would provide additional transportation options during congested hours.” (Draft Scoping Plan p. 38 [emphasis added].)

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equipment;³²

- that all off-road construction vehicles be alternative fuel vehicles, or diesel-powered vehicles with Tier 3 or better engines or retrofitted/repowered to meet equivalent emissions standards as Tier 3 engines;³³
- use of the minimum feasible amount of GHG-emitting construction materials (cement, asphalt, etc.);³⁴
- use of cement blended with the maximum feasible amount of flyash or other materials that reduce GHG emissions from cement production;
- use of lighter-colored pavement with increased reflectivity, which reduces the “heat island” effect;
- recycling of construction debris to maximum extent feasible;
- planting of shade trees in or near construction projects where feasible.

Finally, the DEIR also should consider feasible measures to mitigate and/or reduce emissions of criteria pollutants (including black carbon and other particulate matter) from diesel buses, such as requiring retrofitting of diesel buses with particulate traps, replacing diesel buses

³²The calculator used in the Sacramento Metropolitan Air Quality Management District’s program is available at <http://www.airquality.org/ceqa/index.shtml#construction> (as of September 29, 2008).

³³Similarly, the South Coast Air Quality Management District has called for the State, in selecting projects that will be funded from Proposition 1B, to impose a condition that requires “use of lowest emitting construction equipment and fuels available.” (South Coast Air Quality Management District Res. No. 07-07 (April 6, 2007), “Resolution Expressing Conditions for Funding Projects with Proposition 1B Funds in the South Coast District.”)

³⁴A new production method known as “warm-mix” asphalt technology that significantly reduces GHG emissions during application may prove to be a feasible alternative road paving material. (See Moore, *Warm-Mix Asphalt (WMA) Potentially Can Provide Important Benefits for Paving Contractors, Reduce Fuel Costs and Diminish Green-House Gases*, Construction Equipment (March 1, 2007), available at <http://www.constructionequipment.com/article/CA6421459.html> [as of September 29, 2008]. Warm-mix asphalt was used successfully in Yellowstone National Park in August 2007, and, this fall, Logan International Airport in Boston will become the first in the U.S. to pave a runway with the new asphalt mix. (See “Green” Asphalt Saves Energy and Reduces Greenhouse Gas Emissions (August 6, 2008), available at http://fypower.org/news/email_story.html?post_id=3165 [as of September 29, 2008]).

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with the lowest-emitting available alternative fuel buses, requiring that all new buses have the lowest level of emissions feasible, and planting particulate-absorbing trees near freeways and busy streets. Emissions of these pollutants is a critical health issue for the region, which does not meet attainment standards for ozone and particulate matter.³⁵

Global warming presents California with one of its greatest challenges to date. MTC has the opportunity to take steps to address the problem of climate change constructively, while educating the public and decision-makers. We urge MTC to meet the challenge with the Proposed Transportation Plan and DEIR. Please do not hesitate to contact us if the Attorney General's Office can be of any assistance.

Sincerely,

/S/

LAURA J. ZUCKERMAN SANDRA
GOLDBERG
Deputy Attorneys General

For EDMUND G. BROWN JR.
Attorney General

³⁵See generally, e.g., California Air Resources Board, Health Effects of Diesel Exhaust, available at http://www.oehha.org/public_info/facts/dieselfacts.html (as of September 29, 2008); California Air Resources Board, Draft Diesel Particulate Matter Health Risk Assessment for the West Oakland Community (March 19, 2008), available at <http://www.arb.ca.gov/ch/communities/ra/westoakland/westoakland.htm> (as of September 29, 2008); and the Bay Area Air Quality Management District's air quality summaries, available at http://www.baaqmd.gov/pio/aq_summaries/index.htm (as of September 29, 2008).

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Attachment E

Page 1

METROPOLITAN TRANSPORTATION COMMISSION

DRAFT 2017 TRANSPORTATION IMPROVEMENT PROGRAM
(TIP) and DRAFT AIR QUALITY CONFORMITY ANALYSIS
FOR PLAN BAY AREA and the DRAFT 2017 TIP

***CERTIFIED
TRANSCRIPT***

**PROGRAM AND ALLOCATIONS COMMITTEE MEETING PUBLIC
HEARING**

REPORTER'S TRANSCRIPT OF PROCEEDINGS

WEDNESDAY, JULY 13, 2016

BAY AREA METRO CENTER

375 Beale Street

San Francisco, California 94105

Reported By: AMBER EMERICK

Certified Shorthand Reporter No. 13546

State of California

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1 ATTENDEE
S

2 MTC COMMISSIONERS:

3 Scott Wiener

4 Tom Bates

5 David Campos

6 Federal Glover

7 Mark Luce

8 Bijan Sartipi

9 Adrienne Tissier

10 Amy Rein Worth

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17 BE IT REMEMBERED that, pursuant to Notice of the

18 Meeting, and on July 13, 2016, 10:10 a.m. at the Bay Area

19 Metro Center, 375 Beale Street, San Francisco, California

20 94105, before me, AMBER EMERICK, CSR No. 13546, State of

21 California, there commenced a Public Hearing under the

22 provisions of the California Environmental Act.

23

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MEETING AGENDA

PAGE

Introduction by 22

Presentation by 23

24

25

Chair Wiener. 4

Adam Crenshaw. 5

(No public speakers.)

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10:10 a.m.

1 Wednesday, July 13, 2016

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3

P R O C E E D I N G S

4

5 CHAIR WIENER: Colleagues, I would like to begin

6 this public hearing, Item 3A on the Draft 2017

7 Transportation Improvement Program, or TIP, and the

8 companion Draft Transportation-Air Quality Conformity

9 Analysis for Plan Bay Area and for the Draft 2017 TIP.

10 The purpose of this hearing is to receive public

11 comments on the Draft 2017 TIP and Draft

12 Transportation-Air Quality Conformity Analysis, which will

13 release for public review on June 24th. Written comments

14 will be accepted through 5:00 p.m. on July 28th, 2016.

15 After the comment period has closed, staff will

16 review the comments and respond as appropriate. No action

17 will be taken during this hearing today. Formal adoption

18 of the 2017 TIP and Conformity Analysis is scheduled to be

19 requested of the Commission at its September 28th, 2016,

20 meeting.

21 If you wish to make a comment, please feel out a

- 22 blue card, available on the table at the side of the room,
23 and give it to Kimberly Ward, the Programming and
24 Allocations Committee Clerk. We ask that each speaker be
25 brief and concise and keep their comments to no more than

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1 twominutes.

2 I will now ask MTC staff to present an overview

3 of the Draft TIP and Draft Air Quality Conformity

4 Analysis. And following that presentation, we will take

5 public comments.

6 MR. CRENSHAW: Good morning, Commissioners. I'm

7 Adam Crenshaw, with the Programming and Allocations

8 section.

9 The Transportation Improvement Program or TIP is

10 the region's four-year spending plan for surface

11 transportation projects that are expected to receive

12 federal funding, require a federal action, or are

13 considered regionally significant for air quality

14 conformity purposes.

15 It includes transportation improvements for

16 transit facilities, local roadways, state highways, and

17 bicycle and pedestrian facilities. It also contains a

18 limited number of regionally-significant port and freight

19 rail projects.

20 MTC has developed a Draft 2017 TIP in cooperation

21 with regional partner agencies and other interested

22 parties and in consultation with federal agencies.

- 23 The Draft TIP covers a four-year period from federal
24 fiscal year 16-17, through 2019/20; contains approximately
25 700 projects, totaling about \$6.6 billion in committed

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1 federal, state, regional, and local funding.

2 All projects in the TIP are consistent with Plan

3 Bay Area, as required by federal regulations. The TIP is

4 also required to be financially constrained, meaning that

5 the amount of funding program does not exceed the amount

6 of funding reasonably expected to be available.

7 In developing the Draft 2017 TIP, staff conducted

8 an analysis to confirm that the TIP meets these

9 requirements, and this analysis is included as an appendix

10 to the TIP document.

11 MTC has also conducted a Transportation-Air

12 Quality Conformity Analysis on the 2017 TIP and Plan Bay

13 Area to determine that the region is in compliance with

14 federal air quality regulations. The Conformity Analysis

15 was conducted in accordance with EPA's Transportation

16 Conformity Regulations and MTC's Bay Area Air Quality

17 Conformity Procedures, as adopted in MTC Resolution 3757.

18 It includes updated project delivery information

19 for those projects whose completion years have shifted

20 since the last conformity analysis was conducted on the

21 2015 TIP and the Plan. It does not include any new

22 projects that were not evaluate as part of previous

23 conformityanalysis.

24 Based on the draft analysis, staff finds that the

25 Commission canmake apositive conformitydetermination

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1 for the TIP and the Plan for all applicable criteria

2 pollutants and their precursors; meaning that the

3 forecasted emissions are below the required levels.

We

4 also report that all transportation control measures have

5 been fully implemented.

6 As part of the development of the 2017 TIP, staff

7 has also updated the guide to the TIP to reflect the

8 latest available information.

This guide focuses on how

9 the TIP fits into the transportation project development

10 process, and how the public and interested stakeholders

11 can get involved in that process.

12 To further assist in the public assessment of the

13 draft 2017 TIP, and specifically to address the equity

14 implications of proposed TIP investments, MTC has

15 conducted an investment analysis with a focus on

16 low-income and minority populations, seniors, and persons

17 with disabilities.

18 The results of the population use-based portion

19 of this analysis indicate that overall, an equitable

20 portion of investments are directed to transportation

21 projects that support low-income and minority populations.

22 One exception worth noting is that the share of

- 23 transit investment by trips for passengers living in
- 24 low-income households fall short of the share of transit
- 25 trips made by passengers living in low-income households.

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1 Another exception highlighted in the Darensburg
2 impact analysis is that minority populations receive less
3 per rider benefit from state and federal funds than
4 non-minority populations, but that this does not
5 demonstrate a disparate impact in the distribution of
6 these funds.

7 Staff believes that these discrepancies are
8 likely due to an absence of approximately \$2 billion in
9 transit formula funding from the Draft 2017 TIP. The
10 programming of -- the programming of these funds are
11 anticipated to occur in the near future.

12 Staff is looking into the impact of the -- these
13 and other funds will have on this analysis, and recommends
14 conducting another investment analysis when the TIP is
15 reconciled to the updated Plan next year.

16 The preliminary Investment Analysis was released
17 with the Draft 2017 TIP for review and comment and was
18 presented to the Policy Advisory Council on July 6th.

19 Investment Analysis are included in your packets.

20 In accordance with MTC's public participation
21 plan, the Draft 2017 TIP and Draft Air Quality Conformity
22 Analysis were posted on MTC's website. are available at
23 the MTC offices, and will be sent to public libraries

25 throughout the Bay Area upon request.

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1 Additionally, interested parties were contacted
2 about the release of these documents by mail and e-mail.
3 And this public hearing was noticed in various Bay Area
4 newspapers. This outreach process also serves to satisfy
5 the public involvement requirements for the Federal
6 Transit Administration's annual program of projects for
7 applicable fund sources.
8 Written comments on the Draft TIP and Air Quality
9 Conformity Analysis will be accepted through 5:00 p.m. on
10 Thursday, July 28th, 2016.

11 I would also like to note that we have a court
12 reporter here to transcribe these proceedings and any
13 comments made today.

14 Thank you very much. And this concludes my presentation.

15 CHAIR WIENER: Thank you very much.

16 If there are no questions or comments,
17 Colleagues, we'll now move to the public comment portion
18 of this hearing.

19 I do not have any public comment cards.

20 Is there any public comment on this item, Item

21 3A?

22 Okay. Seeing none, we will close public comment.

23 And, Colleagues, unless there are any comments or

24 questions, I will close this public hearing.

Thank you.

25 (Whereupon, the meeting adjourned at 10:17 a.m.)

Emerick and Finch, Certified Shorthand Reporters
Reporter's Transcript of Proceedings

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CERTIFICATE OF REPORTER

I, AMBER EMERICK, hereby certify that the foregoing proceeding was taken in shorthand by me, a Certified Shorthand Reporter of the State of California, and was thereafter transcribed into typewriting, and that the foregoing transcript constitutes a full, true, and correct report of said proceedings which took place;

That I am a disinterested person to the said action.

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*Final Transportation-Air Quality Conformity Analysis for the Amended Plan Bay Area and the 2017
Transportation Improvement Program*

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AMBER EMERICK CSR No. 13546

Emeri ck And Finch, Certi fied Shorthand
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V. Response to Public Comments

The Draft 2017 TIP and Transportation Air Quality Conformity Analysis were released for public review and comment from June 24, 2016 through July 28, 2016 and a public hearing was held on July 13, 2016 to receive public comment. The following is a list of the public comments submitted to MTC along with staff's responses to these comments. No comments were made during the public hearing. The correspondence and public hearing transcript for the Draft 2017 TIP and Transportation Air Quality Conformity Analysis are available at <http://mtc.ca.gov/our-work/fund-invest/transportation-improvement-program-tip/draft-2017-tip>.

No.	Name	Agency/Organization	Dated	Response
1	Andrea Miranda	Public	Email 7/27/2016	Response #1
2	Cathy Jennings	Public	Email 7/29/2016	Response #1
3	Charlie Cameron	Public	Letter 7/22/2016	Response #1
4	Bob Moss	Public	Email 7/28/2016	Response #1 and #2
5	Rand Strauss	Public	Email 7/28/2016	Response #1 and #2
6	Alex Hakso	Public	Email 7/29/2016	Response #3
7	Anne Nichols	Public	Email 7/27/2016	Response #3
8	Jean Severinghaus	Public	Email 7/3/2016	Response #3
9	Karim Hyder	Public	Email 7/28/2016	Response #3
10	Holly Westphal	Public	Email 7/27/2016	Response #1 and #3
11	Mark Fassett	Public	Email 7/29/2016	Response #1 and #3
12	Mewi	Public	Letter 7/28/2016	Response #1, #2, and #3
13	Jim Burt	Public	Email 7/30/2016	Response #1, #2, and #4

14	Larry V.	Public	Email 7/28/2016	Response #1, #2, and #5
15	Linda Curtis	Public	Email 7/27/2016 and 7/28/2016	Response #1, #2, #3, and #5
16	Michael Ferreira, Victoria Brandon, Rebecca Evans	Three Sierra Club Chapters	Email 7/26/2016	Response #6

Category 1: Responses to Comments Related to Specific Projects

The Regional Transportation Plan (Plan) establishes long-range investment priorities and strategies to operate, maintain, and improve the surface transportation network in the San Francisco Bay Area. The Plan currently in effect for the Bay Area is called Plan Bay Area and was adopted in 2013. The Transportation Improvement Program (TIP) helps carry out the Plan’s strategies in the short term by committing certain funding resources to implement specific programs and project improvements that help support implementation of the Plan. MTC staff forwarded project specific comments to the sponsoring agencies for clarification of next steps and opportunities for input for service planning or project development for specific programs and projects. Interested parties are encouraged to contact project sponsors directly for specific project concerns or to stay informed throughout project development.

Comment and Response #1

Several commenters opposed local projects in the TIP such as implementing bus rapid transit (BRT) on El Camino Real in Santa Clara County or installing express lanes on US 101 in San Mateo County. Some commenters also opposed specific elements of project designs. Other commenters expressed support for local projects in the TIP such as the construction of high-occupancy vehicle (HOV) lanes on US 101 in San Mateo County or the extension of Sonoma Marin Area Rail Transit service beyond the initial operating segment. MTC has notified the project sponsors of the comments submitted.

MTC includes local projects in the TIP after the project sponsor demonstrates project funding, scope and schedule consistent with Plan Bay Area. The decision to include a project in the TIP does not represent an allocation or obligation of

funds, or final project approval. Before securing funding and approval for project implementation, the project is subject to environmental review and final approvals from federal, state, regional or local agencies depending on fund sources, and project-specific required actions. The environmental process will include additional opportunities to comment on the scope, design elements and impacts of a project.

MTC's Guide to the San Francisco Bay Area's Transportation Improvement Program outlines the various opportunities available to the public and interested stakeholders to get involved in the transportation planning and project development process (see TIP Appendix A-3). The guide is also available at MTC's offices at 375 Beale St., San Francisco and online at: <http://mtc.ca.gov/our-work/fund-invest/transportation-improvement-program>.

Comment and Response #2

Some commenters suggested that MTC include specific new projects in the TIP, namely the addition of a second BART tube across the Bay and lowering the Central Expressway in Santa Clara County so that it is separated from cross-traffic.

Large capital projects such as these must be included in an adopted regional long range plan before they can be included in the TIP. Neither of these projects is included in the currently adopted Plan. However, MTC is currently working with a number of partners in the region to evaluate short, medium and long term needs for transit capacity serving the Transbay corridor. A second Transbay tube is being considered as part of this study. Projects selected for further development will then need to be included in the Plan before advancing beyond planning and environmental analysis in the TIP.

Other suggested projects were increased Caltrain service frequencies, a transit pass for residents of the City of Berkeley and changes to local bus routes and service. These projects could potentially be implemented without being included in the TIP if they were not federally funded and did not require a federal action.

MTC's Guide to the San Francisco Bay Area's Transportation Improvement Program outlines the various opportunities available to the public and interested stakeholders to get involved in the transportation planning and project development process (see TIP Appendix A-3). The guide is also available at MTC's

offices at 375 Beale St., San Francisco and online at: <http://mtc.ca.gov/our-work/fund-invest/transportation-improvement-program>.

Category 2: Responses to Comments Related to General Categories of Projects

Staff also received comments regarding general categories of projects. These comments did not identify specific projects, so the comments were not forwarded to sponsoring agencies.

Comment and Response #3

Some commenters opposed general categories of projects such as BRT projects with dedicated lanes or the purchases of diesel buses and equipment. Other commenters expressed support for grade separated rail transit, expanded local bus service or bicycle and pedestrian infrastructure.

MTC's Guide to the San Francisco Bay Area's Transportation Improvement Program outlines the various opportunities available to the public and interested stakeholders to get involved in the transportation planning and project development process (see TIP Appendix A-3). The guide is also available at MTC's offices at 375 Beale St., San Francisco and online at: <http://mtc.ca.gov/our-work/fund-invest/transportation-improvement-program>.

MTC also works with our partner agencies to develop programs that fund or incentivize specific categories of projects. Information about these programs and their development can be found online at: <http://mtc.ca.gov/our-work/fund-invest>.

Category 3: Responses to Comments Regarding Advocacy for Transportation Funding

Staff also received comments urging MTC to advocate for additional funding and policy changes.

Comment and Response #4

One commenter requested MTC to propose steady sources of funding, such as increasing the gas tax or reforming Proposition 13.

MTC continues to support numerous efforts to establish new sources of federal, state, regional and local funding for transportation. Each year MTC adopts a federal and state advocacy program to prioritize its efforts to ensure that the Bay Area benefits from new opportunities, defend against proposals that may reduce funding for Bay Area transportation, advance our goal of a safe, efficient and well-maintained regional transportation system. Information about MTC's

advocacy program can be found online at: <http://mtc.ca.gov/our-work/advocate-lead/state-and-federal-advocacy>.

MTC urges members of the public to track and support developments related to increased transportation funding at all levels of government.

Category 4: Responses to Comments Regarding Land-Use Decisions

Staff also received comments pertaining to land-use trends and policies.

Comment and Response #5

One commenter opposed the construction of high-density residential developments along arterials, while another commenter suggested developing real estate located above transportation facilities.

SB 375 requires MTC to develop a Sustainable Communities Strategy that demonstrates that land-use development patterns and the proposed transportation network can work together to meet greenhouse gas reduction targets. To help achieve these goals, some funding programs, such as the One Bay Area Grant (OBAG) County Discretionary Program, include policies that incentivize cities to build housing. While the TIP includes funding from these programs, the TIP itself is focused on near-term transportation investments and does not include land-use decisions. Local jurisdictions retain the authority to adopt local land-use policies and make specific land-use decisions through their individual processes.

Category 5: Responses to Comments Regarding the Relationship of the TIP to the Plan

Staff received comments from the Sierra Club on the connection between the TIP and the policies and priorities established in the Plan.

Comment and Response #6

Meeting Greenhouse Gas Emissions Targets

The Sierra Club noted that the Draft Transportation-Air Quality Conformity Analysis for the Amended Plan Bay Area and the 2017 Transportation Improvement Program "indicates that the draft 2017 TIP will not result in the greenhouse gas (GHG) reduction per capita target for the year 2035 [15%, relevant to the Plan] as required by the Air Resources Board under the California Sustainable Communities and Climate Protection Act of 2008 (SB 375)."

Transportation conformity is required under section 176(c) of the Clean Air Act (42 U.S.C. 7506(c)) to ensure that federally funded or approved highway and transit activities are consistent with (“conform to”) the purpose of the state air quality implementation plan (SIP). Conformity to the purpose of the SIP means that transportation activities will not cause or contribute to new air quality violations, worsen existing violations, or delay timely attainment of the relevant national ambient air quality standards (NAAQS).

In addition, the Federal Environmental Protection Agency’s transportation conformity rule (40 CFR Parts 51 and 93) establishes the criteria and procedures for determining whether metropolitan transportation plans, TIPs, and federally supported highway and transit projects conform to the purpose of the SIP. Transportation conformity applies to designated nonattainment and/or maintenance areas for transportation-related criteria pollutants: ozone, PM2.5, PM10, carbon monoxide, and nitrogen dioxide. Specifically, regional transportation conformity for transportation plans and TIPs is demonstrated by performing a regional emissions analysis for the applicable NAAQS pollutants in nonattainment areas.

Currently, there are no federal requirements for consideration of GHG impacts in a regional conformity analysis for a TIP or transportation plan. Therefore, to reduce confusion, the air quality and climate implications text and Table 6 will not be included in Appendix E of the Final Conformity Analysis.

Additionally, the Plan focuses extensively on GHG emission reductions and demonstrates that the combination of land use and transportation investments result in the region meeting its goals of 7 and 15 percent reductions in GHG emissions by 2020 and 2035, respectively. Any estimation of GHG reductions is relevant to the Plan. In contrast, the TIP covers only a four year period and includes only a subset of transportation projects and programs from the Plan.

References:

http://www.dot.ca.gov/hq/env/air/main_sections/conformity.htm
<https://www.epa.gov/state-and-local-transportation/policy-and-technical-guidance-state-and-local-transportation#requirements>
http://www.fhwa.dot.gov/environment/air_quality/conformity/

Prioritizing Transportation System Investments

This commenter also requested that funding in the proposed TIP should not be directed to highway and roadway expansion projects and should instead be directed to pedestrian, bicycle and transit projects in order to be supportive of the Sustainable Communities Strategies (SCS).

As mentioned in response to the previous comment (#6), there are no federal requirements for consideration of GHG impacts in a regional conformity analysis for a TIP or transportation plan and the "Draft Environmental Impact Report for MTC's Transportation 2035 Plan" is a California Environmental Quality Act (CEQA) *state* requirement – unassociated with federal requirements for the Draft Conformity Analysis.

Additionally, the performance analysis of the Plan evaluates if the full complement of transportation projects and programs included in the Plan, taken together with land use changes, advance the region's goals and objectives identified in the Plan. As a subset of projects and programs from the Plan, the investments included in the proposed TIP are consistent with the top priority of the Plan to operate and maintain the region's existing transportation system. Nearly two-thirds of the \$6.3 billion in committed funds over the four-year period of the TIP, is directed to maintaining the existing transportation system. In addition, the majority of funding programmed on State Highway System projects (82%) and local road projects (54%) rehabilitates, maintains, and operates the existing system.

It should also be noted that two significant federal programs for transit, bicycle and pedestrian, and complete streets projects are not yet programmed in the TIP. Nearly \$2 billion in Federal Transit Administration (FTA) formula funds expected to be available during the TIP period have not been programmed and therefore are not reflected in the TIP. The program of projects for these funds is anticipated to be adopted and programmed into the TIP in 2017. In addition, most projects from the second cycle of the One Bay Area Grant (OBAG 2) have not yet been programmed into the TIP. The OBAG 2 program, with more than \$150 million in annual federal funds, supports a range of priority multi-modal projects throughout the region. These projects will be incorporated into the TIP as the program is adopted.

High Level of Near-Term Highway Investment

The Sierra Club also noted that the proposed TIP should not front-load highway and roadway projects in the TIP and should instead use its funds to reduce vehicle miles travelled (VMT) and therefore GHGs.

The TIP is required to be fiscally constrained by program and by year. However, the TIP does not reflect the universe of federal, state, and local revenues that will be available over the four year period. Some of these funds will be incorporated as their individual funding programs are developed and adopted, such as the Regional Transportation Improvement Program (RTIP) or regional allocations of FTA formula funds. Other funds are typically not reflected in the TIP at all, including the vast majority of local and state funds that will go to operate, maintain, and manage the region's existing transportation system.

It should be noted that although the TIP presents only a partial picture of the subset of transportation projects that will be implemented during the four year period, the full picture of the projects, programs and strategies that will be completed within the region is captured within the Plan. As mentioned above, although there are no federal requirements for consideration of GHG impacts and/or CEQA obligations in a regional conformity analysis for a TIP or transportation plan, the Plan does demonstrate that the combination of land use and transportation investments result in the region meeting its goals of 7 and 15 percent reductions in GHG emissions by 2020 and 2035, respectively. Any estimation of GHG reductions is relevant to the Plan itself. In contrast, the TIP covers only a four year period and includes only a subset of transportation projects and programs from the Plan.

Equitable Distribution of Funding

This commenter also noted that the proposed TIP and its underlying projects should be changed to eliminate the inequitable distribution of funds to low income and minority transit riders.

The investment analysis of the proposed TIP indicates that although the investments in the TIP are distributed equitably overall, a variance in the share of transit investments by trips for passengers living in low-income households and in the benefits of investments to minority transit riders. It is important to note, however, that the TIP does not reflect the full picture of transportation investments in the Bay Area over the long-term. As noted above, the TIP only includes four years of near-term fund programming. Also, since the TIP primarily documents projects that require federal actions or use federal funds, it tends to

include more large capital projects than rehabilitation programs. Additionally, funding shown in the TIP is included in the year that project phases begin or are obligated and does not reflect the actual flow of funding and expenditures within these phases. While rehabilitation programs will have their funding spread across many years, large capital projects tend to have their funding lumped into a single year even if the funds will actually be expended over a number of years, some of which may be outside the scope of the TIP. When compared to the investments described in the Plan, the 2017 TIP only reflects about 15% of average annual transportation spending in the Bay Area.

An example of the issues described above is the fact that the 2017 TIP Investment Analysis is heavily influenced by two projects, BART's Railcar Procurement Program and Caltrain's Electrification project, as these projects have large capital phases that are beginning in the near future. Together, these projects account for over one third of all transit funding in the 2017 TIP. As these systems are used by a lower proportion of low-income and minority riders than the regional average, the results of the analysis show lower investments benefiting low-income and minority riders. Prior iterations of the TIP Investment Analysis that showed a less variable distribution have been influenced by other large capital projects, such as SFMTA's Central Subway project and VTA's BART Warm Springs to Berryessa Extension project, that are still ongoing, but in the current TIP period require less funding action. Additionally, approximately \$2 billion in transit formula funding for FY2016-17 through FY2019-20 is yet to be programmed and is not included in the proposed 2017 TIP. While BART and Caltrain will still receive a large portion of these funds, the program will also distribute funds to a wider variety of transit operators.

MTC will revisit the investment analysis in the future (estimated for summer 2017, to coincide with adoption of Plan Bay Area 2040) and these transit funds are expected to be included. Additionally, MTC will continue to include updated demographic data sources in future iterations of the investment analysis. Since the draft analysis was released, BART's demographic data have been updated to account for weekend ridership.

Since the equity analysis of the Plan includes more projects and programs than just those that are federally focused and transportation funding is captured from more years, it is not disproportionately influenced by the types of projects described above.

It should also be noted that this analysis only assesses investments and does not directly assess the resulting benefit and burden of specific projects or programs, such as travel time savings or improved accessibility to jobs or other destinations.

Addressing the Effects of Climate Change on Transportation Infrastructure

The Sierra Club also noted that the TIP does not recognize the urgency of climate change and its effects on transportation and transit infrastructure. The commenter requested that the TIP identify projects and funding that will mitigate climate change impacts on Bay Area transportation infrastructure.

In recognition of the risks and challenges related to planning for long-term sustainability and resilience of our transportation assets in the face of climate change, MTC and other regional, state, and federal partners have been working together over the last four years to study how and where the Bay Area is vulnerable to current and future flooding in order to develop strategies to reduce these risks.

MTC was recently awarded a grant from Caltrans to plan for ensuring the Bay Area's transportation system becomes more resilient to increased flooding and sea level rise, while also improving the safety and sustainability of our communities, particularly vulnerable and disadvantaged communities. The \$1.2 million study, to be completed by MTC in cooperation with the Bay Conservation and Development Commission (BCDC), Caltrans District 4, and the Bay Area Regional Collaborative (BARC), will develop a regional vulnerability assessment focused on the Bay Area's transportation infrastructure, Priority Development Areas (PDAs) as identified in the Plan, and vulnerable and disadvantaged communities. The project will also develop a suite of adaptation strategies to improve the resilience of Bay Area transportation assets and communities for inclusion in Plan Bay Area as well as other appropriate local and regional planning and programming documents. The results of the study could address the commenter's request in a future TIP to identify projects that mitigate the risks and damages caused by climate change.

VI. CONFORMITY FINDINGS

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

- This conformity assessment was conducted consistent with EPA's transportation conformity regulations and with the Bay Area Air Quality Conformity Protocol adopted by MTC as **Resolution No. 4274**.
- The Amended Plan Bay Area and the 2017 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 the Amended Plan Bay Area and 2017 Transportation Improvement Program are lower than the applicable motor vehicle emission budgets for the 2008 national 8-hour ozone standard.
- For carbon monoxide, motor vehicle emissions in the Amended Plan Bay Area and 2017 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 A1

List of Projects in the Final 2017 Transportation Improvement Program

List of 2017 TIP Projects by Air Quality Status and County

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2030
Alameda	ALA050014	22776	ACTC	SR 84 Expressway Widening	In Livermore: Widen Route 84 from Jack London Blvd. to Pigeon Pass.	2017 TIP Update - Update the funding plan to add \$7.3M in FY17 ROW Sales Tax and \$2.7M in FY17 CON Sales Tax funds	NON-EXEMPT	2030
Alameda	ALA050019	22769	ACTC	I-880 North Safety Improvements	Oakland: I-880 between 23rd Ave to 29th Ave; Reconfigure Interchange, including new ramps.	2017 TIP Update - Update the funding plan to add \$5.0M in FY16 ROW Sales Tax funds and \$1.7M in FY17 CON Local funds	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.	2017 TIP Update - Update the funding plan to reprogram \$539K in Earmark from FY14 CON to FY17 PSE and add \$134K in FY17 PSE Local and \$2M in FY17 CON Local funds. FY17 funds are for landscaping	NON-EXEMPT	2020
Alameda	ALA070042	22670	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.	2017 TIP Update	NON-EXEMPT	2020
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	2017 TIP Update - Update the funding plan to reprogram \$2M in CON Local funds from FY15 to FY17. FY17 funds are for landscaping activities only.	NON-EXEMPT	2020
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.	2017 TIP Update - Update the funding plan to reprogram \$1.9M in CON Local from FY16 to FY20 and \$42.3M in CON RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
Alameda	ALA090018	240394	ACTC	Truck Parking Facilities in North County (Phase I)	Alameda County: Provide safe parking facilities in north part of Alameda County.	2017 TIP Update - Update the funding plan to reprogram \$1.0M in PE Local from FY13 to FY17 and \$500K in ROW Local and \$500K in CON Local from FY15 to FY17	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.	2017 TIP Update - Update the funding plan to change the source for \$5M in CON funds from Local to RTP-LRP and reprogram \$146K in PE Local from FY15 to FY17, \$2M in CON Local from FY17 to	NON-EXEMPT	2030
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	2017 TIP Update - Update funding plan to reprogram \$1.5M in PE Local from FY16 to FY19. Reprogram and change source of \$250K in ROW from FY16 Local to FY22 RTP-LRP, \$6.0M in CON RTP-LRP from	NON-EXEMPT	2030
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.	2017 TIP Update - Update funding plan to reprogram \$927K in PE Local from FY17 to FY19 and remove \$1.1M in FY17 PE Local. Reprogram and change funding source of \$2.3M in ROW from FY19 Local to	NON-EXEMPT	2030
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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2030

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

List of 2017 TIP Projects by Air Quality Status and County

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Alameda	ALA090027	22082	Port of Oakland	7th St Grade Separation and Port Arterial Improvem	In Oakland: (1) 7th Street Grade Separation project; (2) Middle Harbor Road Improvements project; and (3) Intelligent Transportation Systems and Technology (ITST) Master Plan	2017 TIP Update - Update project name and description to change the scope. Update funding plan to change the source for \$33M from Local to Sales Tax and \$3.5M from Local to RTP-LRP, add \$16.5M in	NON-EXEMPT	2030
Alameda	ALA110001	240014	WETA	Central Bay Operations and Maintenance Facility	WETA: Construct a central bay operations and maintenance facility.	2017 TIP Update - Update the funding plan to add \$531K in FY11 PE, \$913K in FY13 CON, \$750K in FY14 CON, \$7.25M in FY15 CON, and \$16M in FY17 CON Prop 1B funds and reprogram \$3M in CON	NON-EXEMPT	2020
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.	2017 TIP Update - Update the funding plan to reprogram funds between years, change the source for \$2M in Local to RTP-LRP and add \$12.6M in RTP-LRP funds	NON-EXEMPT	2030
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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2020
Alameda	ALA110046	240024	Oakland	Oakland Army Base Infrastructure Improvements	In Oakland: At former Oakland Army Base: Implementing Army Base Infrastructure Master Plan including TCIF funded OHIT improvements implemented by City of Oakland. For the related Port project, see	2017 TIP Update - Update the project description to reflect reduction in scope. Update funding plan to reprogram \$12.7M in CON from FY15 Private to FY16 Local and add \$5.3M. Add \$46.0M in CON Sales Tax in various	NON-EXEMPT	2020
Alameda	ALA110104	21013	MTC	Bay Bridge Park	Bay Bridge Park in Alameda County, in Oakland at the Oakland Touchdown of the new East Span of the Bay Bridge (Project previously titled "SFOBB Gateway Park")	2017 TIP Update	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.	2017 TIP Update - Update the funding plan to reprogram \$2M in CON Local from FY18 to FY20 and \$10.3M in CON RTP-LRP funds from FY19 to FY21	NON-EXEMPT	2030
Alameda	ALA130005	240038	Dublin	Dougherty Road widening	Dublin: Dougherty Road from Sierra Lane to North City Limit: Widen from 4 lanes to 6 lanes	2017 TIP Update - Update the funding plan to reprogram and change the funding source of \$920K in FY14 ROW Local and \$7.6M in FY15 CON Local to FY15 CON Sales Tax and add \$2.1M. Add \$1.1M in	NON-EXEMPT	2020
Alameda	ALA130006	240250	Dublin	Dublin Boulevard widening	In Dublin: Dublin Blvd between Sierra Court and Dublin Court: Widenfrom 4 lanes to 6 lanes.	2017 TIP Update - Update the funding plan to change the source for \$2.9M from Other Local to Sales Tax, add \$130K in CON Sales Tax and reprogram funds between years and phases	NON-EXEMPT	2020
Alameda	ALA130014	240381	Oakland	7th Street West Oakland Transit Village, Phase II	In Oakland: On 7th Street between Wood Street and Peralta Street. Project includes road diet, bicycle lanes, sidewalk enhancement, pedestrian amenities, traffic signal mods, street and pedestrian lights,	2017 TIP Update	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA130015	240381	Oakland	Lake Merritt BART Bikeways	Oakland: Various Streets near the Lake Merritt BART Station: Implement road diets, install high quality bikeways and curb ramps, and resurface the street	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT - Not Regionally Significant Project	2040

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

List of 2017 TIP Projects by Air Quality Status and County

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Alameda	ALA130017	240381	Oakland	Oakland - Peralta and MLK Blvd Streetscape Phase I	Oakland: Peralta St from 3rd St to 36th St and MLK Jr. Blvd. from West Grand to 40th St: Phase 1 components include bike lanes and racks, street lights, landscaping, new sidewalks and pedestrian	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA130024	240381	Oakland	Lakeside Complete Streets and Road Diet	Oakland: Along Harrison Street and Lakeside Drive between 19th Street and Grand Avenue: implement road diet and install bike and pedestrian facilities	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing. Update the description to reflect decrease in scope	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA130025	240391	Fremont	Fremont City Center Multi-Modal Improvements	Fremont: Capital Ave from State St to Fremont Blvd: Construct roadway extension; Various locations around Fremont City Center and Fremont BART Station: Implement multi-modal improvements to	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA130026	240391	Berkeley	Shattuck Complete Streets and De-couplet	Berkeley: Shattuck Ave, Shattuck Square and Berkeley Square from Allston Way to University Ave intersection: Reconfigure travel lanes and parking, repair pavement and make other improvements	2017 TIP Update	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA130027	240386	Newark	Enterprise Drive Complete Streets and Road Diet	Newark: Enterprise Drive between Filbert Street and approximately 350 feet west of Wells Avenue adjacent to the Dumbarton Transit Oriented Development plan area: Implement Road Diet and rehabilitate	2017 TIP Update - Update mode and submode to include freight truck and pedestrian. Update project milestones revised for FY17	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA130028	240381	Berkeley	Hearst Avenue Complete Streets	In Berkeley: Hearst St from Shattuck Ave to Gayley/La Loma: Implement access and safety improvements to Downtown Berkeley PDA for all modes, includes a road diet from Shattuck Ave to Euclid Ave	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA130032	240182	BART	BART Metro Priority Track Elements	BART: In Lafayette, Dublin and Millbrae: Provide three critical track extensions in order to provide the BART system with additional operational flexibility and additional capacity, all within existing right-of-	2017 TIP Update	NON-EXEMPT	2040
Alameda	ALA130034	22042	ACTC	I-680 NB HOV/HOT Lane	Route I-680: from South of Auto Mall Parkway to State Route 84 in Alameda County, construct NB HOV/HOT Lane.	2017 TIP Update - Update scope to change southern limit from SCL County Line to Auto Mall Pkwy and update the funding plan to change the source for \$180M in RTP-LRP to Sales Tax and TCRP, remove	NON-EXEMPT	2030
Alameda	ALA150001	240062	ACTC	Route 84 widening, Pigeon Pass to I-680	In Alameda County: On SR-84 from Pigeon Pass to I-680 (PM 17.9/22.0): Widen roadway from 2 lanes to 4 lanes; On I-680 from SR 84 to north of Andrade Creek: Construct aux lane; On I-680: extend NB	2017 TIP Update - Update the funding plan to add \$4M in FY14 PE Sales Tax, \$2M in FY18 PE Sales Tax, \$2M in FY18 ROW Sales Tax, \$8.7M in PE RTP-LRP, \$17.5M in ROW RTP-LRP and \$106M in CON	NON-EXEMPT	2030
Alameda	ALA150003	21473	Dublin	Dublin Blvd. - North Canyons Pkwy Extension	Dublin: Between Dublin Boulevard and North Canyons Parkway: Build roadway extension	2017 TIP Update - Update the description to reflect that the project is a construction project, update the RTP reference reprogram PE to FY17 and add \$50K in FY17 PE Local and \$12M in FY21 CON RTP-	NON-EXEMPT	2040
Alameda	ALA150004	22455	AC Transit	AC Transit: East Bay Bus Rapid Transit	Alameda County: Along Broadway/ International/E 14th corridor from Oakland to San Leandro: Implement BRT including 34 stations, transit signal priority, level-boarding, shelters, off-board ticketing,	2017 TIP Update - Update the funding plan to add \$2M in FY17 CON Sales Tax	NON-EXEMPT	2020

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Alameda	ALA150022	230550	Hayward	City of Hayward Car Sharing Services	Hayward: Various locations: Obtain car sharing services in downtown Hayward and possible additional locations through a competitive RFP process.	2017 TIP Update - Update the funding plan to reprogram funds from FY16 to FY17	NON-EXEMPT - Not Regionally Significant Project	2030
Alameda	ALA150042	240746	Oakland	Oakland: Telegraph Ave Bike/Ped Imps and Road Diet	HSIP7-04-014: In Oakland: Telegraph Ave from 29th to 45th St: Install crosswalk enhancements, painted bulb-outs, and painted median refuges; from 29th to 41st St: Implement road diet with buffered	2017 TIP Update	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA150043	240746	Oakland	Oakland: Shattuck and Claremont Bike/Ped Imps	HSIP7-04-016 Oakland: On Claremont from Telegraph to Clifton: Implement road diet with bike lanes; Shattuck at 49th, 51st, 59th St, Alacraz: Construct crosswalk enhancements, RRFBs, bulb-out,	2017 TIP Update	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA150047	240381	Oakland	Oakland: Telegraph Avenue Complete Streets	In Oakland, on Telegraph Avenue between 20th St and 41st St, implement complete street project inc. road diet, buffered bike lanes, ped crossing improvements, bulbouts, bus boarding islands, traffic	2017 TIP Update	NON-EXEMPT - Not Regionally Significant Project	2040
Alameda	ALA170001	230110	ACTC	State Route 262 (Mission Blvd) Improvements	In Fremont: Mission Blvd/I-680 IC: widen Mission Blvd to 3 lanes each direction through IC, rebuild the NB and SB I-680 on and off ramps	2017 TIP Update - Add a new non-exempt project to the TIP with \$3.5M in Sales Tax and \$16.6M in RTP-LRP funds	NON-EXEMPT	2030
Alameda	ALA170004	240037	ACTC	I-880/West Winton Avenue Interchange	In Hayward: At I-880/West Winton Avenue I/C: Reconstruct I/C including reconfiguration of eastbound to southbound on ramp and new connection to Southland Mall Drive	2017 TIP Update - Add a new non-exempt project to the TIP with \$3.5M in Sales Tax, \$1.5M in Other Local and \$16M in RTP-LRP	NON-EXEMPT	2030
Alameda	ALA170005	240052	ACTC	I-880/Whipple Road Interchange Improvements	In Union City/Hayward: at I-880/Whipple Rd Interchange: Implement full interchange improvements including northbound off-ramp, surface street improvements and realignment, and bike/ped	2017 TIP Update - Add a new non-exempt project into the TIP with \$3M in Sales Tax and \$57M in RTP-LRP funds	NON-EXEMPT	2030
Alameda	ALA170006	230668	BAIFA	ALA-880 Express Lanes	In Alameda/Santa Clara Counties: On I-880 from Hegenberger to Dixon Landing (Southbound) and Dixon Landing to Lewelling (Northbound); Convert HOV lanes to express lanes. Project also references	2017 TIP Update - Amend a new project into the TIP with \$57.0M in FY17 CON, \$1.5M in FY17 ROW, \$12.5M in FY15 PE, and \$6.9M in FY14 ENV Express Tolls	NON-EXEMPT	2030
Alameda	ALA170008	230684	ACTC	I-580/680 Interchange HOV/HOT Widening	Alameda County: On I-580 between Hacienda Dr. and San Ramon/Foothill Road and on I-680 between Stoneridge Dr. and Amado: Widen to add one HOV/HOT lane for WB 580 to SB 680 and NB 680 to EB	2017 TIP Update - Amend a new non-exempt project into the TIP with \$5.0M in FY21 ROW RTP-LRP, \$2M in FY18 PE Sales Tax, \$28.0M in FY21 PE RTP-LRP, \$150.0M in FY24 CON RTP-LRP, and \$1.0M in	NON-EXEMPT	2040
Alameda	ALA170009	240059	ACTC	Widen I-680 NB and SB for EL from SR-84 to Alcosta	Alameda County: Northbound and southbound I-680 from Route 84 to Alcosta Boulevard: Widen for express lanes	2017 TIP Update - Amend a new nonexempt project into the TIP with \$1.5M in FY18 PE Sales Tax and \$321M in RTP-LRP funds	NON-EXEMPT	2030
Alameda	ALA170010	230088	ACTC	I-880 NB HOV/HOT: North of Hacienda to Hegenberger	Alameda County: I-880 in the northbound direction from north of Hacienda Ave to Hegenberger Road: Widen to provide one HOV/express lane	2017 TIP Update - Amend a new nonexempt project into the TIP with \$1.5M in PE Sales Tax and \$220M in RTP-LRP	NON-EXEMPT	2030
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. Project is phased	2017 TIP Update - Update the funding plan to add \$11M PE SalesTax and \$30.5M in ROW SalesTax, change the source for \$76M in Local funds to RTP-LRP, reprogram \$2M in Con SalesTax from FY10 to	NON-EXEMPT	2030

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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	2017 TIP Update. Retain this project in the TIP for informational purposes as it 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.	2017 TIP Update - Update the funding plan to reprogram \$2M in CON Salestax from FY15 to FY17, change the source and program year for \$7.7M in CON funds from FY19 RTP-LRP to FY17 Sales Tax and	NON-EXEMPT	2020
Contra Costa	CC-010023	21205	CCTA	I-680/SR 4 I/C Reconstruction - Phases 1, 2, 4 & 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, and 2 lane direct EB SR4 to SB I-680. Phases 1, 2, 4 & 5. Env Doc covers all	2017 TIP Update - Update the funding plan to reprogram \$4.5M in PSE Sales Tax from FY19 to FY21, \$500K in ROW Sales Tax from FY17 to FY20, and \$360M in RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
Contra Costa	CC-030002	21210	Hercules	Hercules Intercity Rail Station	In Hercules: From I-80/SR-4 to the future train station: Extend John Muir Pkwy to provide direct access including Bayfront Bridge over Refugio Creek, Bay Trail West Gap Closure, Refugio Creek Restoration,	2017 TIP Update - Update the description to reflect increase in scope. Update the funding plan to add \$4.5M in FY16 CON Sales Tax and \$4.1M in FY15 CON Local	NON-EXEMPT	2030
Contra Costa	CC-030004	22614	Martinez	Martinez Intermodal Station Parking Expansion	Martinez: At the Martinez Intermodal Station: Expand parking from 175 spaces to 600 spaces. Project includes adding a pedestrian and a vehicular bridge to access the parking lot.	2017 TIP Update - Update the funding plan to reprogram \$7.5M in FY14 CON Local Sales Tax and \$1.6M in FY15 CON Local to FY17	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2030
Contra Costa	CC-050028	22353	CCTA	I-680 SB HOV Lane Completion	Contra Costa County: I-680 from North Main Street to Livorna in the southbound direction: Construct a HOV lane	2017 TIP Update - Update the funding plan to reprogram and change the fund source of \$16.1M in FY19 CON RTP-LRP to \$1.0M CON RM2 and to \$15.1M CON Express Tolls. Funds in FY 20. Remove \$2.9	NON-EXEMPT	2030
Contra Costa	CC-050030	98198	CC 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.	2017 TIP Update - Update the funding plan to reprogram FY18 ROW and FY19 CON to FY21	NON-EXEMPT	2030
Contra Costa	CC-050076	22355	Richmond	I-80/Central Avenue Interchange Modification	I-80/Central Ave; Ph1 Construct new signals and CMS's to redirect I-80 WB on-ramp traffic during weekend peak periods to I-580. Ph2 connect Pierce to San Mateo to relocate signal at Pierce/Central Ave	2017 TIP Update - Update the funding plan to reprogram funds between years and phases and add \$3.6M in FY21 CON RTP-LRP	NON-EXEMPT	2030
Contra Costa	CC-070008	22607	Antioch	Laurel Road Extension	Antioch: On Laurel Road between Hillcrest and SR4 Bypass; Construct new 4 lane divided extension.	2017 TIP Update - Update the funding plan to reprogram ROW from FY15 to FY17 and CON from FY19 to FY21	NON-EXEMPT	2040
Contra Costa	CC-070009	22607	Antioch	Slatten Ranch Road Extension	Antioch: On Slatten Ranch Road between Hillcrest Avenue to Wicklow Road; Construct new 4 lane road.	2017 TIP Update - Update the mode and submode to add bicycle. Update the project name and description to reflect change in scope. Update the funding plan to reprogram CON from FY15 to FY19	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 Havenwood Avenue to Homecoming Way, including widening of bridge over Marsh Creek. traffic signal modifications, and	2017 TIP Update - Update the description to change the project limits to Havenwood to Homecoming Way. Update the funding plan to reprogram local funds between years and phases including	NON-EXEMPT	2030

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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.	2017 TIP Update - Update funding plan to change the fund source of \$6.0M in XGEN and \$1.0M in FY19 ROW RTP-LRP to Sales Tax. Reprogram \$40.0M in CON RTP-LRP from FY19 to FY21, \$2.0M in ENV	NON-EXEMPT	2030
Contra Costa	CC-070026	98194	Concord	Commerce Avenue Extension	Concord: Commerce Avenue over Pine Creek to Waterworld Parkway; Extend roadway.	2017 TIP Update - Retain this project in the TIP for informational purposes	NON-EXEMPT	2030
Contra Costa	CC-070035	22360	CCTA	Reconstruct I-80/San Pablo Dam Rd Interchange	San Pablo: I-80/San Pablo Dam Rd I/C: Reconstruct I/C-relocating WB El Portal on-ramp to the full I/C northwards, providing access to McBryde through a new road from SPDR I/C, and replacing Riverside	2017 TIP Update - Update the funding plan to reprogram \$7.1M in CON Local from FY19 to FY20, \$9.2M in CON RIP from FY18 to FY20, \$57.7M in CON RTP-LRP, \$4.3M in ROW RTP-LRP, and \$1.9M in PSE	NON-EXEMPT	2030
Contra Costa	CC-070046	230218	El Cerrito	Del Norte Area TOD Complete Street Imps	El Cerrito del Norte BART Station Area: Complete Streets improvements to access, circulation and safety for bicyclists, pedestrians, local and regional bus, rapid bus, and automobile connections to BART	2017 TIP Update - Update description to include converting one-way sts to two-way and AQ description to non-exempt. Update funding plan to change the source for \$691K from Local to RTP-LRP, add	NON-EXEMPT	2030
Contra Costa	CC-070053	230206	CCTA	SR4: Balfour Road Interchange	Brentwood: Balfour Road/SR4; Construct new interchange.	2017 TIP Update - Update the expanded project description. Update the funding plan change the source for \$1.6M from ECCRFA to Other Local and \$28.8M from ECCRFA to Sales Tax and reprogram funds	NON-EXEMPT	2020
Contra Costa	CC-070062	22122	WETA	Richmond Ferry Service	WETA: Implement new ferry transit service between Richmond and San Francisco.	2017 TIP Update - Update the expanded description. Update the funding plan to reprogram \$2.0M in FY14 CON Prop 1B to various years and phases. Add \$6.5M in FY13 CON Prop 1B, \$508K in FY17 CON	NON-EXEMPT	2020
Contra Costa	CC-070063	22610	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.	2017 TIP Update - Update the funding plan to add \$504K in FY17 CON Local funds, \$1.2M in FY15 PSE Local, \$479K in FY15 ENV Local, and \$6.3M in FY16 CON Local and reprogram funds between years	NON-EXEMPT	2040
Contra Costa	CC-070075	230291	CC County	Kirker Pass Road NB Truck Climbing Lanes	Unincorporated Contra Costa County: On Kirker Pass Road from Clearbrook Drive to approximately 1,000 feet beyond the crest of Kirker Pass Road; Construct northbound truck climbing lane and paved	2017 TIP Update - Update the funding plan to add \$4.2M in FY19 CON Local and \$203K in FY19 CON Local Sales Tax. Reprogram \$136K in ROW Local Sales Tax from FY16 to FY17 and \$777K in PE Local	NON-EXEMPT	2030
Contra Costa	CC-070078	22607	Brentwood	John Muir Parkway Extension: Ph. II	Contra Costa County: John Muir Parkway northerly from Briones Valley Rd to a logical termini on Concord Avenue: Extend roadway(1 lane + 1 bike lane per direction).	2017 TIP Update - Update the funding plan	NON-EXEMPT	2040
Contra Costa	CC-070081	22607	CC County	Byron Highway - Vasco Road Connection	Contra Costa County: between Byron Highway and Vasco Road: Construct an east-west connection road	2017 TIP Update	NON-EXEMPT	2040
Contra Costa	CC-090019	240629	San Ramon	Bollinger Canyon Road Widening (Alcosta to SRVB)	San Ramon: Bollinger Canyon Road between Alcosta Blvd and San Ramon Valley Blvd: Widen from six to eight lanes. Project is phased.	2017 TIP Update - Reprogram Other Local CON funds from FY14 to FY15 and FY17	NON-EXEMPT	2020
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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2020
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	2017 TIP Update - Update the funding plan to reprogram PE to FY17, ROW to FY19 and CON to FY21	NON-EXEMPT	2030

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Contra Costa	CC-130002	21211	BART	eBART Railroad Avenue Station	Pittsburg: on eBART corridor at Railroad Ave: Design and construction of station	2017 TIP Update - Reprogram \$9.9M in CON funds from FY19 to FY17, change the source for \$3.9M in CON from RTP-LRP to Other Local, \$2.4M in CON from RTP-LRP to Sales Tax and \$3.6M in CON from	NON-EXEMPT	2030
Contra Costa	CC-130005	240744	Pleasant Hill	Golf Club Rd Roundabout and Bike/Ped Improvements	Pleasant Hill: Golf Club Rd from CC Canal Regional Trail to east of Old Quarry Rd, Old Quarry Rd from Golf Club Rd to Chilpancingo Pkwy: Install bike/ped imprvmnts, construct roundabout, and rehab	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT - Not Regionally Significant Project	2040
Contra Costa	CC-130006	240744	Concord	Concord BART Station Bike/Ped Access Improvements	Concord: Near the Downtown Concord BART Station: Implement bike/ped access improvements including road diets, buffered bike lanes (0.7 mi), Class 2 bike lanes (0.6 mi), and Class 3 bike routes (0.1	2017 TIP Update - Update the funding plan to reprogram CON from FY16 to FY17	NON-EXEMPT - Not Regionally Significant Project	2040
Contra Costa	CC-130039	240744	Pittsburg	Pittsburg Multimodal Transit Station Access Imps.	In Pittsburg: At the Northeast corner of Railroad Ave and California Ave: Construct a Kiss-n-Ride lot, add a right-turn lane on California Ave and improve multi-modal access to eBART station.	2017 TIP Update	NON-EXEMPT - Not Regionally Significant Project	2040
Contra Costa	CC-130043	230685	BAIFA	CC I-680 Southern Segment Express Lanes	In Contra Costa County: On I-680 between Alcosta Boulevard and Livorna Road (northbound) and between Alcosta Boulevard and Rudgear Road (southbound); Convert existing HOV lanes to express lanes.	2017 TIP Update - Update the project name. Update the funding plan to reprogram \$317K in FY15 ROW Express Tolls and \$128K in FY14 PE Express Tolls to FY15 CON and add \$4.5M. Add \$3.4M in FY13	NON-EXEMPT	2020
Contra Costa	CC-130046	21205	CCTA	I-680 / SR 4 Interchange Reconstruction - Phase 3	In Pacheco: At the I 680/Route 4 interchange: Widen SR4 in the median to provide a third lane in each direction from Morello Avenue to Port Chicago (SR242). Work includes widening of bridges within	2017 TIP Update - Update the funding plan to change the source for \$31.5M from RIP to RTP-LRP, add \$3.2M in RTP-LRP and \$5.87M in Sales Tax and reprogram funds between years and phases	NON-EXEMPT	2030
Contra Costa	CC-130047	240746	Richmond	37th Street Bicycle & Pedestrian Improvements	Richmond: On 37th St from Cerritto Ave to Center Ave: Install bike lanes and pedestrian countdown heads and upgrade traffic signals; On 37th from Barrett to Chanslor: Implement road diet with one lane	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT - Not Regionally Significant Project	2040
Contra Costa	CC-150009	230550	CCTA	CCTA - Carshare 4 All	Contra Costa and Alameda Counties: Richmond, El Cerrito, and Oakland: The program will expand carshare access at transit locations. The expansion of round-trip carsharing services will reduce car	2017 TIP Update	NON-EXEMPT - Not Regionally Significant Project	2030
Contra Costa	CC-150013	94046	CCTA	SR 4 Integrated Corridor Management	Contra Costa County: Along SR 4 between I-80 in Hercules to the SR 4/SR 160 Interchange in the City of Antioch: Implement Integrated Corridor Management along corridor.	2017 TIP Update - Update the funding plan to add \$14.8M in FY21 CON RTP-LRP and \$200K in FY17 PSE Local Sales Tax funds and update scope and AQ description to reflect that project will be	NON-EXEMPT	2040
Contra Costa	CC-150017	21225	San Pablo	Rumrill Blvd Complete Streets Improvements	In San Pablo: Along Rumrill Boulevard between San Pablo Avenue to the North and Costa Avenue to the South; Complete Streets Improvements and road diet	2017 TIP Update	NON-EXEMPT - Not Regionally Significant Project	2040
Contra Costa	CC-170001	22613	Danville	San Ramon Valley Blvd Lane Addition and Overlay	In Danville: On San Ramon Blvd between Jewel Terrace and Podva Rd; Lane addition and rehabilitate roadway.	2017 TIP Update - Add a new non-exempt project into the TIP with \$791K in FY17 CON Sales Tax, \$10K in FY17 PE General Fund, \$67K in FY17 PSE Sales Tax, \$20K in FY17 PE Sales Tax, \$30K in FY17	NON-EXEMPT	2040

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Contra Costa	CC-170002	240588	BAIFA	CC-680 Northern Segment Express Lane - Southbound	In Contra Costa County: On I-680 Southbound from Benicia-Martinez Toll Plaza to El Cerro; convert HOV to express lanes and add/modify express lane elements. Project also references RTP ID 230685	2017 TIP Update - Amend a new non-exempt project into the TIP with \$1.0M in FY18 ROW Express Tolls, \$2M in FY18 CON Express Tolls, \$3.8M in FY13 ENV RM2, \$3.6M in FY16 PE Express Tolls and	NON-EXEMPT	2030
Contra Costa	CC-170003	240587	BAIFA	CC-680 Northern Segment Express Lane - Northbound	In Contra Costa County: On I-680 Northbound from Rudgear to Benicia-Martinez Bridge; convert HOV to express lanes, add express lane elements and provide operational improvements. Project also	2017 TIP Update - Amend a new project into the TIP with \$24.8M in FY21 CON RTP-LRP, \$900K in FY21 ROW RTP-LRP, \$2.0M in FY17 ENV Local, \$1.1M in FY21 ENV RTP-LRP, and \$3.1M in FY21 PE RTP-	NON-EXEMPT	2030
Marin	MRN050034	240691	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.	2017 TIP Update - Update the funding plan to reprogram RTP-LRP from FY19 to FY21 and update the RTP ID to 240691	NON-EXEMPT	2040
Marin	MRN070006	240039	Novato	Novato Boulevard Widening, Diablo to Grant	Novato: Novato Blvd between Diablo and Grant Ave.: Improvements to roadway including including widening existing two/three lanes to four lanes and adding turn lanes, bike lanes, curbs, and sidewalks.	2017 TIP Update - Update the funding plan to reprogram \$2M in CON Sales Tax funds from FY16 to FY17 and change the source and program year for \$5.9M in CON funds from FY16 Sales Tax to FY21	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	2017 TIP Update	NON-EXEMPT - Not Regionally Significant Project	2040
Marin	MRN110035	240748	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	2017 TIP Update	NON-EXEMPT - Not Regionally Significant Project	2040
Marin	MRN130001	240034	GGBHTD	Larkspur Ferry Terminal Parking Garage	In Larkspur: At the Larkspur Ferry Terminal (LFT): construct a new three story parking structure	2017 TIP Update - Update the funding plan to reprogram \$500K in PE Local funds from FY15 to FY18 and \$3.5M in CON RTP-LRP from FY20 to FY21	NON-EXEMPT	2040
Marin	MRN150006	240735	GGBHTD	GGBHTD: Bldg Ridership to Meet Capacity Campaign	Golden Gate Bridge, Highway and Transportation District: Systemwide: Begin several marketing campaigns in the next year focusing on promoting Golden Gate Transit and Golden Gate Ferry use	2017 TIP Update - Update the funding plan to reprogram \$210K in CON CMAQ and \$27K in CON Local from FY16 to FY17	NON-EXEMPT - Not Regionally Significant Project	2040
Marin	MRN150009	240758	MTC	Richmond-San Rafael Bridge Access Improvements	In Contra Costa and Marin Counties: On I-580/Richmond-San Rafael Bridge: Convert existing shoulders to an automobile travel lane (EB) and a bike/ped path, construct bike/ped path in Contra Costa	2017 TIP Update - Update the funding plan to reprogram \$5M in CON RM1 funds from FY16 to FY17	NON-EXEMPT	2020
Marin	MRN150010	21017	MCTD	MCTD - Relocate Transit Maint. Facility - PE only	In Marin County: Relocate contractor maintenance facilities in a centralized location, including bus parking and three maintenance bays. This project listing includes only the PE phase of this project.	2017 TIP Update	NON-EXEMPT	2040
Multi-County	MTC050027	22511	WETA	Ferry Service - Berkeley/Albany	WETA: Berkeley/Albany: Provide ferry service from Berkeley/Albany to San Francisco.	2017 TIP Update - Update the funding plan to remove \$12.0M in FY15 CON RM2, \$2.5M in FY10 CON Prop 1B, \$20.0M in FY14 CON Prop 1B, \$20.5M in FY19 CON RTP-LRP. Reprogram \$5.0M in CON	NON-EXEMPT	2040

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Multi-County	MTC050029	230581	WETA	SF Ferry Terminal/Berthing Facilities	WETA: San Francisco: At the Ferry Terminal; Construct additional ferry docking/berthing facilities in the South Basin to improve ferry access and support WETA berthing/maintenance operational needs.	2017 TIP Update - Update the funding plan to reflect that only the South Basin Improvements will be implemented on this listing including adding \$4M in FY17 CON FTA Passenger Ferry Program (Other	NON-EXEMPT	2020
Multi-County	REG070003	22509	WETA	Treasure Island Ferry Service	Treasurer Island: Implement new ferry transit service between Treasure Island and San Francisco/East Bay locations.	2017 TIP Update - Retain this project in the TIP for informational purposes as additional federal funds are expected	NON-EXEMPT	2040
Multi-County	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.	2017 TIP Update - Update the funding plan to reprogram \$100K from FY16 PE to FY17 ROW to match obligation	NON-EXEMPT	2040
Multi-County	REG090037	94525	BART	BART: Railcar Procurement Program	BART: Procure 790 Railcars (includes the replacement of 669 Railcars)	2017 TIP Update - Update the funding plan to change the source for \$907K in CON from Other Local to RTP-LRP and \$80M in CON from CMAQ to RTP-LRP and reprogram all RTP-LRP to FY21	NON-EXEMPT	2040
Multi-County	REG130004	240741	BAIFA	Regional Express Lane Network	Region-wide: Program-level project costs to support the Regional Express Lane Network deployment including: Program costs (planning, coordination, & management); Centralized toll system costs;	2017 TIP Update - Update description and funding plan to remove \$156.8M in Express Tolls, \$34.0M in RTP-LRP, and \$6.3M in RM2 as scope and funding is being split out to ALA170006, CC-170002, CC-	NON-EXEMPT	2040
Multi-County	REG150001	22009	Caltrans	Oakland to San Jose Double Track (Segment 2A)	Between Oakland and San Jose: On UPRR Niles subdivision from MP 6 to MP 35, and the Coast subdivision MP 13 to MP 35, and on the Caltrain Right of Way MP 44 to MP 48: Construct a second mainline	2017 TIP Update. ITIP funds are proposed for deletion in the 2016 STIP - changed \$7 M to RTP-LRP funds.	NON-EXEMPT	2040
Multi-County	SON090002	240736	SMART	Sonoma Marin Area Rail Corridor	Between Sonoma and Marin Counties: Implement passenger rail service and non-motorized pathway on NWP rail line. Project also references RTP ID 22001	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2040
Multi-County	VAR170003	230656	BAIFA	ALA/CC-80 and Bay Bridge Approach Express Lanes	In Alameda/Contra Costa counties; On I-80 from the Carquinez Bridge to Powell and the Bay Bridge Approaches; Convert HOV lanes to express lanes. Project also references RTP IDs 230657 and 240741	2017 TIP Update - Amend a new project into the TIP with \$5.0M in FY13 ENV RM2, \$3.0M in FY21 ROW RTP-LRP, \$4.8M in FY21 ENV RTP-LRP, \$9.8M in FY21 PE RTP-LRP, and \$75.7M in FY21 CON RTP-LRP	NON-EXEMPT	2030
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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2020
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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2040
Napa	NAP110029	240057	American Canyon	Eucalyptus Drive Realignment Complete Streets	American Canyon: Eucalyptus Dr. from Theresa Rd to Hwy 29: Extend roadway and reconfigure intersection of Eucalyptus Dr and Hwy 29 and Eucalyptus Drive and Theresa Road. Create complete street	2017 TIP Update - Update the funding plan to remove \$1.7M in CON RIP, add \$908K in PSE Local and \$502K in CON Local and reprogram PSE from FY17 to FY18 and CON from FY19 to FY21	NON-EXEMPT - Not Regionally Significant Project	2040
Napa	NAP130006	230392	American Canyon	Devlin Road and Vine Trail Extension	American Canyon: Devlin Road from the southern terminus 2,500 feet south to Green Island Road: Construct roadway extension and Class I multipurpose path	2017 TIP Update	NON-EXEMPT - Not Regionally Significant Project	2020
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.	2017 TIP Update - Update the funding plan to add \$360M in FY17 CON Other Local funds	NON-EXEMPT	2020

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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.	2017 TIP Update	NON-EXEMPT	2020
San Francisco	SF-010038	21549	SF DPW	Bayview Transportation Improvements	In San Francisco: From US 101 to the Hunters Point Shipyard along: 25th, I280-Illinois; Cesar Chavez, US101-Illinois; Illinois, 25th-Cargo; Cargo, Illinois-Jennings; Jennings, Cargo-Evans; Evans, Cesar	2017 TIP Update-Update the description to clarify scope and update the funding plan to reprogram \$212K in Local from FY15 ROW to FY17 CON, \$288K in Local ROW from FY15 to FY19, \$500K in CON	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to remove \$360M in RTP-LRP and reprogram remaining RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to reprogram RTP-LRP funds from FY19 to FY21 and add \$18.6M in FY21 PE RTP-LRP	NON-EXEMPT	2030
San Francisco	SF-070004	230164	SF County TA	Geary Bus Rapid Transit	Muni: On Geary Boulevard; Design and implement a BRT project.	2017 TIP Update - Update the funding plan to change the source for \$6.8M in RTP-LRP to Sales Tax and \$6.8M in RTP-LRP to Local and reprogram funds between years and	NON-EXEMPT	2030
San Francisco	SF-070005	230161	SFMTA	Van Ness Avenue Bus Rapid Transit	Muni: On Van Ness Avenue from Mission to Lombard; Design and implement a BRT project. Project is phased. Project also references RTP IDs 240745 and 240471	2017 TIP Update	NON-EXEMPT	2020
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	2017 TIP Update - Update the funding plan to reprogram \$205K in ROW Local from FY15 to FY17, \$10.1M in CON RTP-LRP from FY20 to FY21, and \$12.0M in CON Private and \$320K in CON Local funds	NON-EXEMPT	2030
San Francisco	SF-090012	240309	SFMTA	Additional Light Rail Vehicles to Expand Muni Rail	SFMTA: Procure 20 expansion light rail vehicles (LRVs).	2017 TIP Update - Update the funding plan to change the source and program year for \$2M in CON funds from FY19 RTP-LRP to FY20 Other Local and reprogram \$122M in RTP-LRP from FY19 to FY21	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	2017 TIP Update - Update the funding plan to change the source and program year for \$13.7M in CON funds from FY19 Private funds to FY21 RTP-LRP	NON-EXEMPT	2030
San Francisco	SF-090018	240309	SFMTA	Oakdale-Palou Interim High-Capacity Bus Corridor	Muni: Transit Preferential improvements for the Palou Avenue corridor, including bus bulbs, up to six traffic signals with transit signal priority, new bus shelters and pedestrian safety treatments.	2017 TIP Update - Update the funding plan to reprogram RTP-LRP funds from FY19 to FY21	NON-EXEMPT	2030
San Francisco	SF-090019	240147	SFMTA	Extended Trolleybus Service into Hunters Point	SFMTA: Procure 10 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 (24	2017 TIP Update - Update the project description to reflect increase in scope to 10 electric trolley vehicles, update the RTP reference to 240147 and update the funding plan to reprogram RTP-LRP funds	NON-EXEMPT	2030
San Francisco	SF-090020	240147	SFMTA	Geneva Harney BRT Infrastructure: Central Segment	SFMTA: From Executive Park/Harney Way under US 101 to SF/Daly City line on Geneva Avenue: Construct bus rapid transit facilities	2017 TIP Update - Update description to change eastern limit to Executive Park/Harney Way. Update the funding plan to change the source for \$1.3M from RTP-LRP to Sales Tax and \$4.8M from RTP-LRP to	NON-EXEMPT	2030

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San Francisco	SF-090023	240147	SFMTA	Geneva Harney BRT Infrastructure: Eastern Segment	SFMTA: Bayview and Hunters Point: from Executive Park/Harney Way to Hunters Point Transit Center via Candlestick/Hunters Pt. Shipyard development: Construct extension of Geneva Harney BRT. Project	2017 TIP Update - Update the project name and description. Update the funding plan to change the source for \$2M in FY20 CON funds from RTP-LRP to Other Local, reprogram remaining CON RTP-LRP	NON-EXEMPT	2030
San Francisco	SF-090032	240171	SFMTA	SFMTA: Muni Forward 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.	2017 TIP Update - Update the funding plan to add \$17M in Sales Tax and \$134M in Local	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to remove \$35.0M in RTP-LRP, reprogram RTP-LRP from FY19 to FY21 and reprogram \$2M in CON from FY15 to FY17	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to reprogram \$28M in ROW Developer Fee funds from FY19 to FY21 and \$303M in CON Developer Fee funds from FY19 to FY21	NON-EXEMPT	2030
San Francisco	SF-110045	240526	SFMTA	SFMTA: 8X Customer First Program	San Francisco: 8X line: Implement Transit Corridor Improvements including colorizing existing dedicated transit lanes, TSP, wayfinding improvements and transit arrival prediction sign, vehicle branding,	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2020
San Francisco	SF-110049	240728	SF County TA	Treasure Island Congestion Pricing Program	San Francisco: Treasure Island: Implement Congestion Pricing Program. project is phased	2017 TIP Update - Update the funding plan to reprogram \$1.0M in FY21 RTP-LRP from CON to PE & PSE, \$110K in PE Sales Tax from FY16 to FY17, and \$417K in Local from FY18 CON to various years &	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	2017 TIP Update - Update the funding plan to change the source for \$1M in CON from RTP-LRP to Local and reprogram ROW Local from FY16 to FY18, CON Local from FY17 to FY19 and CON RTP-LRP from	NON-EXEMPT	2030
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	2017 TIP Update	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.	2017 TIP Update	NON-EXEMPT	2030
San Francisco	SF-130004	240400	SF County TA	Treasure Is/Yerba Buena Is Street Improvements	On 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	2017 TIP Update - Update the funding plan to reprogram \$44.5M in CON Private Joint Developer funds from FY19 to \$4.0M in FY20, \$5.0M in FY21, and \$35.5M in FY22	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	2017 TIP Update - Update the funding plan to change the source for \$3.7M from developer fees to RTP-LRP and \$1M from Local to RTP-LRP, reprogram CON developer fees from FY19 to FY18 and	NON-EXEMPT	2040

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San Francisco	SF-130006	240147	SF DPW	Southeast Waterfront Transportation Improvements	San Francisco: Between HP Shipyard and Candlestick Pt: improve roadways to facilitate 5-mile, multi-modal corridor, connecting project area with the Bayshore Intermodal Station. Project development and	2017 TIP Update - Update the funding plan to reprogram \$100M in CON Local funds from FY19 to FY20 and \$47.7M in CON RTP-LRP funds from FY19 to FY21	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.	2017 TIP Update - Update the mode and submode to include bus. Update the funding plan to reprogram \$2.0M in CON Local funds from FY16 to FY17	NON-EXEMPT	2030
San Francisco	SF-130011	240490	SF DPW	SF- Second Street Complete Streets and Road Diet	In San Francisco: On Second Street between Market and King; Design and construct a complete streets project including the removal of a vehicular travel lane from Market to Townsend	2017 TIP Update	NON-EXEMPT - Not Regionally Significant Project	2040
San Francisco	SF-130015	240486	SFMTA	Mansell Corridor Complete Streets	San Francisco: Mansell Ave from University to Brazil and Persia St from Brazil to Dublin: Implement complete streets improvements, including reduced, separated and relocated vehicular lanes, and bike/ped	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT - Not Regionally Significant Project	2040
San Francisco	SF-130017	240728	SF County TA	SF Downtown Congestion Pricing (NE Cordon)	San Francisco: In the northeast part of the city bounded by Laguna, Guerrero, and 18th St: Implement or pilot a mobility improvement and congestion pricing program charging a peak hour toll (capped at	2017 TIP Update - Update the funding plan to change the funding source of \$2.0M from RTP-LRP to Local funds and reprogram from FY19 to FY17, reprogram remaining RTP-LRP to FY21	NON-EXEMPT	2040
San Francisco	SF-130019	240544	SFMTA	Eddy and Ellis Traffic Calming Improvement Project	San Francisco: On Eddy St between Leavenworth and Cyril Magnin and on Ellis St between Jones and Cyril Magnin: Convert one-way streets to two-way streets and implement pedestrian and traffic calming	2017 TIP Update	NON-EXEMPT - Not Regionally Significant Project	2040
San Francisco	SF-130021	240731	Port of SF	Pier 70 19th Street & Illinois Street Sidewalk	San Francisco: 19th St from Illinois St to approximately 600' east: Construct new 19th St roadway and bike/ped improvements; On Illinois Street from 18th and 19th: construct new sidewalk and other	2017 TIP Update	NON-EXEMPT - Not Regionally Significant Project	2040
San Francisco	SF-150008	240490	SF County TA	Quint-Jerrold Connector Road	San Francisco: From Oakdale Ave to Jerrold Ave: Provide an alternate access route between Oakdale and Jerrold Avenues and across the Caltrain tracks, to be coordinated with Caltrain's Quint Street Bridge	2017 TIP Update - Update the funding plan to change the source for \$234K from Sales Tax to Local, add \$1.76M in Other Local, and \$851K in RTP-LRP and reprogram funds between years and phases	NON-EXEMPT - Not Regionally Significant Project	2040
San Francisco	SF-170001	240415	Port of SF	Mission Bay Ferry Terminal	San Francisco: At the eastern terminus of 16th St: Construct new ferry landing to service San Francisco Mission Bay and Central Waterfront as a part of the Bay area ferry transit system	2017 TIP Update - Add a new project into the TIP with \$3.4M in FY16 PE Local Operating Funds, \$1M in FY17 PE Local, \$1M in FY9 CON Local, \$8.5M in FY21 CON RTP-LRP, and \$3.6M in FY21 PSE RTP-LRP	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to reprogram \$28.6M in FY15 CON SHA, \$7.5M in FY16 CON SHA, \$122.9M in FY17 CON SHA, and \$907.4M in FY18 CON SHA to \$21.2M in FY19 CON SHA,	NON-EXEMPT	2040

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San Mateo	SM-050001	98204	Pacifica	SR 1 - Fassler to Westport Drive Widening	In Pacifica: Route 1 between Fassler Ave. & Westport Dr.; Add an additional lane in each direction.	2017 TIP Update - Update the funding plan to reprogram \$5.6M in PSE Sales Tax to FY18, \$700K in ROW Sales tax and \$6.9M in ROW RIP to FY19, \$1.9M in CON Local to FY20 and \$31M in CON RTP-LRP to	NON-EXEMPT	2030
San Mateo	SM-050027	21603	Redwood City	US 101 / Woodside Interchange Improvement	Redwood City: US101/Woodside; Reconstruct and reconfigure interchange.	2017 TIP Update - Update the funding plan to reprogram \$38.3M in CON RTP-LRP funds from FY19 to FY21	NON-EXEMPT	2030
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	2017 TIP Update	NON-EXEMPT	2020
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	2017 TIP Update - Update the funding plan to reprogram \$1.5M in CON Local and \$11.5M in CON RTP-LRP from FY19 to FY23 and \$400K in PE Local Sales Tax from FY15 to	NON-EXEMPT	2030
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.	2017 TIP Update - Update the mode and submode. Update the funding plan to reprogram \$100K in PE Local from FY15 to FY17 and \$3.9M in CON RTP-LRP from FY20 to FY21 and add \$500K in FY20 CON	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	2017 TIP Update - Update the funding plan to reprogram \$2.0M in CON Local from FY18 to FY17. Reprogram and change the funding source of \$10.7M in CON from FY19 RTP-LRP to FY17 Local Sales Tax	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 from Sierra Point to SF County Line; Construct auxiliary lanes or managed lanes. Project also references RTP ID 240060 for managed lanes	2017 TIP Update - Update description. Update funding plan to reprogram \$4.3M in CON RTP-LRP from FY19 to FY21 and add \$60.7M. Reprogram and change the funding source of \$500K in ENV from	NON-EXEMPT	2030
San Mateo	SM-090014	22282	CCAG	Improve US 101 operations near Rte 92	City of San Mateo:On US 101; Operational improvements near Route 92	2017 TIP Update - Note: Pending CTC 2016 STIP approval. Update the funding plan to reprogram \$2.41M in ENV RIP from FY17 to FY20, \$3.2M in PSE RIP from FY18 to FY21, and \$18.2M in CON RIP funds	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	2017 TIP Update - Update the funding plan to reprogram \$600K in PE Local Sales Tax from FY14 to FY17, \$2.0M in CON Local Sales Tax from FY18 to FY20, and \$4.4M in CON RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
San Mateo	SM-110002	22120	WETA	WETA: Redwood City Ferry Service	WETA: Redwood City; Implement ferry transit service between Redwood City and San Francisco	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2030
San Mateo	SM-110003	22279	SSF	US 101/Produce Avenue Interchange	South San Francisco: On US Highway 101 from Utah Avenue on the east side to the vicinity of Produce Avenue on the west side: Construct a local interchange	2017 TIP Update - Update the funding plan to change the source for \$1.57M from RTP-LRP to Local and for \$430K from RTP-LRP to Sales Tax, reprogram funds between years and phases and add \$2.62M	NON-EXEMPT	2040
San Mateo	SM-130021	230430	Burlingame	Carolan Ave Complete Streets and Road Diet	Burlingame: Carolan Ave between Broadway and Oak Grove Ave: Implement road diet by converting a 4-lane roadway into a 2-lane roadway with a center turn lane, Class II bike lanes, and intersection	2017 TIP Update	NON-EXEMPT - Not Regionally Significant Project	2040

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San Mateo	SM-150017	240060	CCAG	US 101 HOV/ HOT from Santa Clara to I-380	In San Mateo County: On US 101 between the Santa Clara County Line (P.M. 20.6 in SCL)and I-380: Install an HOV or Express Lane. Project also references RTP ID 240466.	2017 TIP Update - Update the funding plan to change the source and program year for \$8.5M in ENV funds from FY19 RTP-LRP to FY17 Sales Tax, reprogram RIP and RTP-LRP funds to FY22 and remove	NON-EXEMPT	2030
San Mateo	SM-170003	22271	San Bruno	SR-35 (Skyline Blvd) Widening from I-280 to Sneath	Widens Skyline Blvd. (SR 35) between I-280 and Sneath Lane. It is currently the last portion of what is otherwise a four lane roadway along Skyline Blvd. The project widens approximately 1.3 miles of the	2017 TIP Update - Amend a new nonexempt project into the TIP with \$500K in FY17 ENV Local Sales Tax and \$350K in FY16 PE Local Sales Tax funds and \$3.6M in CON RTP-LRP funds	NON-EXEMPT	2030
San Mateo	SM-170004	240067	Pacifica	Manor Drive Overcrossing and Milagra On Ramp	In Pacifica: Hwy 1 and Manor Drive I/C: Widen the existing overcrossing; Hwy 1 and Milagra: Construct a new on-ramp; Both intersections: install signals	2017 TIP Update - Amend a new nonexempt project into the TIP with \$16.0M in FY21 CON RTP-LRP and \$1.0M in FY17 ENV Local funds	NON-EXEMPT	2030
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.)	2017 TIP Update - Update the funding plan to reprogram \$1.3B in CON RTP-LRP funds to FY21	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 interchange; widen Blossom Hill Road and reconstruct interchange to provide an additional lane in each direction, including the bridge structure over US-101 plus other	2017 TIP Update - Update the funding plan to reprogram RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
Santa Clara	SCL050009	22956	VTA	Capitol Expressway LRT Extension- Phase II	In the East Valley: The Capitol Avenue light rail line from the existing Alum Rock Transit Center to a rebuilt Eastridge Transit Center (2.6 miles): provide light rail extension	2017 TIP Update - Update the funding plan to reprogram and change the funding source of \$170M in CON funds from FY19 Sales Tax to FY21 RTP-LRP	NON-EXEMPT	2040
Santa Clara	SCL070004	22965	San Jose	US 101 / Mabury New Interchange	In San Jose: US 101/Mabury interchange; Construct full interchange.	2017 TIP Update - Update the funding plan to reprogram CON funds from FY19 to FY21 and retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to reprogram CON RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
Santa Clara	SCL090004	230452	San Jose	Downtown San Jose Bike Lanes and De-couplet	In San Jose: Ph 1: Reduce lanes, add bike lanes and bike/ped accessibility improvements on Almaden Ave and Vine St. Ph 2: Convert one-way couplets to two-way streets; reduce lanes; add bike lanes on:	2017 TIP Update - Update the funding plan to reprogram RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to reprogram \$10M in CON RTP-LRP from FY19 to FY21	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing. Update the expanded project description for clarity	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to reprogram \$2M in CON funds from FY19 to FY20 and \$11.5M in CON funds from FY19 to FY21	NON-EXEMPT	2030
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	2017 TIP Update - Update the funding plan to reprogram \$33.4M in ROW RTP-LRP and \$51.5M in PSE RTP-LRP funds from FY19 to FY21	NON-EXEMPT	2040

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Santa Clara	SCL090030	240439	VTA	SR 85 Express Lanes	In Santa Clara County: Implement roadway pricing on SR 85 carpool lane from US 101 in San Jose to US 101 in Mountain View.	2017 TIP Update - Update description and update the funding plan to change the source for \$17M in FY19 funds from RTP-LRP to Other Local, add \$5.5M in PE Local, add \$500K in ROW RTP-LRP and	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to reprogram \$1M in CON Local from FY16 to FY20 and \$150M in CON RTP-LRP funds from FY19 to FY21	NON-EXEMPT	2040
Santa Clara	SCL110002	240466	VTA	Santa Clara County - US 101 Express Lanes	In Santa Clara County: From Dunne Avenue in Morgan Hill to San Mateo County line in Palo Alto: Implement roadway pricing on US 101 carpool lane	2017 TIP Update - Update description. Update funding plan to add \$1.2M in RTP-LRP and \$4.8M in Local funds and reprogram funds between years and phases	NON-EXEMPT	2030
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.	2017 TIP Update	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.	2017 TIP Update - Update the funding plan to reprogram RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
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. Project is phased.	2017 TIP Update - Update the funding plan to reprogram \$2M in CON local from FY15 to FY20, \$7.64M in PE RTP-LRP from FY20 to FY21 and \$7.9M in CON RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to add \$5.9M in Local funds and \$8.1M in CON RTP-LRP and reprogram funds between years and phases	NON-EXEMPT	2030
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,	2017 TIP Update - Update the funding plan to reprogram CON RTP-LRP funds from FY19 to FY21	NON-EXEMPT	2030
Santa Clara	SCL110010	240118	VTA	VTA: Stevens Creek Bus Rapid Transit	In Santa Clara County: Stevens Creek corridor: Implement Bus Rapid Transit improvements including dedicated guideways, signal prioritization, low-floor boarding, ticket vending machines, premium BRT	2017 TIP Update - Update the funding plan to change the source and program year for \$10.9M in PSE and \$142.6M in CON from FY20 Sales Tax to FY21 RTP-LRP	NON-EXEMPT	2020
Santa Clara	SCL130001	240443	VTA	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.	2017 TIP Update - Update project sponsor. Update the funding plan to add \$4M in CON RTP-LRP, change the source for \$4M from Local to RTP-LRP and reprogram funding among years	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to reprogram \$2M in ENV Local to FY18, \$2M in PSE Local and \$1.2M in ROW Local to FY20, \$3.2M in RTP-LRP to FY21 ENV, \$13.3M in RTP-LRP to FY21 PSE,	NON-EXEMPT	2030
Santa Clara	SCL150018	230550	VTA	Peery Park Rides	In Sunnyvale: Peery Park area: Implement flexible transit service as part of a trip reduction strategy	2017 TIP Update	NON-EXEMPT - Not Regionally Significant Project	2030

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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. Project is phased.	2017 TIP Update - Update the funding plan to reprogram \$1.3M in CON Prop-1B and \$298K in Private-Developer funds from FY15 to FY17 and \$14.7M in CON RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
Solano	SOL070020	230687	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	2017 TIP Update - Update the funding plan to reprogram RTP-LRP from FY19 to FY21	NON-EXEMPT	2040
Solano	SOL090001	240210	Vacaville	I-505/Vaca Valley Off-Ramp and Intersection Imprv.	Vacaville: I-505 at Vaca Valley Pkwy: 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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2020
Solano	SOL090015	230313	Solano County	Redwood-Fairgrounds Dr Interchange Imps	Solano County: I-80/Redwood St. I/C and SR 37/Fairgrounds Dr. I/C: Implement I/C and safety improvements; Fairgrounds Dr. between Redwood St. and SR 37 (2.1 lane miles): Remove left turn lane and	2017 TIP Update - Update the funding plan to reprogram \$105K in PE Local, \$422K in PE HPP and \$397K in CON Local from FY16 to FY17 and reprogram all RTP-LRP funds from FY19 to FY21	NON-EXEMPT	2040
Solano	SOL110001	240581	MTC	I-80 Express Lanes - Fairfield & Vacaville Ph I&II	I-80 in Solano County from Red Top Rd to I-505: Convert existing HOV to HOT & Construct new HOT lanes from Air Base Parkway to I-505. Project also references RTP ID 230660	2017 TIP Update - Update the funding plan to reprogram \$2M in CON Local from fY16 to FY20 and \$219.6M in RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to reprogram \$19.4M in CON RTP-LRP from FY16 to FY17	NON-EXEMPT	2030
Solano	SOL110004	94151	STA	Jepson: Walters Rd Ext - Peabody Rd Widening	Jepson Parkway segment: Walters Road Extension - Peabody Widening.	2017 TIP Update - Update the funding plan to reprogram RTP-LRP funds from FY19 to	NON-EXEMPT	2030
Solano	SOL110005	94151	STA	Jepson: Leisure Town Road from Vanden to Commerce	Jepson Parkway segment: Leisure Town Road from Vanden Road to Commerce. Project is phased	2017 TIP Update - Update the funding plan to reprogram \$19.4M in CON RIP funds from FY16 to FY17	NON-EXEMPT	2030
Solano	SOL110006	94151	STA	Jepson: Leisure Town Road (Commerce to New Ulatis)	Reconstruct and widen Leisure, from 900 feet South of Commerce Place to South of New Ulatis Creek	2017 TIP Update - Update the project limits and update the funding plan to reprogram \$6M in CON RIP from FY19 to FY22	NON-EXEMPT	2030
Solano	SOL110007	22795	Fairfield	Fairfield Transportation Center - Phase 3	In Fairfield: Fairfield Transportation Center; Construct second parking structure with approximately 600 automobile parking spaces and access improvements.	2017 TIP Update - Update the funding plan to reprogram \$600K in PSE TDA from FY16 to FY17 and \$6.9M in CON RTP-LRP from FY20 to FY21	NON-EXEMPT	2030
Solano	SOL110009	230635	Vacaville	Vacaville Intermodal Station - Phase 2	In Vacaville: Construction of a 137 stall surface parking lot.	2017 TIP Update - Update the description to reflect reduction in scope and update the funding plan to reprogram RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT - Not Regionally Significant Project	2040
Solano	SOL990018	22632	Vallejo	I-80 / American Canyon Rd overpass Improvements	Vallejo: American Canyon Road overpass at Hwy. 80; capacity and safety improvements.	2017 TIP Update - Update the funding plan to reprogram \$200K in FY19 Local from CON to PE and \$5.03M in CON RTP-LRP from FY19 to FY21	NON-EXEMPT	2040

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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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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 and implement landscaping.	2017 TIP Update - Update the funding plan to reprogram \$2.6M in CON RTP-LRP from FY19 to FY21	NON-EXEMPT	2020
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 and implement landscaping	2017 TIP Update - Update the funding plan to reprogram \$2.6M in CON RTP-LRP from FY19 to FY21	NON-EXEMPT	2020
Sonoma	SON050001	240668	Sonoma County	Laughlin Bridge over Mark West Crk 20C0246	Mark West Creek Bridge: Laughlin Rd/Brickway Blvd Extension; Construct new 2 lane bridge.	2017 TIP Update - Update the regional air quality description from Exempt to Non-Exempt and update RTP ID reference to 240668	NON-EXEMPT	2030
Sonoma	SON070004	98147	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,	2017 TIP Update - Update the funding plan to add \$827K in FY18 CON Earmark-HPP funds being transferred from SON050015 and reprogram CON RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2020
Sonoma	SON130017	230700	Santa Rosa	Santa Rosa Cmplt Sts Road Diet on Transit Corridor	Santa Rosa: On transit corridors within two Priority Development Areas (Mendocino Ave/Santa Rosa Ave Corridor and Downtown Station Area) and in Communities of Concern: Rehabilitate roadway and	2017 TIP Update	NON-EXEMPT - Not Regionally Significant Project	2040
Sonoma	SON150006	240529	Santa Rosa	US 101 Hearn Ave Interchange	Santa Rosa: US 101/Hearn Avenue over-crossing/interchange: Replace the US 101/Hearn Avenue over-crossing/interchange with a new over crossing/interchange including bike lanes, sidewalks, and re-	2017 TIP Update - Update funding plan to reprogram change the source for \$4.35M from RTP-LRP to Sales Tax and for \$800K from RTP-LRP to Other Local, reprogram funds between years and phases and	NON-EXEMPT	2030
Sonoma	SON150010	230550	Son Co TA	Santa Rosa Car Share	Santa Rosa: Various locations: Establish nine car share vehicles at four pods.	2017 TIP Update - Update the funding plan to reprogram CON from FY16 to FY17	NON-EXEMPT - Not Regionally Significant Project	2030

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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.	2017 TIP Update - Update the funding plan to reprogram \$1.0M in CON Local funds from FY17 to FY18 and add \$500K	EXEMPT (40 CFR 93.126) - Shoulder improvements	2040
Alameda	ALA010034	94526	AC Transit	AC Transit: Facilities Upgrade	AC Transit: Agency's facilities & equipment upgrades.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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. Project is phased	2017 TIP Update - Update the funding plan to reprogram \$1.7M in CON RTP-LRP funds from FY19 to FY21	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing right-of-way	2040
Alameda	ALA030002	240386	Alameda County	Alameda: Vasco Road Safety Improvements	Livermore: On Vasco Road from 1,000' South of Dalton Ave to CC County line; Realign roadway, provide standard shoulder widths, install median barriers and add truck-climbing lanes. (Total length of	2017 TIP Update - Update description to reflect the slight change in scope. Update the funding plan to add \$2.0M in FY18 ROW Local. Reprogram \$13.0M in CON RTP-LRP from FY19 to FY21 and add \$6.0	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.	2017 TIP Update - Update the funding plan to reprogram FY16 funds to FY17	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Alameda	ALA050035	240381	Alameda County	Cherryland/Ashland/Castro Valley/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.	2017 TIP Update - Update the funding plan to reprogram \$270K in PSE ATP from FY17 to FY18 and reprogram \$30K in ATP from FY17 ROW to FY18 PSE. Reprogram \$100K in ATP from FY19 CON to FY18	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	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.	2017 TIP Update - Update the funding plan to add \$13.6M in Sales Tax & reprogram in various years & phases, including ROW from FY13 to FY18 and CON from FY19 to FY21. Add \$4.9M in FY21 CON	EXEMPT (40 CFR 93.127) - Changes in vertical and horizontal alignment	2020
Alameda	ALA070009	98207	ACTC/Oak/Alameda	Oakland/Alameda Freeway Access Project	Oakland: Between Oak Street and Union Street; Reconfigure interchange and intersections to improve connections between I-880, the Posey and Webster tubes and the downtown Oakland area.	2017 TIP Update - Update expanded project description. Update funding plan to change the source for \$500K in Sales Tax and \$2M in RTP-LRP to Other Local, remove \$31.1M in RTP-LRP and reprogram	EXEMPT (40 CFR 93.127) - Changes in vertical and horizontal alignment	2020
Alameda	ALA070039	240347	Oakland	Oakland Waterfront Bay Trail	Oakland: From Emeryville border to San Leandro border; Construct new segments of the Bay Trail.	2017 TIP Update - Update the mode, submode, and description. Update the funding plan to reprogram \$600K in FY19 CON from RTP-LRP to Local in various years and phases. Reprogram \$30.0M in CON	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2030
Alameda	ALA070054	22425	Port of Oakland	California Inter-regional Rail Intermodal Study	Port of Oakland: Study to determine the feasibility of a freight rail shuttle system between the Port and inland points in the Central Valley.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action	2040
Alameda	ALA090022	240389	Alameda County	Estuary Bridges Seismic Retrofit and Repairs	Oakland: Seismic retrofit and repairs of 3 Oakland Estuary bridges	2017 TIP Update - Update the funding plan to reprogram CON funds from FY16 to FY17 and update regional air quality description from "Non-Exempt" to "Exempt"	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040

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Alameda	ALA090023	240389	Alameda County	Fruitvale Ave Roadway Bridge Retrofit	Alameda County: Retrofit Fruitvale Roadway Bridge a lifeline facility	2017 TIP Update - Update the funding plan to reprogram \$500K in ROW Local from FY16 to FY19 and \$500K in CON Local from FY17 to FY20 and add \$500K in FY17 PE Local funds	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Alameda	ALA090065	94525	BART	BART: Fare Collection Equipment	BART: Systemwide: Acquire and install fare collection equipment.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Alameda	ALA090068	94525	BART	MacArthur BART Plaza Remodel	Oakland: MacArthur BART Station: Renovate the entry plaza	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Alameda	ALA110032	240381	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;	2017 TIP Update - Update the funding plan to add \$462K in FY14 CON Local, \$44K in FY15 CON Local, \$800K in FY13 CON 5307, and \$237K in FY06 CON 5307	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.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Grants for training and research programs	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	2017 TIP Update - Update the mode and submode to include bicycle. Update the funding plan to reprogram \$828K in CON Earmark from FY16 to FY17	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA110099	21017	ACE	ACE Preventative Maintenance	ACE Rail - Preventative maintenance activities for ACE service and associated equipment, functions, and facilities.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Alameda	ALA110115	240508	BART	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
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	2017 TIP Update - Update the funding plan to reprogram all funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Planning and technical studies	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Alameda	ALA130003	240227	Oakland	Lake Merritt to Bay Trail Bike/Ped Bridge	Oakland: Over Embarcadero and UPRR tracks under I880 between the Estuary and Lake Merritt along the Channel: Construct ADA accessible bicycle pedestrian bridge to link Bay Trail to Lake Merritt.	2017 TIP Update - Update the funding plan to reprogram \$11.2M in CON RTP-LRP from FY19 to FY21	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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Alameda	ALA130007	240196	BART	BART to Livermore Extension - Develop EIR/EIS	BART - Develop Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) for the BART to Livermore Extension Project (Proposed Project).	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Alameda	ALA130008	240386	San Leandro	San Leandro Boulevard Preservation	San Leandro: San Leandro Blvd from Williams St to Hudson Ln: Pavement Preservation	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA130009	240386	Pleasanton	Pleasanton Complete Streets	Pleasanton: Valley Avenue from Bernal Ave to Hopyard Road and Hopyard Road from Black Avenue to Del Val Parkway: rehabilitate and resurface pavement and installing pedestrian improvements including	2017 TIP Update	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA130011	21011	Livermore	Livermore Relocation and Restoration of R/R Depot	In Livermore: Relocation and rehabilitation of the Historic Depot building to a site adjacent to the UPRR tracks and the Downtown parking structure/LAVTA's Transit Center. No loss of existing transit hub	2017 TIP Update - Update the funding plan to reprogram CON STP from FY16 to FY17	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	ALA130012	240386	Dublin	Dublin Boulevard Preservation	In Dublin: Dublin Boulevard between San Ramon Road and Village Parkway, Dublin Boulevard between San Ramon Road and Village Parkway: Pavement preservation	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA130013	240386	Hayward	Hayward - Industrial Boulevard Preservation	Hayward: Industrial Boulevard from Clawiter Road to 659 ft south of Depot Road: Pavement rehabilitation	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA130016	240386	Oakland	Oakland Complete Streets	In Oakland: Various federal aid eligible streets: Resurfacing and preventive maintenance including installation of ADA-compliant curb ramps, and installation (or reinstallation) of bikeway facilities	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA130018	240386	Alameda County	Alameda Co-Variou Streets and Roads Preservation	Unincorporated Alameda County: Various roadways including Grove Way, Lake Chabot Rd, A St, Vasco Rd, and Liberty St: Rehabilitate pavement	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA130019	240386	Piedmont	Piedmont Complete Streets (CS)	Piedmont: Highland Ave (Sierra to Mountain) and Moraga Ave (Pala to City Limits): Rehabilitate pavement and upgrade pedestrian, bicycle and transit facilities within the project boundaries	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA130021	240386	Emeryville	Emeryville - Hollis Street Preservation	Emeryville: Hollis Street north of Powell Street, Hollis Street (63rd Street to Ocean Avenue), Hollis Street (65th Street to 66th Street), Hollis Street (66th Street to north of 67th Street [City Limits]): Rehabilitate	2017 TIP Update	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA130022	240386	Alameda	Alameda City Complete Streets	City of Alameda: Various Locations: Rehabilitate pavement and make minor improvements to stormwater, bike/ped, and transit facilities	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Alameda	ALA130030	240381	MTC	Improved Bike/Ped Access to East Span of SFOBB	In Oakland: In the vicinity of the East Span of the San Francisco-Oakland Bay Bridge: Construct improved bicycle and pedestrian access. Project is phased.	2017 TIP Update - Update the funding plan to reprogram \$2M in CON RM1 to FY20 and reprogram the remaining CON funds to FY22	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA130035	240381	Berkeley	Bay Trail Shoreline Access Staging Area Project	City of Berkeley: Berkeley Marina, construct segment 3 of Bay Trail Extension, construct new public restroom, and renovate existing public parking area and windsurf staging area.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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Alameda	ALA150002	240386	Alameda County	Niles Canyon Rd (SR 84)/Pleas-Sunol Rd Inter. Imps	In Sunol Area: At Niles Canyon Rd(SR 84), Pleasanton Sunol Rd and Paloma Rd intersection: intersection improvements at the four corners including installation of a traffic signal, shoulder improvements	2017 TIP Update	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Alameda	ALA150005	240197	Berkeley	LeConte Elementary Safe Routes to School Imps	Berkeley: Shattuck Ave between Ward St and Russell St: Pedestrian crossing improvements near LeConte School.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2020
Alameda	ALA150006	240381	Alameda County	Be Oakland, Be Active	Oakland: Citywide: Promote walking and cycling in 41 of Oakland Unified School District's most disadvantaged schools.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Alameda	ALA150007	240381	Alameda	Cross Alameda Trail (includes SRTS component)	City of Alameda: between Webster St and Sherman St: construct a new trail with an on-street portion.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA150008	240347	ACTC	East Bay Greenway	Alameda County: BART alignment from Lake Merritt BART station to the South Hayward BART station. Install a primarily Class I facility that generally follows BART alignment, a distance of approximately 16	2017 TIP Update - Update the funding plan to change the source for \$1.25M in ROW funds from RTP-LRP to Other Local and reprogram to FY19 and reprogram RTP-LRP funds from FY19 to FY21	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2030
Alameda	ALA150009	240381	Livermore	Livermore Marylin Avenue Safe Routes to School	Livermore: Marylin Avenue Elementary School: Safe Routes to School infrastructure improvements surrounding Marylin Avenue Elementary School.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA150010	240381	Oakland	International Boulevard Improvement Project	Oakland: International Boulevard and East 12th Street corridor from 1st Avenue to Durant Avenue: Install pedestrian scale lighting along the corridor, repair sidewalk damage, and install curb ramps.	2017 TIP Update - Update the funding plan to reprogram \$2.5M in CON ATP, \$3.5M in CON Local, and \$500K in CON Sales Tax from FY16 to FY17	EXEMPT (40 CFR 93.126) - Lighting improvements	2040
Alameda	ALA150011	21011	Albany	Complete Streets for San Pablo Ave/Buchanan St.	Albany: San Pablo Ave and Buchanan St: Implement Complete Streets elements including curb extensions, high visibility crosswalks, medians, pedestrian signals and gateway improvements	2017 TIP Update - Update the funding plan to add \$62K in FY16 PSE Local and reprogram \$3.1M in CON RTP-LRP funds from FY19 to FY21	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA150012	240381	Oakland	Laurel Access to Mills, Maxwell Park and Seminary	Oakland: MacArthur Boulevard from High St to Simmons St: Implement bicycle and pedestrian improvements	2017 TIP Update - Update the funding plan to reprogram \$3.6M in CON ATP and \$39K in CON Sales Tax from FY16 to FY17	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
Alameda	ALA150014	94527	LAVTA	LAVTA: Bus Purchase-Low Floor	LAVTA: 40' Hybrids: Replace 4 2002-Low Floor Diesel Vehicles with 4 40' Hybrids.	2017 TIP Update - Update the description to reflect change in bus length. Update the funding plan to reprogram funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Alameda	ALA150015	94527	LAVTA	LAVTA: Bus Purchase-Over the Road	LAVTA: 40' Hybrids: Replace 4 2002- over the road Diesel vehicles with 4 40' Hybrids.	2017 TIP Update - Update the funding plan to reprogram funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Alameda	ALA150016	94527	LAVTA	LAVTA: Bus Purchase-7 Hybrids	LAVTA: 35' Hybrids: Replace 7 2003- Diesel vehicles with 1 40' Hybrid and 6 35' Hybrids	2017 TIP Update - Update the funding plan to reprogram funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040

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Alameda	ALA150017	94527	LAVTA	LAVTA: 5 40' Hybrbrids	LAVTA: 40' Hybrids: Replace 5 2000 40'Diesel Vehicles with 5 40' Hybrids	2017 TIP Update - Update the funding plan to reprogram all funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Alameda	ALA150019	94527	LAVTA	Dublin Blvd Transit Performance Initiative	LAVTA: Dublin Blvd: Project includes implementing Adaptive Signal Control at 27 intersections, Transit Signal Priority, signal coordination, key bus stop improvements, updated customer interface portal,	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.128) - Traffic signal synchronization projects	2040
Alameda	ALA150020	94526	AC Transit	AC Transit: South County Corridors	AC Transit: South Alameda County Major Corridors: Travel time improvements including Adaptive Traffic Control Systems, corridor-wide Transit Signal Priority, signal coordination and relocation of key bus	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.128) - Traffic signal synchronization projects	2040
Alameda	ALA150021	240745	Caltrans	SFOBB Maintenance Complex Ph 3 Training Facility	Near Oakland, at the San Francisco Oakland Bay Bridge Toll Plaza Building. Reconstruct maintenance complex training facilities.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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	ALA150023	230550	Oakland	Oakland Car Share and Outreach Program	Oakland: Citywide: Oakland's car sharing program will extend dedicated car sharing spaces into public right of way and conduct outreach to disadvantaged communities and low-income groups	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at	2030
Alameda	ALA150024	240391	Oakland	Oakland: High/Ygnacio/Courtland Bike/Ped Imprvmnts	In Oakland: Intersection of High Street, Courtland Avenue and Ygnacio Avenue: Implement improvements for pedestrian and bicyclist safety	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA150025	240381	Oakland	Oakland Safe Routes to Schools Various Locations	In Oakland: At six school locations: Implement crossing and access improvements for pedestrians and bicyclist	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA150026	240381	Alameda County	Safe Routes to School, Unincorporated Alameda Co.	In Unincorporated Alameda County: Various schools: Bicycle and pedestrian education for children walking and biking to school.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Alameda	ALA150028	240381	Alameda County	Ashland Avenue Bicycle/Ped Improvements	Ashland, Unincorporated Alameda County: Ashland Avenue between E.Lewelling Blvd and East 14th St: Widen sidewalk, Install Class II Bicycle lanes and ped lighting	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA150029	22425	UCBerkeley	UC Berkeley Parking Price Auction Study	Berkeley: UC Berkeley: Conduct study to determine the real value of parking of current parking permit holders who pay a discounted rate relative to commercially available parking	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Alameda	ALA150030	94525	BART	Ladders of Opportunity - Careers in Transit	BART: Implement new Transit Career Ladders Training Program to improve training access for traditionally underrepresented individuals by developing streamlined pathways into transportation	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Alameda	ALA150031	94527	LAVTA	LAVTA: Replacement (10) 40' Hybrid Buses	LAVTA: Purchase 10 40' hybrid buses to replace diesel buses that have exceeded their useful life	2017 TIP Update - Update the funding plan to reprogram all \$7.9M in 5307, TDA4, and 5339 funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040

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Alameda	ALA150032	94527	LAVTA	LAVTA: Replacement (10) 30' Hybrid Buses	LAVTA: Purchase ten (10) 30' hybrid buses to replace diesel buses that have exceeded their useful life	2017 TIP Update - Update the funding plan to reprogram funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Alameda	ALA150033	94527	LAVTA	LAVTA: Service Vehicles (2) Trucks	LAVTA: Purchase two service trucks for use in maintenance yard and along the Wheels bus lines.	2017 TIP Update - Update the funding plan to reprogram all funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Purchase of support vehicles	2040
Alameda	ALA150034	94527	LAVTA	LAVTA: Trapeze Upgrade	LAVTA: Purchase, install and operate upgrades/modules of the Trapeze operating system	2017 TIP Update - Update the funding plan to reprogram all funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040
Alameda	ALA150035	94527	LAVTA	LAVTA: Farebox Replacement	LAVTA: New Buses: Install farebox devices compliant with Clipper technology	2017 TIP Update - Update the funding plan to reprogram funding from FY16 to FY17	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Alameda	ALA150036	94527	LAVTA	LAVTA: Service Vehicles (3) Road Supervisor	LAVTA: Purchase 3 vehicles for road supervisors' use when providing roadside assistance to the fixed-route fleet. These vehicle will be outfitted with tools and equipment necessary to perform	2017 TIP Update - Update the funding plan to reprogram all funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Purchase of support vehicles	2040
Alameda	ALA150037	94527	LAVTA	LAVTA: Service Vehicles (4) shift trade	LAVTA: Purchase 4 vehicles for road supervisors' use when providing roadside assistance to the fixed-route fleet. These vehicles will be outfitted with tools and equipment necessary to perform	2017 TIP Update - Update the funding plan to reprogram all funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Purchase of support vehicles	2040
Alameda	ALA150038	94526	AC Transit	AC Transit: Purchase (10) Double-Deck Diesel Buses	AC Transit: Purchase (10) Double-Deck Diesel Buses to replace buses in existing fleet	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Alameda	ALA150039	94526	AC Transit	AC Transit: Purchase (10) 40' Buses-Fuel Cell ZEB	AC Transit: Replace 10 40ft urban diesel buses with Zero-emission fuel cell buses	2017 TIP Update - Update the funding plan to reprogram CON RTP-LRP from FY19 to FY21	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Alameda	ALA150040	94526	AC Transit	AC Transit: Replace (10) 40ft Urban Buses-Diesels	AC Transit: Replace 10 (of 102 in sub-fleet) 40ft urban diesel buses with diesels	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Alameda	ALA150041	94526	AC Transit	AC Transit: Replace (29) 60' Artic Buses - Diesels	AC Transit: Replace 29 60ft artic urban diesel buses with diesels	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Alameda	ALA150044	240381	Oakland	19th St BART to Lake Merritt Urban Greenway	In Oakland: Between Broadway and Harrison Street: Improvements include sidewalk widening and bulbouts, ped crossing improvements, bikelanes, new traffic signals and signal mods, street/ped lighting,	2017 TIP Update	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Alameda	ALA150045	94526	AC Transit	AC Transit: PM - Exchange for 40ft Fuel Cell ZEB	AC Transit: Preventive maintenance program, including maintenance of buses and facilities. Project is in exchange for local funds to replace 10 (of 102 in sub-fleet) 40ft urban diesel buses with Zero-	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040

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Alameda	ALA150046	21017	Union C Transit	Union City Transit Rehab Two (2) Transit Buses	Union City Transit: Rehabilitate two (2) compressed natural gas (CNG) buses from 2008 that are now at their mid-life service expectancy. The vehicles have the potential to serve the transit agency longer	2017 TIP Update	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Alameda	ALA150048	240381	Berkeley	9th St Bicycle Blvd Extension Pathway Ph II	In Berkeley: Between the 9th Street Bicycle Boulevard (south of Heinz Avenue) and Murray Street: Install a shared-use path	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Alameda	ALA150049	240393	Berkeley	goBerkeley Residential Shared Parking Pilot	In Berkeley: In residential areas adjacent to Southside/Telegraph and Elmwood goBerkeley program areas: Implement parking pricing pilot; In pilot areas: Implement TDM strategies and outreach focused on	2017 TIP Update	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Alameda	ALA150050	240393	Oakland	Oakland Parking and Mobility Management Project	Oakland: Montclair and select areas of Downtown: Implement demand-responsive parking management and transportation demand management initiatives	2017 TIP Update - Update the funding plan to reprogram CON funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Alameda	ALA150051	240382	LAVTA	Wheels Individualized Marketing Program	LAVTA: Systemwide: Implement a multi-pronged marketing program directed at key subsets of the riding public with the goal of converting non-users to public transit passengers	2017 TIP Update	EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Alameda	ALA170002	240318	ACTC	I-80/Ashby Avenue Interchange Improvements	Alameda County: I-80/Ashby IC: Reconstruct the interchange including constructing new bridge, two roundabouts and bike/ped improvements	2017 TIP Update - Amend a new project into the TIP with \$5.5M in FY19 PE Sales Tax, \$1.5M in FY19 ROW Sales Tax, \$4.0M in FY17 PE Sales Tax, and \$43.8M in FY21 CON RTP-LRP funds	EXEMPT (40 CFR 93.127) - Interchange reconfiguration projects	2030
Alameda	ALA170003	240751	Union C Transit	Union City Transit: Single Point Login Terminals	Union City Transit: Systemwide Revenue Transit Vehicles: Implement Single Point Login Terminals, Including Equipment and Programming for Clipper Card.	2017 TIP Update - Amend a new project into the TIP with \$21K in FY17 CON STP and \$2,667 in Local funds	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Alameda	ALA170007	22425	MTC	Regional Planning Activities and PPM - Alameda	Alameda: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2017 TIP Update - Add a new project to the TIP with \$2.1M in RIP transferred from ALA090030 and \$5.5M in STP and \$711K in Local transferred from REG090038	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Alameda	ALA990052	94526	AC Transit	AC Transit: Paratransit Van Replacement	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of support vehicles	2040
Alameda	ALA990076	94526	AC Transit	AC Transit: ADA Paratransit Assistance	AC Transit: ADA Paratransit Operating Subsidy.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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	2017 TIP Update - Update the funding plan to reprogram FY16 funds to FY17	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Contra Costa	CC-030001	21208	AC Transit	AC Transit: Richmond Prkwy Transit Center	Richmond: Adjacent to I-80 at the Richmond Parkway Transit Center; rehabilitation park and ride facility, traffic light installation and restriping on Blume Dr	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2020
Contra Costa	CC-030025	21017	WCCTA	WCCTA: Preventive Maintenance Program	WestCat: Operating assistance to aid agency with preventive maintenance activities of its fleet.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040

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Contra Costa	CC-030035	21017	ECCTA	Tri-Delta: ADA Operating Assistance	Tridelta: Operating assistance to fund ADA Set Aside requirement	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	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 &	2017 TIP Update - Update the funding plan to reprogram CON funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
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.	2017 TIP Update - Retain this project in the TIP for informational purposes. Update the funding plan to reprogram \$76K in ROW to PE and \$619K in ROW to CON, add \$237K in CON and change the	EXEMPT (40 CFR 93.126) - Railroad/highway crossing	2020
Contra Costa	CC-070033	21225	EB Reg Park Dis	Contra Costa Parks Bike/Ped Trail Improvements	Contra Costa County: Various County Parks; Various bicycle and pedestrian trail improvements. Construction will be done in different phases.	2017 TIP Update - Update the funding plan to reprogram FY15 CON funds to FY17	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-070065	94046	Oakley	Main Street (Previously SR4) Realignment in Oakley	Oakley: On Main St (previously State Route 4) from west of Vintage Parkway to east of 2nd St; Realign roadway, sidewalks, curb, gutters, etc. including traffic calming and signals. No additional automobile	2017 TIP Update - Update the funding plan to reprogram \$1.5M in CON Earmark and \$70K in CON Local from FY16 to FY17 and add \$430K in FY17 CON Local funds	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
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.	2017 TIP Update - Update the funding plan to reprogram and change the funding source of \$4.5M in FY14 CON ECCRFA to FY21 CON RTP-LRP. Reprogram \$600K in PE Local Sales Tax from FY13 to FY17	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-070092	21017	ECCTA	ECCTA: Transit Bus Replacements	Tri-Delta Transit: Replace 80 transit vehicles with similar vehicles and procure 30 MDT terminals	2017 TIP Update	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro 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.	2017 TIP Update	EXEMPT (40 CFR 93.127) - Intersection channelization projects	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,	2017 TIP Update - Update the funding plan to add \$4.1M in FY14 CON Local, \$350K in FY11 PE Local, and \$1.5M in FY16 CON Prop 1B funds	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian 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.	2017 TIP Update - Update the funding plan to reprogram \$4.7M in PE Earmark and \$1.2M in PE Local from FY14 to FY17 and \$13.0M in PE RTP-LRP from FY19 to FY21	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
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	2017 TIP Update - Update the funding plan to reprogram funds from FY17 to FY18	EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2030

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List of 2017 TIP Projects by Air Quality Status and County

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro 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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing. Update the funding plan to add \$397K in FY14 PE Local and \$443K in FY16 CON Local, and remove \$46K	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-110099	94558	CCCTA	CCCTA - Replace 15 40' Buses	CCCTA: replace 15 40' Heavy Duty Diesel Transit Buses.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro 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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	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 and Bailey Road to improve bicycle and pedestrian circulation. Project is phased.	2017 TIP Update - Update mode and submode for consistency	EXEMPT (40 CFR 93.127) - Interchange reconfiguration projects	2040
Contra Costa	CC-130003	21225	CC County	Bailey Road Bike and Pedestrian Improvements	Bay Point: Bailey Rd from Willow Pass Rd to SR 4: Improve bicycle and pedestrian accessibility. Improvements will expand sidewalks and construct uniform bike lanes to create a corridor conducive to all	2017 TIP Update - Update the funding plan to remove \$837K in PE Local, \$885K in ROW Local, \$3.5M in CON RTP-LRP, and \$2.8M in CON Local funds and reprogram PE to FY18, ROW to FY19, CON Local	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-130004	230693	CC County	Contra Costa County Various Streets & Road Preserv	CC County: Pleasant Hill Road (northbound Rancho View Dr to Reliez Valley Rd), Vasco Road (Walnut Blvd to Frisk Creek Bridge), and Byron Highway(Brentwood Blvd to Marsh Creek Rd): pavement	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130011	240744	Concord	Detroit Avenue Bicycle and Pedestrian Improvements	Concord: Detroit Ave between Clayton Rd and Monument Blvd: Complete Streets improvements including bike lanes and bike routes; pavement rehabilitation; street lighting improvements; sidewalk gap	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Contra Costa	CC-130012	240744	Concord	Concord Various Street Preservation	Concord: Concord Blvd (Port Chicago Hwy to 6th Street) and Arnold Industrial Way (Port Chicago Hwy to approximately 1100 ft westerly) Grind and replace the top 2.5" of asphalt concrete and upgrade	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130013	240367	Concord	Concord New and Upgraded Signals at Various Loc	Concord: Various Locations: Upgrade existing traffic signals, install new traffic signals, and related improvements including ADA upgrades. Includes installing an actuated Bike/Ped Traffic Signal at Oak	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Contra Costa	CC-130015	240744	Pinole	Pinole - San Pablo Avenue Preservation	Pinole: San Pablo Avenue from Pinole Shores Drive to Sunnyview Drive: Pavement Resurface, and miscellaneous concrete repairs to curbs and gutter	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040

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Contra Costa	CC-130020	240744	Moraga	Moraga Various Streets and Roads Preservation	Moraga: Moraga Road from St Marys Road to Draeger Drive: Perform pavement base repairs; mill and place 2" asphalt concrete; adjust utility frame to grade; install shoulder backing; replace striping and	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130023	240744	Danville	Danville Various Streets and Roads Preservation	Danville: Sycamore Valley Road from Camino Ramon to San Ramon Valley Boulevard including the bus loop within the adjoining Park-and-Ride Lot, and El Cerro Boulevard from El Pintado Road to La Gonda	2017 TIP Update	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130024	240744	El Cerrito	Ohlone Greenway Station Area Bike/Ped Improvements	El Cerrito: On Ohlone Greenway at El Cerrito del Norte & Plaza BART Stations & at intersections of Hill, Cutting, Central & Fairmount, widen path & improve ped & bike facilities; at three nodes along length	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-130025	230693	Martinez	Martinez Various Streets and Roads Preservation	Martinez: Various Streets and Roads: Rehab and perform preventative pavement maintenance to roadways and modify curb ramps to meet current ADA standards	2017 TIP Update	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130026	240744	Richmond	Richmond Local Streets and Roads Preservation	Richmond: Various Streets and Roads: Rehabilitate pavement and install curb ramps	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130027	240367	CC County	Port Chicago Hwy/Willow Pass Rd Bike Ped Upgrades	Bay Point: Near the intersection of Port Chicago Hwy and Willow Pass Rd: Install bike lane, sidewalk, curb and gutter, bike/ped access improvements, and intersection channelization	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
Contra Costa	CC-130029	240367	Pleasant Hill	Boyd Road/Elinora Drive SRTS Sidewalk Installation	Pleasant Hill: Along north side of Boyd Road (between Horten Ct and Liahona Ct) and east side of Elinora Dr (between Gladys Dr to Gregory Ln): Install concrete sidewalk, new curb/gutter, driveway conform,	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-130030	240744	Clayton	Clayton Various Streets Preservation	Clayton: Keller Ridge Dr from Eagle Peak Ave to Elk Dr.: Rehabilitate roadway	2017 TIP Update - Update the funding plan to reprogram CON from FY16 to FY17	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130031	240744	Oakley	Oakley Various Streets and Roads Preservation	Oakley: Various streets and roadways: Rehabilitate roadway including striping	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130032	240744	San Pablo	San Pablo Avenue Bicycle and Ped Improvements	San Pablo and Richmond: On San Pablo Avenue between Rumrill Blvd and Hilltop Drive: Construct sidewalks and bicycle lanes, modify existing signals to accommodate new striping (no additional	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-130033	240744	Walnut Creek	Walnut Creek - North Main Street Preservation	Walnut Creek: North Main Street from San Luis Road to Geary Road: Rehabilitate roadway and upgrade traffic signal equipment to detect bicycles	2017 TIP Update - Update the mode, submode, and expanded project description for clarity and retain in the TIP for informational purposes as the project is	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130037	240367	Moraga	Moraga Rd SRTS Bicycle and Ped Improvements	In Moraga: On Moraga Road between Campolindo High School and St. Mary's Road: Install pedestrian and bicycle facilities, including trails, sidewalks, crossings and bicycle facilities.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-130038	240367	Danville	Vista Grande Street Pedestrian Improvements/SR2S	Danville: Vista Grande Street between Camino Tassajara and Diablo Road/Vista Grande Elementary School: Construct separated asphalt concrete pathway and safety enhancements to provide direct ped/bike	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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Contra Costa	CC-130040	230693	Hercules	Hercules-Refugio Valley Road Pavement Preservation	In Hercules: Refugio Valley Road from Sycamore Avenue to Redwood Road: Resurface roadway	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing. Update the extended description to clarify scope. Update the funding plan to add \$308K in FY16 CON	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Contra Costa	CC-130045	94558	CCCTA	CCCTA: Access Improvements Implementation	CCCTA: Various bus stops system-wide: Implement bicycle and pedestrian access improvements identified in County Connection's Access Improvement Study.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-130049	240731	EB Reg Park Dis	Breuner Marsh Restoration and Public Access	City of Richmond: Breuner Marsh at Point Pinole Regional Shoreline Park: Implement public access improvements including a staging area and associated bicycle and pedestrian access improvements	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-130050	240731	EB Reg Park Dis	SF Bay Trail, Pinole Shores to Bay Front Park	Pinole: Between Pinole Shores and Bayfront Park, approximately 0.5-mile: Construct a section of the San Francisco Bay Trail. Project is phased	2017 TIP Update - Update the funding plan to reprogram \$4M in CON ATP and \$519K in CON Local funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-150001	21017	WCCTA	WestCAT: Replacement of (10) Paratransit Cut-Aways	WestCat: Paratransit vans: Replace (10) 2008 29ft cutaway style Paratransit Vans with (10) similar style vans	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Contra Costa	CC-150002	21017	WCCTA	WestCAT: Purchase of (10) Radio systems	WestCat: Radio systems: Purchase of (10) Radio systems for (10) Cut Away Van's	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Contra Costa	CC-150003	21017	WCCTA	WestCAT: Purchase of (2) Electronic Fareboxes	WestCat: Fareboxes: Purchase of (2) Fast Fare Electronic Fareboxes	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Contra Costa	CC-150004	21017	WCCTA	WestCAT: Replace (1) 2003 40ft Revenue Vehicle	WestCAT: Replace (1) 2003 40 foot revenue vehicle with similar (1) 40 foot revenue vehicle	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Contra Costa	CC-150005	21017	WCCTA	WestCAT: Replace (1) 40ft Rev. Vehicle with 45ft	WestCat: Replace (1) 2003 40 foot Revenue Vehicle with (1) 45 foot vehicle	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Contra Costa	CC-150006	94558	CCCTA	CCCTA: Replace 18 30' Buses	CCCTA: Replace 18 30' Heavy Duty Diesel buses that have reached the end of their useful life.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Contra Costa	CC-150007	94558	CCCTA	CCCTA: Replace 13 35' Buses	CCCTA: Replace 13 35' Heavy Duty Diesel Buses that have reached the end of their useful life. □	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040

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Contra Costa	CC-150008	94558	CCCTA	CCCTA: Replace 3 Paratransit Vans	CCCTA: Replace 3 paratransit vans that have reached the end of their useful life.	2017 TIP Update - Update the funding plan to reprogram funds from FY16 to FY17	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-150010	21225	CC County	CC County - Rio Vista Elementary Ped Connection	Contra Costa County: On Pacifica Avenue between Mariners Cove Drive and Wharf Drive: Install sidewalks, bike lanes, flashing beacons, speed feedback sign, retaining wall and drainage improvements and	2017 TIP Update - Update the project name and description for consistency	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-150011	21225	Pleasant Hill	Contra Costa Blvd. Improvement (Beth to Harriet)	HSIP5-04-015 In Pleasant Hill: On Contra Costa Blvd between Beth Drive and Harriet Drive: Installation of new sidewalk, bike lanes, traffic signal, landscaping and street lighting.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-150012	94558	CCCTA	REMIX Software Implementation Project	County Connection: Systemwide: Integrate REMIX mapping software into County Connection's planning process.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040
Contra Costa	CC-150014	21017	WCCTA	WestCAT: Replace (1) 1998 40 ft Vehicle	WCCTA: Replace (1) 1998 Revenue Vehicle with (1) 40 ft Revenue Vehicle	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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-150015	21017	WCCTA	WestCAT: Purchase (1) Fast Fare Electronic Farebox	WestCAT: Purchase and Install (1) FastFare Electronic Farebox for (1) 40 ft Revenue Vehicle	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Contra Costa	CC-150016	21225	Richmond	The Yellow Brick Road in Richmond's Iron Triangle	Richmond: Various locations outlined in the the Yellow Brick Road Plan: Implement bike/ped improvements	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Contra Costa	CC-150018	230550	Walnut Creek	Walnut Creek-Parking Guidance System Pilot	Walnut Creek: Downtown core area: Implement Parking Guidance System connected to all public parking in downtown core area.	2017 TIP Update - Update the funding plan to reprogram CON funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Directional and informational signs	2030
Contra Costa	CC-150019	94525	BART	Concord Yard Wheel Truing Facility	BART: Concord Yard: Construct a wheel truing facility which will house a dual-gauge wheel truing machine to service both BART and eBART vehicle wheels.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040
Contra Costa	CC-150020	240735	ECCTA	ECCTA: Non-ADA Paratransit to FR Incentive Program	ECCTA: Systemwide: Use outreach, travel training and fare incentives to move non-ADA paratransit users to FR service	2017 TIP Update - Update the funding plan to reprogram CON from FY16 to FY17	EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Contra Costa	CC-150021	21017	WCCTA	WestCAT - AVL System with APC Element.	Western Contra Costa Transit Authority (WestCAT): Systemwide: Purchase and install a new AVL system including automatic passenger counting (APC)	2017 TIP Update	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Contra Costa	CC-170004	22425	MTC	Regional Planning Activities and PPM - CC County	Contra Costa: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2017 TIP Update - Add a new project to the TIP with \$1.5M in RIP transferred from CC-090035 and \$4.3M in STP and \$563K in Local transferred from REG090038	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Contra Costa	CC-990045	21017	WCCTA	WestCat: ADA Paratransit Operating Subsidy	WestCat: ADA Paratransit Operating Subsidy	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040

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Contra Costa	CC-99T001	94558	CCCTA	CCCTA: ADA Paratransit Assistance	CCCTA: ADA Paratransit Assistance to transit agency.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Marin	MRN010035	94572	GGBHTD	ACIS Radio Communications System	GGBHTD: Replace radio communications system on agency's bus fleet.	2017 TIP Update	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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	MRN050001	21325	TAM	US 101 / Greenbrae Interchange Corridor Impts.	Marin: US 101 Greenbrae I/C Corridor Improvements: Sir Francis Drake To Tamalpais; Reconfigure interchange and close a gap in the non-motorized transportation network	2017 TIP Update - Update the funding plan to reprogram funds between years and phases	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2020
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.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2020
Marin	MRN050019	240748	GGBHTD	Golden Gate Bridge-Suicide Deterrent SafetyBarrier	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	2017 TIP Update	EXEMPT (40 CFR 93.126) - Safer non-Federal-aid system roads	2040
Marin	MRN050025	94572	GGBHTD	GGBHTD: Facilities Rehabilitation	GGBHTD: Rehabilitate agency's maintenance and operating facilities and replace heavy duty operating and maintenance equipment.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN070002	240714	Mill Valley	Mill Valley - Miller Avenue Rehabilitation	HSIP5-04-009 - Mill Valley: Miller Avenue between Sunnyside Ave and Almonte Blvd: Pavement resurfacing, reconstruction of bicycle lanes, modifications to traffic islands, and improvements to sidewalk	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
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	2017 TIP Update - Update the funding plan to reprogram \$3.4M in CON Local funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2020
Marin	MRN090049	240678	Marin County	Non-motorized Transp. Projects - Marin County	Marin County; Various locations; Bicycle & pedestrian improvement projects	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	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	2017 TIP Update - Update the funding plan to reprogram CON funds from FY14 to FY17	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Plantings, landscaping, etc	2040
Marin	MRN110040	240723	MCTD	MCTD Preventive Maintenance	Marin Transit: Systemwide: Bus Transit Preventative maintenance	2017 TIP Update	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/CMAQ funding available through the TPI program to MRN110040	2017 TIP Update	EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2040
Marin	MRN110045	94572	GGBHTD	GGBHTD: Replace 7 - 40' Diesel Buses	GGBHTD: Replace seven (7) 40' Diesel Buses	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Marin	MRN110047	21017	MCTD	MCTD: ADA Paratransit Assistance	MCTD: ADA Paratransit Assistance to transit agency.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Marin	MRN130004	240714	San Rafael	San Rafael Various Streets and Roads Preservation	San Rafael: Point San Pedro Rd from 600' north of Biscayne Dr to Riviera Dr and Del Presidio Blvd from Manual T. Freitas Parkway to Las Gallinas Ave: Resurface roadway	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Marin	MRN130005	240678	San Rafael	San Rafael Transit Center Pedestrian Access Imps.	San Rafael: In the vicinity of the Bettini Transit Center and the future SMART station: Upgrade existing traffic signal equipment to be compliant with rail and improve pedestrian facilities	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Marin	MRN130006	240714	Ross	Bolinas Avenue and Sir Francis Drake Intersection	Ross: On Sir Francis Drake Blvd from Winship Ave through the 100 block and on Bolinas Ave from Sir Francis Drake Blvd to Shady Ln: Rehabilitate pavement and replace the traffic signal	2017 TIP Update - Update the funding plan to reprogram \$36K in CON Local funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Marin	MRN130007	240678	Marin County	North Civic Center Drive Improvements	In San Rafael: On Civic Center Drive from Merrydale Overcrossing/Scettrini Drive to Judge Haley Drive: Construct bike/ped improvements	2017 TIP Update - Retain this project in the TIP as it is ongoing	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
Marin	MRN130009	240724	Fairfax	Parkade Circulation and Safety Improvements	Fairfax: Between Sir Francis Drake Boulevard, Pacheco Avenue, Claus Drive and Broadway: Improve bicycle, pedestrian, transit, and vehicular circulation and safety around and through the Parkade in	2017 TIP Update - Update the funding plan to reprogram \$255K in CON RIP and \$55K in CON Local from FY17 to FY18	EXEMPT (40 CFR 93.127) - Bus terminals and transfer points	2040

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

List of 2017 TIP Projects by Air Quality Status and County

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Marin	MRN130010	240744	Marin County	Donahue Street Road Rehabilitation Project	Marin County: Donahue St from Drake Ave. to Bridge Blvd. and Bridge Blvd. from Donahue St. to Bridgeway: Rehabilitate roadway; Donahue St. at Terners Dr. and at Bridge Blvd: Upgrade traffic signal	2017 TIP Update	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Marin	MRN130011	240714	Novato	DeLong Avenue and Ignacio Boulevard Resurfacing	Novato: At the DeLong Avenue and Ignacio Boulevard interchanges: Reconstruct the bridge deck approaches with appropriate conforms and improved pavement surfaces to improve vehicular, pedestrian	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Marin	MRN130012	240715	Mill Valley	Bayfront Park Recreational Bay Access Pier Rehab	Mill Valley: Bayfront Park: Construct trail connector to Bay Trail and waterfront including a reconstruction of the pier	2017 TIP Update - Update the funding plan to reprogram CON funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN130013	240715	San Anselmo	Sunny Hill Ridge and Red Hill Trails	In San Anselmo: Near Sunny Hill and Red Hill: Construct three miles of hiking trails	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN130014	240715	Marin County	Mill Valley-Sausalito Pathway Preservation	Marin County: Mill Valley-Sausalito multiuse pathway from East Blithedale Avenue to Almonte Boulevard in Mill Valley: Rehabilitate multi-use path	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN130015	94572	GGBHTD	GGBHTD - Transit Systems Enhancements	GGBHTD: Systemwide: systems, technology and communication enhancements to transit fleet and facilities.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Marin	MRN150003	21017	MCTD	MCTD: On Board Vehicle Equipment	MCTD: Farebox: Install fareboxes on 62 paratransit vehicles and Dial-A-Ride vehicles. Replace fareboxes on 18 fixed route vehicles	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing. Update the project name	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Marin	MRN150004	230550	TAM	TAM - Car Share Canal	Marin County: Car Share CANAL is a Pilot Project to Integrate Transit, focused on Environmental Justice, Mobility, Immigration Support and Climate Protection Education. This is a non infrastructure project.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2030
Marin	MRN150005	94572	GGBHTD	MS Sonoma Ferry Boat Refurbishment	GGBHTD: MS Sonoma: Refurbish 38-year old ferry vessel	2017 TIP Update	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Marin	MRN150007	240735	GGBHTD	GGBHTD: On-Board Bus and Ferry Surveys	GGBHTD: Systemwide: Conduct survey of bus and ferry passengers to collect ridership and socioeconomic data, required to support equity analyses for Title VI for fare or major service changes.	2017 TIP Update - Update the funding plan to reprogram \$52K in CON Local funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Marin	MRN150008	240678	San Rafael	Grand Avenue Bicycle Pedestrian Improvements	San Rafael: Grand Ave across the San Rafael Canal: Construct bridge and sidewalk improvements for bicyclists and pedestrians	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Marin	MRN150011	21017	MCTD	MCTD- Replace 2 Shuttle Vehicles	MCTD: Replace two fixed route shuttle buses that are beyond their useful life.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Marin	MRN150012	21017	MCTD	MCTD - Replace 13 -40ft Buses	MCTD: Replace 13 40ft vehicles that are beyond their useful life	2017 TIP Update	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040

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Marin	MRN150013	21017	MCTD	MCTD - Emergency Radio System	MCTD: Replace radio system on fixed route shuttles and rural service to meet emergency radio requirements.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Marin	MRN150014	94572	GGBHTD	GGBHTD Ferry Major Components Rehab	GGBHTD: Systemwide: Ferry Rehab, replace major ferry components such as navigation systems, dry-dock, hull, interior, life saving equipment, propulsion and other ferry components.	2017 TIP Update - Update the funding plan to reprogram all funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Marin	MRN150015	94572	GGBHTD	GGBHTD Ferry Propulsion Systems Replacement	GGBHTD: Systemwide: Ferry propulsion systems: replacement of power distribution systems, propellers, engines, generators, gear boxes, etc. for Golden Gate Ferry vessels.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Marin	MRN150016	240714	Novato	Vineyard Road Improvements	Novato: Vineyard Road from Wilson Avenue to Sutro Avenue: Perform pavement rehabilitation, install bicycle lanes, and property owner-funded frontage improvements	2017 TIP Update	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Marin	MRN170001	22425	MTC	Regional Planning Activities and PPM - Marin	Marin: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2017 TIP Update - Add a new project to the TIP with \$412K in RIP transferred from MRN090020 and \$3.8M in STP and \$495K in Local transferred from REG090038	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	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.	2017 TIP Update	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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
Multi-County	BRT030004	94525	BART	BART Train Control Renovation	BART: Replace obsolete elements and subsystems of the train control system.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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
Multi-County	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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
Multi-County	BRT97100B	94525	BART	BART: Rail, Way and Structures Program	BART: Systemwide; Replace worn out mainline rail and make other timely reinvestments in way.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing right-of-way	2040
Multi-County	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040

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Multi-County	CC-130048	94525	BART	BART Station Modernization Program	All BART Stations: Implement station access improvements, upgrade of lighting, elevator, escalator, stairs, railings, station agent booth, roof, walls, painting, and noise reduction.	2017 TIP Update - Update the funding plan to remove \$6.3M in FY16 TIGER funds	EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Multi-County	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2030
Multi-County	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.	2017 TIP Update - Update the funding plan to reprogram \$1M in CON Local from FY16 to FY17	EXEMPT (40 CFR 93.126) - Directional and informational signs	2040
Multi-County	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Multi-County	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.	2017 TIP Update - Update the funding plan to reprogram \$194M in RTP-LRP from FY19 to FY21	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Multi-County	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.	2017 TIP Update - Update the funding plan to reprogram all funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Multi-County	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	2017 TIP Update	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Multi-County	REG090042	230419	MTC	511 Traveler Information	Regionwide: Provides multimodal, accurate, reliable, and accessible traveler information on multiple dissemination platforms; serves as the go-to source during major disruptions and emergencies; and	2017 TIP Update - Update the mode and submode to add bicycle and freight truck. Update the project description to include assistance during regional emergencies. Update the funding plan to add \$40K	EXEMPT (40 CFR 93.126) - Directional and informational signs	2040
Multi-County	REG090044	230419	MTC	Incident Management Program	Regionwide: Manage congestion by implementing strategies to enhance mobility and safety, and reduce the impacts of traffic incidents, including advanced transportation management technologies and	2017 TIP Update	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
Multi-County	REG090045	240751	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.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Multi-County	REG090046	230419	MTC	Regional Arterial Operations & Signal Timing Prog	Regional: Develop plans to guide arterial investments, and provide project management and traffic engineering/tech assistance (including procuring traffic signal & comm. equipment and	2017 TIP Update - Update the funding plan to add \$1.0M in FY18 CON Local funds	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
Multi-County	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040

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Multi-County	REG090054	21017	WETA	WETA: Ferry Channel & Berth Dredging	WETA: Various service areas: Dredge ferry channel, ferry basin and berth	2017 TIP Update - Retain this project in the TIP for informational purposes as additional federal funds are expected	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing right-of-way	2040
Multi-County	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.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Multi-County	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.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Multi-County	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	2017 TIP Update	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2030
Multi-County	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.	2017 TIP Update	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
Multi-County	REG110010	230550	MTC	Regional Bicycle Sharing Program	Regionwide: various locations: Implement a bikesharing program	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2030
Multi-County	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2030
Multi-County	REG110020	21017	WETA	WETA: Facilities Rehabilitation	WETA: Various Locations: Rehabilitate ferry facilities in order to maintain existing transit services.	2017 TIP Update - Retain this project in the TIP for informational purposes as additional federal funds are expected	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
Multi-County	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.	2017 TIP Update - Update the funding plan to reprogram all funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Multi-County	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2030
Multi-County	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.	2017 TIP Update - Update the funding plan to reprogram all funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040

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Multi-County	REG110039	22423 MTC		GL: 5307 JARC Set-aside FY13-FY14 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 Part 93.126, 127, 128, Exempt Tables 2 & 3.	2017 TIP Update - Update the funding plan to reprogram all funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Multi-County	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,	2017 TIP Update - Update the funding plan to reprogram all funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Multi-County	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.	2017 TIP Update - Update the funding plan to reprogram all funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Multi-County	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.	2017 TIP Update - Update the funding plan to reprogram RTP-LRP funds from FY19 to FY21	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Multi-County	REG130001	21013 MTC		Toll Bridge Maintenance	Region-wide: Seven state-owned toll bridges: routine maintenance of bridge facilities	2017 TIP Update - Update the funding plan to add \$12M in FY19 and FY20 RM1 funds	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Multi-County	REG130002	21013 MTC		Toll Bridge Rehabilitation Program	Bay Area: On 7 state-owned toll bridges: Rehabilitation program	2017 TIP Update - Update the funding plan to add \$263M in RM1 funds	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Multi-County	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.	2017 TIP Update - Update the funding plan to add \$2M in FY17 CON Local funds	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
Multi-County	REG130005	21011 MTC		Transit Oriented Affordable Housing	Bay Area Region: Establish a land acquisition and land banking financing fund to maximize the production of affordable housing near transit stations	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Multi-County	REG150002	21017 Caltrans		GL: FTA 5311 Rural Area FY15	GL: FTA Section 5311 Rural Area Program, Non-ITS portion. Projects include capital and operating assistance. Projects consistent with 40 CFR Part 93.126 Exempt Table 2	2017 TIP Update - Update the funding plan to reprogram all funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Multi-County	REG150003	230716 Caltrans		GL: Elderly&Persons with Disability Prog FY13-FY14	Region-Wide: Elderly & persons with Disabilities. Prog Lump Sum Listing; Project incl. Veh. replacements, minor expansion & office equip. Consist with 40 CFR Part 93.126 Exempt Table 2	2017 TIP Update - Update the funding plan to reprogram all funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Multi-County	REG150004	22423 MTC		GL: Lifeline Cycle 4 5307 JARC	GL: 5307 JARC Set-aside FY13 Small UA and FY14-FY16 Large and Small UA. Various 5307 (former JARC) projects in large and small urbanized areas. Project is consistent with 40 CFR Part 93.126 Exempt	2017 TIP Update - Update the funding plan to reprogram all funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Multi-County	REG150005	21011 BART		Transit-Oriented Development Pilot Planning Progra	Oakland and San Francisco: Develop a comprehensive TOD strategy that fills the remaining gaps in transportation management and development implementation in the Transbay corridor	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040

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Multi-County	REG150006	22481	Caltrain	Caltrain Station Management Toolbox	Caltrain: Systemwide: Develop tools to plan for transit-oriented development and multi-modal access improvements along the corridor. (Other Federal funds are FTA TOD Planning Program funds)	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Multi-County	REG170001	22425	MTC	Regional Planning Activities and PPM - MTC	Regional: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2017 TIP Update - Add a new exempt project to the TIP with \$2M in RIP and \$9.6M in STP and \$1.2M in Local transferred from REG090038	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Multi-County	REG170002	230419	MTC	Transportation Management Systems	Regionwide: Implement a collective approach to freeway operations and management, including field devices that monitor travel conditions and disseminate information; response to freeway incidents; and	2017 TIP Update - Amend a new exempt project into the TIP with \$3.0M in FY17 CON Local funds	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
Multi-County	REG170003	230550	MTC	511 Carpool and Vanpool Programs	Regional: Operate Carpool and Vanpool Programs	2017 TIP Update - Amend a new exempt project into the TIP with \$2.9M in FY19 CON Local funds and \$16.4M in FY21 RTP-LRP funds	EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2030
Multi-County	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.	2017 TIP Update - Update the funding plan to remove \$11.4M in FY17 CON 5337 and \$2.85M in FY17 CON Local funds	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing right-of-way	2040
Multi-County	SM-050041	22481	Caltrain	Caltrain: Signal/Communication Rehab. & Upgrades	Caltrain: Systemwide: Rehabilitate existing signal system and upgrade/replace communication equipment.	2017 TIP Update - Update the funding plan to remove \$1.2M in FY17 5337 and \$300K in FY17 Local funds and retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Multi-County	VAR130002	22423	MTC	GL: JARC FY12 Small UA & Rural	GL: JARC 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.	2017 TIP Update - Update the funding plan to reprogram all funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Multi-County	VAR130003	230716	MTC	GL: New Freedom FY12 Small UA & Rural	Regional: Various Cycle 7 (FY12) New Freedom projects in small urbanized and rural areas.	2017 TIP Update - Update the funding plan to reprogram all funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Multi-County	VAR130005	230716	MTC	GL: New Freedom FY12 Large UA	GL: New Freedom FY2012 Large UA. Various Cycle 5 (FY12) New Freedom projects in large urbanized areas	2017 TIP Update - Update the funding plan to reprogram all funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Multi-County	VAR150001	21017	MTC	GL: FTA 5311 Rural Area FY16	GL: FTA Section 5311 Rural Area Program, Non-ITS portion. Projects include capital and operating assistance. Projects consistent with 40 CFR Part 93.126 Exempt Table 2	2017 TIP Update - Update the funding plan to reprogram funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Multi-County	VAR150002	240727	Caltrans	GL: Pavement Resurf and/or Rehab-Fed Discretionary	Regionwide: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Pavement resurfacing and/or rehabilitation	2017 TIP Update	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Multi-County	VAR150003	240727	Caltrans	GL: Bike and Ped Facilities - Fed Discretionary	Regionwide: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Bicycle and pedestrian facilities (both motorized and Non-motorized)	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Multi-County	VAR170001	240747	Caltrans	GL: Safety Improvements - SRTS	GL: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories - Shoulder imprvmts, increasing sight dist, traffic control devices, signals, Pavement marking, Lighting	2017 TIP Update - Add a new grouped listing of projects into the TIP	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Multi-County	VAR170002	240746	Caltrans	GL: Highway Safety Improvement Program	GL: Safety Imprv - Highway Safety Improvement Program. Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories.	2017 TIP Update - Split this grouped listing out from VAR110007. Funds programmed in FY17 and later will be reflected in this listing. Prior year funding will be included in	EXEMPT (40 CFR 93.126) - Highway Safety Improvement Program implementation	2040
Multi-County	VAR170004	240745	Caltrans	GL: Pavement Resurfacing/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	2017 TIP Update - Add a new grouped listing to the TIP with \$15.9M in Highway Maintenance funds	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Multi-County	VAR170005	240745	Caltrans	GL: Safety Improvements - SHOPP Mobility Program	Regionwide: Various Locations: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories	2017 TIP Update - Add new grouped listing funded with \$66,965 in SHOPP funding. Prior year funding for this program is programmed under VAR110001	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
Multi-County	VAR170006	240745	Caltrans	GL: Pavement Resurf./Rehab - SHOPP Roadway Presv.	Regionwide: Various Locations: Projects consistent with 40CFR93.126 Exempt Tables 2 categories - Pavement resurfacing and/or rehabilitation, Emergency relief (23 U.S.C. 125), Widening narrow	2017 TIP Update - Add new grouped listing funded with \$509.9M in SHOPP funding. Prior year funding for this program is programmed under VAR110003	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Multi-County	VAR170007	240745	Caltrans	GL: Safety Imprv. - SHOPP Collision Reduction	Regionwide: Various Locations: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories	2017 TIP Update - Add new grouped listing funded with \$342.0M in SHOPP funding. Prior year funding for this program is programmed under VAR110004	EXEMPT (40 CFR 93.126) - Guardrails, median barriers, crash cushions	2040
Multi-County	VAR170008	240745	Caltrans	GL: Emergency Repair - SHOPP Emergency Response	Regionwide: Various Locations: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories	2017 TIP Update - Add new grouped listing funded with \$120.1M in SHOPP funding. Prior year funding for this program is programmed under VAR110005	EXEMPT (40 CFR 93.126) - Repair of damage caused by natural disasters, civil unrest, or terrorist acts, except projects involving substantial functional, locational or capacity changes	2040
Multi-County	VAR170009	240745	Caltrans	GL: Safety Improvements - SHOPP Mandates	Regionwide: Various Locations: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 and Table 3 categories	2017 TIP Update - Add new grouped listing funded with \$49.9M in SHOPP funding. Prior year funding for this program is programmed under VAR110042	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Multi-County	VAR170010	240745	Caltrans	GL: Bridge Rehab and Reconstruction - SHOPP	Regionwide: Various Locations: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Widening narrow pavements or reconstructing bridges (no additional travel lanes).	2017 TIP Update - Add new grouped listing funded with \$276.1M in SHOPP funding. Prior year funding for this program is programmed under VAR110044	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Multi-County	VAR170011	240745	Caltrans	GL: Shoulder Imprv - SHOPP Roadside Preservation	Regionwide: Various Locations: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories - Fencing,Safety roadside rest areas	2017 TIP Update - Add new grouped listing funded with \$5.6M in SHOPP funding. Prior year funding for this program is programmed under VAR130001	EXEMPT (40 CFR 93.126) - Plantings, landscaping, etc	2040
Multi-County	VAR170012	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.	2017 TIP Update - Add a new grouped listing to the TIP along with \$372M in HBP funds. Prior year funding programmed in VAR110045	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2040
Napa	NAP030004	21017	NVTA	NVTA: ADA Operating Assistance	Napa: ADA operating assistance for paratransit service	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Napa	NAP030005	21017	NVTA	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Construction of small passenger shelters and information kiosks	2040

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Napa	NAP090003	94073	NVTA	SR 12/29/221 Soscol Junction Interchange Study	In Napa County, study alternatives to construct new southbound Route 221 to southbound Route 29 flyover (including auxiliary lane to Route 12/Route 29). TIP project is for ENV and PSE only.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Napa	NAP090005	21017	NVTA	NVTA: Replace Rolling Stock	NVTA: Replace rolling stock for fixed-route, paratransit, and community shuttle fleet.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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	NAP090008	21017	NVTA	NVTA Equipment Replacement and Upgrades	NVTA: Napa Vine service area: Replacement and upgrades to transit equipment	2017 TIP Update	EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040
Napa	NAP110014	240612	NVTA	Napa Valley Vine Trail Design and Construction	Napa County: Various locations: Design and construction of individual segments of Vine Trail.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Napa	NAP110023	230695	Napa County	Silverado Trail Phase H Rehab	County of Napa: On Silverado Trail from Howell Mtn to Zinfandel (Phase H); rehabilitate roadway retaining existing Class II bicycle lanes	2017 TIP Update	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Napa	NAP110026	240748	Napa County	Hardin Rd Bridge Replacement - 21C0058	Napa County: On Harding Rd at Maxwell Creek, 1.6M SE of Pope Cyn Rd: Replace existing one lane bridge with new 2-lane bridge to meet standards	2017 TIP Update	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Napa	NAP110027	240748	Napa County	Loma Vista Dr Bridge Replacement - 21C0080	Napa County: Loma Vista Dr over Soda Creek, 1.4 miles north of Silverado Trail: replace existing one lane bridge with new two lane bridge to meet standards	2017 TIP Update - Update the funding plan to reprogram \$3M in CON HBP from FY19 to FY21	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Napa	NAP110028	22746	Napa	California Boulevard Roundabouts	City of Napa: At at First Street/ California Blvd. and Second Street/ California Blvd: Construct roundabouts Caltrans: Construct roundabout at Northbound off-ramp of SR 29 and First Street	2017 TIP Update	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2020
Napa	NAP130003	230695	Napa County	Airport Boulevard Rehabilitation	In Napa County: On Airport Boulevard between SR 29 and Napa County Airport: Rehabilitate roadway and retrofit curb ramps at 3 intersections, retaining existing Class II bicycle lanes.	2017 TIP Update - Update the funding plan to reprogram all funds to FY22 and retain in the TIP for informational purposes	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Napa	NAP130004	240083	Napa	Highway 29/Napa Creek Bicycle Path Upgrade	Napa: On the North side of Napa Creek under Highway 29: Construct a Class 1 bicycle and pedestrian path	2017 TIP Update - Update the funding plan to reprogram ROW and CON funds from FY19 to FY21	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2020
Napa	NAP130007	230381	Caltrans	Hwy 29 Grayson Ave. Signal Construction	In St. Helena: At the intersection of Hwy 29 and Grayson Ave: Install three way signal with ADA ramp upgrades	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing. Update the implementing agency to Caltrans	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2020
Napa	NAP130008	240612	Yountville	Hopper Creek Pedestrian Bridge and Path Project	Yountville: Along Hopper Creek from Oak Circle Open Space to Mission St: Construct multi-use pathway and a pedestrian bridge across Hopper Creek	2017 TIP Update - Update the funding plan to reprogram \$100K in PSE RIP funds from FY17 to FY19 and \$400K in CON RIP funds from FY19 to FY20	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Napa	NAP130009	230695	Napa County	Silverado Trail Phase G Rehab	County of Napa: On Silverado Trail from Calistoga to Larkmead (Phase G); rehabilitate roadway retaining existing Class II bicycle lanes	2017 TIP Update - Update the funding plan to reprogram CON from FY17 to FY16 to reflect obligation	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Napa	NAP130010	230695	Napa County	Silverado Trail Yountville-Napa Safety Improvement	In Napa County: On Silverado Trail at Yountville Crossroad: Construct intersection safety improvements; On Silverado Trail between Yountville and Napa: Install rumble strips	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040

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Napa	NAP150001	230518	Calistoga	SR 128 and Petrified Forest Intersection Imp	In Calistoga: On SR 128 and Petrified Forest Road, convert 4-way stop controlled intersection to a traffic signal.	2017 TIP Update - Update the funding plan to reprogram PSE to FY17, ROW to FY18 and CON to FY19	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2020
Napa	NAP150002	240748	Napa County	Garnett Bridge Greenwood Ave	In Napa County: On Greenwood Avenue between Myrtledale Road and SR 29 over Garnett Creek; replace one lane bridge damaged in earthquake with a two lane bridge	2017 TIP Update	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Napa	NAP150003	240612	NVTA	Napa Valley Vine Trail Calistoga-St. Helena Seg.	In Napa County: From Calistoga to St. Helena: Construct multi-use trail	2017 TIP Update - Update the funding plan to reprogram \$48K in ENV ATP, \$480K in PSE ATP and \$40K in ROW ATP to FY19 CON and change the sponsor and implementing agency to NVTA	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Napa	NAP170001	22425	MTC	Regional Planning Activities and PPM - Napa	Napa: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2017 TIP Update - Add a new project to the TIP with \$275K in RIP transferred from NAP090002 and \$3.8M in STP and \$495K in Local transferred from REG090038	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Napa	NAP970010	21017	NVTA	Napa Vine Operating Assistance	Napa Vine: Operating assistance to support transit routes and services.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
San Francisco	SF-030013	94636	SFMTA	SFMTA: Wayside Fare Collection Equipment	Muni: Replacement of life-expired fare collection equipment.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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: Powell Street Station: Provide a direct connection between BART & MUNI.	2017 TIP Update - Update the description to change scope to Powell Street Station and update the funding plan to reprogram CON from FY15 to FY17	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing right-of-way	2040
San Francisco	SF-050034	94636	SFMTA	Light Rail Vehicle Overhaul Program	Muni: Systematic overhaul of all light rail vehicles components in agency fleet.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	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	2017 TIP Update - Update the mode and submode. Update the funding plan to reprogram \$1.0M in CON Local from FY16 to FY17 and \$3.5M in CON RTP-LRP funds from FY19 to FY21	EXEMPT (40 CFR 93.126) - Directional and informational signs	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.	2017 TIP Update - Update the funding plan to reprogram \$47M in CON HBP and \$6.1M in CON LBSRA from FY19 to FY21 to match the latest information from Caltrans	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.	2017 TIP Update	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.	2017 TIP Update - Update the funding plan to add \$2.0M in FY17 CON Local funds	EXEMPT (40 CFR 93.128) - Traffic signal synchronization projects	2030

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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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
San Francisco	SF-090011	240557	SF County TA	Oakdale Caltrain Station	San Francisco: Oakdale near Palou: Planning, preliminary engineering, and environmental work for a new Caltrain station and transit service adjustments to serve station.	2017 TIP Update - Update the funding plan to remove \$4.4M in Local Sales Tax funds from various years and phases. Reprogram \$50K in PE Local Sales Tax funds from FY12 to FY06 and \$750K in PE Local	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2020
San Francisco	SF-090031	94636	SFMTA	SF Muni - Preventive Maintenance	SF Muni - Preventive Maintenance	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro 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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
San Francisco	SF-110005	240490	SF DPW	Great Highway Restoration	San Francisco: Great Highway: From Sloat to Skyline Hwy: Ph 1. Restore and stabilize roadway, stop bluff slides, and protect infrastructure. Phase 2. Implement road diet by closing remaining SB lane and	2017 TIP Update - Update the Delivery Milestones section to account for delay in pre-construction schedule	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 wil 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	2017 TIP Update - Update the funding plan to reprogram and change the funding source of \$500K in FY11 PSE Sales Tax and \$1.5M in FY11 CON Sales Tax to FY16 CON Local funds and add \$9.0M	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.	2017 TIP Update - Update the funding plan to add \$10K in FY17 CON Local funds	EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2040
San Francisco	SF-110037	240681	SFMTA	Linked Priced Electric Bikesharing	In San Francisco and select Bay Area cities: Apply ITS technology and differential pricing with the colocation of shared electric bicycles within City CarShare's existing systems	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Directional and informational signs	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
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.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040

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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	2017 TIP Update - Update the funding plan to reprogram \$2.0M in Local from FY15 CON to FY17 PE	EXEMPT (40 CFR 93.126) - Planning and technical studies	2020
San Francisco	SF-130010	240546	SF County TA	Construct Treasure Island Bus Terminal Facility	San Francisco: Treasure Island: Construct Treasure Island Bus Terminal Facility	2017 TIP Update - Update the funding plan to reprogram \$2.0M in CON Private Joint Development from FY16 to FY18 and \$590K in ROW Local funds from FY15 to FY17	EXEMPT (40 CFR 93.127) - Bus terminals and transfer points	2020
San Francisco	SF-130014	240486	SF DPW	SF- Broadway Chinatown Complete Streets	In San Francisco: On Broadway between Columbus and the Broadway Tunnel; Design and construct a complete street project.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-130018	240747	SFDPH	SF SRTS Non-Infrastructure Program	In San Francisco: Countywide: Expansion of the existing San Francisco SRTS education and outreach program.	2017 TIP Update - Update the funding plan to remove \$360K in FY17 CON CMAQ	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
San Francisco	SF-130020	240309	SFMTA	SFMTA: Purchase 60 foot expansion motor coaches	SFMTA: Purchase 35 60 foot expansion motor coaches	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2030
San Francisco	SF-130022	240731	SFMTA	Twin Peaks Connectivity Planning	San Francisco: on Twin Peaks: Develop a conceptual design that will improve access for people who walk or bicycle on Twin Peaks.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Francisco	SF-150001	240747	SF DPW	John Yehall Chin Safe Routes to School	In San Francisco: 4 intersections near 350 Broadway Street: Construct curb extensions and a raised crosswalk. □	2017 TIP Update - Update the description to reflect reduction in scope. Update the funding plan to remove \$156K in FY16 PSE ATP. Change the CON funding source from RTP-LRP to Local, remove \$184K	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-150002	240493	SFMTA	San Francisco Safer Streets Campaign	San Francisco: Citywide: Provide high-visibility enforcement and education to reduce injuries and fatalities, caused by vehicles speeding, to people who walk and bicycle, and increase the number of people	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
San Francisco	SF-150003	240747	SFDPH	San Francisco Safe Routes to School (ATP)	San Francisco: Citywide: Implement effective policy, education, enforcement and outreach strategies to increase walking, biking, transit, and carpooling for ALL students in school years 2015-17.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
San Francisco	SF-150004	240488	SFMTA	SFMTA Station-Area Ped and Bicycle Access Imp.	San Francisco: Citywide within fixed guideway station area radii (per FTA eligibility): Improvements to pedestrian and bicycle access to the transportation stop/station.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-150005	94636	SFMTA	SFMTA - Replacement of 40' Motor Coaches	SFMTA: 40' Neoplan Buses: Replace 40' Neoplan Buses originally in service in 2002 with (85) 40'hybrid buses.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
San Francisco	SF-150006	94636	SFMTA	SFMTA Replacement of 60' Motor Coaches	SFMTA: 60' Neoplan Buses: Replace 98 60' Neoplan Buses diesel buses originally in service in 2002 with 98 60' hybrid buses.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040

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List of 2017 TIP Projects by Air Quality Status and County

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San Francisco	SF-150007	94636	SFMTA	SFMTA Farebox Replacement	SFMTA: Systemwide: Refurbish or purchase existing fareboxes and necessary support equipment to improve reliability, functionality, and the overall customer experience.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
San Francisco	SF-150009	240488	SFMTA	San Francisco Citywide Bicycle Wayfinding	San Francisco: Citywide: Implement an effective bicycle wayfinding signage system throughout San Francisco. This system will increase ridership by improving both the comfort of riding and the ability to	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-150011	240486	SFMTA	San Francisco Vision Zero Safety Investment	San Francisco: along the Van Ness Corridor: Implement pedestrian and safety improvements including pedestrian bulbouts, pedestrian scale lighting, pedestrian countdown signals, ADA curb ramps, and	2017 TIP Update - Update the funding plan to reprogram funds from FY16 to FY17 and update the project description to specify location	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Francisco	SF-150012	240681	SF County TA	San Francisco Travel Smart Rewards Pilot Program	In San Francisco: Undertake a pilot program to mitigate congestion on BART by incentivizing riders to shift travel times	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
San Francisco	SF-150013	240543	SF County TA	SB I-280 Off-Ramp at Ocean Ave Realignment	San Francisco: I-280/Ocean Avenue Interchange: Realign the southbound I-280 off-ramp to Ocean Avenue into a T intersection with a new signal on Ocean Avenue	2017 TIP Update - Update the funding plan to reprogram \$500K in PSE Local from FY16 to FY17, \$1.5M in CON Local from FY17 to FY18, and \$2.9M in CON RTP-LRP from FY19 to FY21	EXEMPT (40 CFR 93.127) - Interchange reconfiguration projects	2040
San Francisco	SF-150014	94636	SFMTA	SFMTA 30' Motor Coach Mid-Life Overhaul	SFMTA: Approximately 86 hybrid coaches: Perform midlife overhauls	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
San Francisco	SF-150015	94636	SFMTA	SFMTA: Replacement of 40' Trolley Coaches	SFMTA: Replace approximately 21 40' ETI electric trolley buses originally in service in 2002 with 21 40' electric trolley buses.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
San Francisco	SF-150016	240543	SF DPW	Lombard Street Vision Zero Project	In San Francisco: On Lombard/US-101 between Broderick St and Franklin St; Install curb extensions and other pedestrian safety and transit features. Project is phased.	2017 TIP Update - Update the funding plan to change the source for \$366K from Sales Tax to Local, and add \$3.7M in FY16 PSE Local, \$653K in FY17 CON ATP, and \$767K in FY17 CON Local funds	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
San Francisco	SF-150017	240747	SFDPH	SF Safe Routes to School 2017-2019	San Francisco: Citywide: Implement a pilot proposal that includes innovative educational, encouragement, and evaluation activities and deliverables to increase safe walking and biking by schoolchildren	2017 TIP Update - Update funding plan to remove \$386K in FY17 CON ATP funds	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
San Francisco	SF-170002	22425	MTC	Regional Planning Activities and PPM - SF County	San Francisco: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2017 TIP Update - Add a new exempt project to the TIP with \$1.1M in RIP transferred from SF-090030 and \$4M in STP and \$518K in Local transferred from REG090038	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing right-of-way	2040
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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040

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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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing. Update the funding plan to add \$2.0M in FY16 CON Local funds	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing right-of-way	2040
San Mateo	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	2017 TIP Update - Update the fundign plan to reprogram all RTP-LRP to FY21	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2030
San Mateo	SM-010002	21893	Half Moon Bay	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.	2017 TIP Update - Update the sponsor to Half Moon Bay. Update the funding plan to reprogram \$600K in PE Local Sales Tax from FY14 to FY17 and \$4.7M in CON RTP-LRP funds from FY19 to FY21	EXEMPT (40 CFR 93.126) - Shoulder improvements	2040
San Mateo	SM-010047	21606	Menlo Park	US 101 / Willow Road Interchange Reconstruction	Menlo Park: US 101 at Willow Road Interchange; Reconstruct and reconfigure interchange (No additional travel lanes).	2017 TIP Update - Update the project sponsor to Menlo Park and update the funding plan to reprogram \$4.32M in FY18 RIP from CON to CON-CE, change the source for \$5.8M in FY18 CON funds from RIP	EXEMPT (40 CFR 93.127) - Changes in vertical and horizontal alignment	2030
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	2017 TIP Update - Update the funding plan to reprogram RTP-LRP from FY19 to FY21	EXEMPT (40 CFR 93.126) - Railroad/highway crossing	2040
San Mateo	SM-030023	94666	SamTrans	SAMTRANS: Preventive Maintenance	SamTrans: Preventative maintenance program for agency fleet.	2017 TIP Update - Update the funding plan to remove \$352K in FY17 CON STP and \$46K in FY17 CON Local funds	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
San Mateo	SM-050005	94525	BART	BART: Preventive Maintenance	BART: Systemwide; Preventive Maintenance	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
San Mateo	SM-050051	240590	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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-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.	2017 TIP Update - Update the funding plan to reprogram \$912K in PE Earmark from FY16 to FY17, \$150K in PE Local from FY16 to FY17, \$2.0M in CON RTP-LRP from FY19 to FY21 and remove \$9.4M in	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.	2017 TIP Update - Update the funding plan to reprogram \$3.5M in CON RIP from FY18 to FY19, \$300K in ENV RIP and \$500K in PSE RIP from FY17 to FY18	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2040
San Mateo	SM-070004	240086	East Palo Alto	Bay Rd Bicycle/Ped Improvements Phase II & III	E. Palo Alto: On Bay Rd btw Clarke/Illinois & Tara Rd (Ph II) & btw Tara Rd & Bay Trail (Ph. III);Improvements including resurface, streetscape, bike lanes, & other improvements.HPP #706 (remainder)	2017 TIP Update - Update the funding plan to reprogram PSE, ROW, and CON to FY17	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
San Mateo	SM-070006	21607	East Palo Alto	US 101 University Ave Interchange Improvements	E. Palo Alto: On University Ave across US 101 btw Woodland Ave and Donahoe St; Construct Bike Lane, modify NB and SB off-ramps and intersections with overcrossing with no new lanes for off-ramps. HPP	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2020
San Mateo	SM-070029	21612	CCAG	Dumbarton Bridge to US101 Connection Study	East Palo Alto: Dumbarton Bridge at US 101; Study of various connections between the Dumbarton Bridge and Highway 101. SAFETEA Earmark HPP #3062 (\$400K)	2017 TIP Update	EXEMPT (40 CFR 93.126) - Planning and technical studies	2030
San Mateo	SM-070049	94666	SamTrans	Facility/Equipment Rehabilitation/Replacement	SAMTRANS: Operating/maintenance facility/equip rehabilitation/replacement, including the provision of facility improvements for admin, maintenance, and operations at the Central Administrative facility,	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
San Mateo	SM-110012	240086	San Bruno	San Bruno Transit Corridor Pedestrian 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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2030
San Mateo	SM-110047	21613	San Mateo	SR92/El Camino Real (SR82) Ramp Modifications	San Mateo: At the SR92/El Camino Real (SR82) interchange: Modify existing on/off rampsto improve the ingress and egress of the interchange.	2017 TIP Update - Update the funding plan to reprogram \$16.0M in CON Local Sales Tax from FY19 to FY17, \$2M in CON RIP from FY17 to FY18 and \$3M in RIP from FY17 CON and FY18 CON-CE	EXEMPT (40 CFR 93.127) - Interchange reconfiguration projects	2030
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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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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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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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 pedestrian facilities.	2017 TIP Update	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
San Mateo	SM-110067	21011	CCAG	Local PDA Planning - San Mateo	San Mateo County Various Agencies: Planning assistance to local jurisdictions to support transportation investments and improve their performance in Priority Development Areas (PDAs), focused on	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Mateo	SM-110068	94666	SamTrans	SAMTRANS: Replacement of Articulated Bus Fleet	SAMTRANS: 60' articulated buses: Replace up to 55 2002 60' NABI diesel articulated buses that have exceeded their useful life.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
San Mateo	SM-130002	230697	Redwood City	Redwood City Various Streets Overlay	Redwood City: On Whipple Ave from Upland Rd to El Camino Real, Whipple Ave from US101 to Veterans Blvd, and Veterans Blvd from US101 to Whipple Ave: Rehabilitate the roadway, add new striping, and	2017 TIP Update - Retain this project in the TIP for informational purposes as it is in construction	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
San Mateo	SM-130003	230430	SSF	SSF Citywide Sidewalk Gap Closure Project	South San Francisco: Various Streets: closes gaps in the existing pedestrian infrastructure	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130004	230697	San Mateo	Mount Diablo Ave. Rehabilitation	In the City of San Mateo: Monte Diablo Avenue from N Quebec St to N Kingston St.: Rehabilitation of local streets and roads and addition of ADA compliant curb ramps, bicycle improvements and pedestrian	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
San Mateo	SM-130008	230430	Menlo Park	Menlo Park-Variou Streets Bike /Ped Improvements	Menlo Park: Various locations: Implement bicycle and pedestrian safety improvements	2017 TIP Update - Retain this project in the TIP for informational purposes as project is in construction	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130009	230697	Millbrae	Millbrae Various Streets and Roads Preservation	Millbrae: Various Locations: Rehabilitate and replace pavement and miscellaneous concrete improvements including installing wheel chair curb ramps.	2017 TIP Update - Update the funding plan to reprogram CON from FY17 to FY16 to match obligation	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
San Mateo	SM-130011	240086	Daly City	John Daly Boulevard Bicycle /Ped Improvements	Daly City: On John Daly Blvd between Top of the Hill - Mission Street transit hub and the Daly City BART Station at Delong Street and Los Banos Ave: Implement bike/ped improvements	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130012	240086	San Carlos	San Carlos Streetscape and Ped Improvments	San Carlos: Around the intersection of El Camino Real and Arroyo Ave: Grand Boulevard Initiatives (GBI), implement bike/ped improvements and bus pad and add pedestrian activation to a mid-block signal	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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San Mateo	SM-130013	240086	SSF	SSF Grand Blvd Project: Chestnut to Arroyo	South San Francisco: El Camino Real between Chestnut Ave/Westborough Blvd to Arroyo Ave: Design and construct improved pedestrian crossings with corner bulbouts, median refuges, expanded bus stop	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130015	230430	San Mateo Co	Semicircular Rd Bicycle / Ped Access Improvements	San Mateo County: On Semicircular Road between Middlefield Road and 5th Avenue; Replace existing sidewalk with ADA compliant sidewalk and install sharrows and school crossing signs; four nearby	2017 TIP Update - Retain this project in the TIP for informational purposes as contract is not yet closed	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130016	240086	Pacifica	Palmetto Avenue Streetscape	In Pacifica: Palmetto Avenue from Bella Vista Avenue to Clarendon Road: Pavement rehabilitation and pedestrian sidewalk improvements.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130017	240086	Belmont	Ralston Avenue Pedestrian Route Improvements	Belmont: Ralston Ave. between South Rd. and Chula Vista Ave. (near Notre Dame de Namur University): Install pedestrian improvements	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130018	230430	Belmont	Old County Road Bicycle/Pedestrian Improvements	Belmont: Old County Road from Ralston Ave to the Belmont/San Carlos City Limits: Implement bike and pedestrian route improvements	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130019	240086	San Bruno	San Bruno Ave Street Medians Improvements	San Bruno: San Bruno Ave from Elm Ave to I-280: Implement pedestrian improvement including curb ramps, speed radar display signs, demolish existing landscape and replace and replace existing spray	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130020	21624	San Mateo	San Mateo Citywide Crosswalk Improvements	City of San Mateo: Various locations citywide: Install new high visibility crosswalks or upgrade existing crosswalks	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130022	230430	Redwood City	Middlefield Road Bicycle / Ped Improvements	In Redwood City: on Middlefield Road between Main Street and MacArthur Avenue; Modify roadway and utilities as needed to widen sidewalks and improve bike and pedestrian amenities. No vehicle travel	2017 TIP Update - Update the funding plan to reprogram and change the funding source of \$2.4M in CON from FY19 RTP-LRP to FY17 Local funds	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130023	22274	Menlo Park	Menlo Park - Willow Rd Traffic Signal Modification	In Menlo Park: On Willow Road between Middlefield Road and Hamilton Avenue, modification of 9 traffic signals.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.128) - Traffic signal synchronization projects	2040
San Mateo	SM-130025	94666	SamTrans	SamTrans Service Plan (SSP)	SamTrans: System-wide: Offset a reduction in price for the Day Pass by \$1.00 and install new signage for new and modified bus routes	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
San Mateo	SM-130026	22481	Caltrain	Caltrain Control Point Installation	Caltrain mainline: In San Carlos: Install a new control point (rail crossover)	2017 TIP Update-Update the funding plan to reprogram \$1.5M in STP and \$190K in Local from FY17 to FY16 and \$1M in PE from FY17 to FY14, change source and year for \$945K from FY17 STP to FY21	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing right-of-way	2040
San Mateo	SM-130027	22481	Caltrain	Caltrain Off-peak Marketing Campaign	Caltrain: Systemwide: Undertake a marketing campaign targeting off-peak ridership	2017 TIP Update - Update the funding plan to reprogram \$6K in CON Local from FY17 to FY14	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Mateo	SM-130028	230430	East Palo Alto	US-101 Pedestrian/Bicycle Overcrossing	East Palo Alto: Between Clarke Avenue and Newell Road: Install a Pedestrian/Bicycle Overcrossing of US-101 to connect the west-side with the east-side of East Palo Alto for safe pedestrian/bicycle access.	2017 TIP Update - Update the funding plan to reprogram \$8.6M in CON ATP funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130029	94525	BART	Daly City BART Station Intermodal Improvements	Daly City: At Daly City BART Station: Improve transit operations; pedestrian & bicycle access; and safety & patron experience	2017 TIP Update	EXEMPT (40 CFR 93.127) - Bus terminals and transfer points	2040

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San Mateo	SM-130030	240590	SSF	SSF Grand Blvd Project: Kaiser Way to McLellan	South San Francisco: Along El Camino Real between Kaiser Way and McLellan Drive: Implement bike and pedestrian enhancements, street trees, rain gardens and median landscaping as well as	2017 TIP Update - Update the project name to specify location	EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
San Mateo	SM-130031	240731	SF City/County	Southern Skyline Blvd. Ridge Trail Extension	San Mateo County: On the east side of SR-35 "Upper Skyline Blvd" between the intersection of Hwy 92 and Hwy 35 southward approximately 6 miles to the SFPUC Peninsula Watershed: Construct Southern	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-130032	230430	San Mateo Co	Midcoast Multi-Modal Trail	San Mateo County: On Highway 1 from Alto Avenue in Miramar to Coronado Street in El Granada: Construct 3,750 feet of multi-use trail	2017 TIP Update - Update the funding plan to reprogram \$565 in PE Local from FY15 to FY19 and \$6.0M in CON RTP-LRP from FY19 to FY21	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-150001	21011	Millbrae	Millbrae Priority Development Area Specific Plan	Millbrae: PDAs Citywide: Update the current Millbrae Transit Station Area PDA and expand PDA to also include El Camino Real Corridor.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Mateo	SM-150002	230430	San Mateo	City of San Mateo SR2S Program	City of San Mateo: Within a 0.1 to 0.5 mile radius around each of the 15 elementary and middle schools in the City: Develop and Implement a Safe Routes to School Program	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-150003	21011	Redwood City	Redwood City Dwntrn Transit Area Impvmts-Streetcar	In Redwood City: Downtown: Planning study of Sequoia Station and streetcar feasibility	2017 TIP Update - Retain this project in the TIP for informational purposes as project is in construction	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Mateo	SM-150004	21011	Belmont	Belmont Village Specific/Implementation Plan	Belmont: Belmont Village PDA: Development of an Implementation Plan	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Mateo	SM-150005	94666	SamTrans	SAMTRANS: Replacement of 2003 Gillig Buses	SAMTRANS: 40' Gillig buses: Replacement of 60 2003 40' Gillig Buses that have reached the end of their useful life.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
San Mateo	SM-150006	230550	San Mateo	City of San Mateo Car Sharing Program	City of San Mateo: Citywide: Expansion of car sharing services in the City of San Mateo	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Continuation of ride-sharing and van-pooling promotion activities at current levels	2030
San Mateo	SM-150007	22481	Caltrain	Map Based Real-Time Train Display for Caltrain.com	Caltrain: Provide map based real-time displays for customers on caltrain.com, and provide open-data for third-party developers.	2017 TIP Update - Update the funding plan to reprogram CON from FY17 to FY16 to reflect FTA transfer	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
San Mateo	SM-150008	94666	SamTrans	SamTrans - Replacement of Non-Rev Vehicles	SamTrans: Non-revenue vehicles: Replace (15) non-revenue service support vehicles	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of support vehicles	2040
San Mateo	SM-150009	230430	San Carlos	US 101 Holly Pedestrian/Bicycle Overcrossing	San Carlos: At the US-101/Holly St Interchange: Construct a grade-separated multipurpose path that will connect pedestrian and bicyclist on the west side of Highway 101 to the east side of Highway 101	2017 TIP Update - Update the funding plan to add \$1.35M in CON RTP-LRP	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-150010	94666	SamTrans	SamTrans - Replacement of Cutaway Buses	SamTrans: Readi-Wheels Paratransit service: Purchase replacement cutaway buses	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040

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County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
San Mateo	SM-150011	94666	SamTrans	SamTrans - Purchase of Replacement Minivans	SamTrans: Purchase ten new replacement minivans used for ADA Paratransit service	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
San Mateo	SM-150012	230430	Daly City	Daly City Central Corridor Bike/Ped Safety Imprmnt	In Daly City: On Junipero Serra Blvd and Eastmoor Ave/San Pedro Rd/E Market St/Guad Cyn Pkwy: Install bike and ped improvements; In Daly City/Uninc San Mateo County: On west side of Mission St/EI	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-150013	240084	San Mateo Co	RWC 2020 Sustainable Transportation Encouragement	San Mateo County: In and around Redwood City: Safe Routes to School walk and bike audits, encouragement and education programs and community-wide transportation mode share change evaluation.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
San Mateo	SM-150014	240084	San Mateo County	Safe Routes to School for Health and Wellness	San Mateo County: Countywide: Implement a non-infrastructure educational program to increase the number of children who bike and walk to school with a focus on long term sustainability. Other State	2017 TIP Update - Update the funding plan to reprogram \$900K in FY16 CON ATP, \$120K in FY15 CON Other State, and \$25K in FY15 CON Local funds to FY17	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
San Mateo	SM-150015	230430	SSF	SSF Linden/Spruce Ave Traffic Calming Improvements	In South San Francisco: On Linden Avenue from California Ave to Miller Avenue and on Spruce Ave from Maple Ave to Lux Ave: install pedestrian/bicycling safety improvements including a class 3 bikeway.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
San Mateo	SM-150016	230550	San Mateo	San Mateo Downtown Parking Tech Implementation	In San Mateo: Various Locations Downtown: Replace existing parking meters, and pay stations and install parking availability signs at City facilities.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Directional and informational signs	2030
San Mateo	SM-170001	240114	San Mateo Co	Hwy 1 Congestion throughput and safety improvement	In San Mateo County along 7 miles of Highway 1 between Pacifica in the north and Half Moon Bay in the south; Install raised medians, left turn lanes, acceleration lanes, and pedestrian crossings.	2017 TIP Update - Amend a new exempt project into the TIP with \$1.0M in FY17 ENV Local Sales Tax, \$500K in FY17 PE Local Sales Tax, \$5.5M in FY21 CON RTP-LRP, and \$150K in FY17 ENV Local funds	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2030
San Mateo	SM-170002	22425	MTC	Regional Planning Activities and PPM - San Mateo	San Mateo: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2017 TIP Update - Add a new project to the TIP with \$1.1M in RIP transferred from SM-090024 and \$3.8M in STP and \$495K in Local transferred from REG090038	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
San Mateo	SM-990026	94666	SamTrans	SAMTRANS: ADA Paratransit Operating Subsidy	SamTrans: ADA Paratransit Operating Subsidy.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.127) - Changes in vertical and horizontal alignment	2020
Santa Clara	SCL050001	94610	VTA	VTA: Standard & Small Bus Replacement	VTA: Standard and Small Bus Replacement	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro 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).	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing right-of-way	2040

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Santa Clara	SCL050046	94610	VTA	VTA: ADA Operating Set Aside	VTA: ADA operating assistance set aside.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	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; Design and construct 1.2 miles of commuter/transportation trail, pedestrian bridge, and underpasses with safety and	2017 TIP Update - Update the funding plan to reprogram ROW from FY15 to FY19, CON from FY19 to FY20 and RTP-LRP from FY19 to FY21	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL050083	240508	San Jose	Coyote Creek Trail (Hwy 237-Story Rd)	In San Jose: from Highway 237 to Story Road; Master plan entire system, design and construction of the trail.	2017 TIP Update - Update the funding plan to reprogram \$30M in RTP-LRP from FY19 to FY21	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL050091	230385	Palo Alto	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.	2017 TIP Update - Update the funding plan to reprogram CON from FY15 to FY17	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as resolution of Caltrans/MTC deobligating the unused funding to the Capital Expressway ITS and Bike/Ped Improvements	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	2020
Santa Clara	SCL090031	240744	VTA	Santa Clara Caltrain Station Bike/Ped Tunnel	In Santa Clara: extend a grade-separated pedestrian tunnel at the Santa Clara Caltrain station.	2017 TIP Update - Update the funding plan to change the source for \$3M in FY15 CON funds from Local Sales Tax to Private Developer Fees and add \$3M in FY15 CON Private Developer fees and \$17K in	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL090041	94610	VTA	VTA: Photovoltaic Solar Panel Alternative Energy	VTA: On the Berryessa BART Station: parking structure: Install photovoltaic solar panels	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Santa Clara	SCL090044	94610	VTA	VTA: TP OCS Rehab & Replacement	VTA: Rehabilitate and replace overhead catenary system (OCS) and associated components	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Santa Clara	SCL110029	240508	San Jose	San Jose: Los Gatos Creek Reach 5 Underpass	In San Jose: Los Gatos Creek Trail between Auzerais Ave and Montgomery/Bird Ave. Construct Los Gatos Creek Trail (Reach 5b/c).	2017 TIP Update - Update the funding plan to reprogram \$2.0M in CON RTP-LRP funds from FY19 to FY21 and add \$500K due to changes in Caltrans bridge project that impacts the Reach 5 trail	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL110032	240508	Gilroy	Gilroy New Ronan Channel and Lions Creek Trails	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.	2017 TIP Update - Update the funding plan to reprogram \$135K in CON Local funds from FY16 to FY17	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as additional federal funding is expected	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing right-of-way	2040
Santa Clara	SCL110100	94610	VTA	VTA: Kinkisharyo LRV Overhaul Program	VTA: Scheduled overhaul of Kinkisharyo Light Rail Vehicles.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040

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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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing right-of-way	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	2017 TIP Update	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	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	2017 TIP Update - Update the funding plan to add \$68K in FY16 CON TDA3 funds	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL110125	240744	VTA	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).	2017 TIP Update	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Santa Clara	SCL130004	240509	San Jose	San Jose - Meridian Bike/Ped Improvements	San Jose: Meridian between Auzerais and Douglas: Install new bicycle lanes and sidewalks; Meridian and Auzerais: Modify signal; Douglas and Meridian: Install new traffic signal; Both intersections: Install	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130006	240747	San Jose	San Jose Citywide SRTS Program	San Jose: Near various schools: Implement bike/ped improvements such as traffic control and guide signs, enhanced crosswalks and other improvements that encourage bicycling and walking to school.	2017 TIP Update	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Santa Clara	SCL130007	21011	San Jose	Jackson Ave Bicycle and Pedestrian Improvements	In San Jose: Jackson Ave between McKee Rd and Alum Rock Ave: Construct pedestrian safety and transit access enhancements including two new traffic signals and the modification of one existing signal.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Santa Clara	SCL130010	21011	San Jose	San Jose Pedestrian Oriented Traffic Signals	In San Jose: At various key intersections: implement traffic signal controlled crossings. This project is phased.	2017 TIP Update - Update the funding plan to reprogram \$213K in CON Local funds from FY16 to FY17	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Santa Clara	SCL130011	21011	San Jose	St. Johns Bikeway and Pedestrian Improvements	In San Jose: On St. John St from N. Montgomery St to N. First St and along N. Almaden Blvd between W. Julian St and Carlisle St: Improve bicycle and pedestrian facilities including gap filling and signal	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130016	240509	San Jose	East San Jose Bikeways	East San Jose: Various locations: make improvements to the bikeway network including the installation of new bikeways, traffic calming features, public bike racks, bike-friendly signal detection and	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130022	240509	Santa Clara Co	San Tomas Aquino Spur Multi-Use Trail Phase 2	In Santa Clara: From El Camino Real/SR 82 to Homestead Road: Construct San Tomas Aquino Spur Trail Phase 2	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130026	21011	Saratoga	Prospect Rd Complete Streets	Saratoga: Prospect Road between Saratoga/Sunnyvale Rd and Lawrence Expressway and on Saratoga Ave between Highway 85 to the City Limits to the north (Lawrence Expressway): Reduce roads width to	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130027	240740	Saratoga	Saratoga Village Sidewalk Rehabilitation	In Saratoga: Along Big Basin Way between 6th street and Hwy 9: Rehabilitate sidewalk.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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Santa Clara	SCL130028	240509	Sunnyvale	Sunnyvale/Saratoga Traffic Signal, Bike/Ped Safety	In Sunnyvale: On Sunnyvale-Saratoga Road at Mathilda: Upgrade the existing traffic signal and install new ramps, bike detection and ped signals.	2017 TIP Update - Update the funding plan to reprogram CON from FY17 to FY18	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130029	240744	Sunnyvale	Fair Oaks Avenue Bikeway and Street Enhancements	In Sunnyvale: Various Locations on Fair Oaks Avenue: Construct bike lanes and complete sidewalk enhancements and rehabilitation to improve pedestrian safety.	2017 TIP Update - Update the funding plan to reprogram CON from FY17 to FY18	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130030	240744	Sunnyvale	Maude Avenue Bikeway and Streetscape	Sunnyvale: On Maude Avenue between Mathilda Avenue and Fair Oaks Avenue: Install medians, modify roadway geometry and stripe bike lanes.	2017 TIP Update - Update the funding plan to reprogram CON from FY17 to FY18	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
Santa Clara	SCL130031	240509	Sunnyvale	Sunnyvale East and West Channel Multi-Use Trails	In Sunnyvale: Various locations on the Sunnyvale East Channel: construct multi-use paved trails.	2017 TIP Update - Update the funding plan to reprogram CON from FY17 to FY18	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130032	240747	Sunnyvale	Sunnyvale SRTS Ped Infrastructure Improvements	In Sunnyvale: At 17 school sites: Install pedestrian enhancements for school route intersections	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130034	240747	Palo Alto	Arastradero Road Schoolscape/Multiuse Trail	In Palo Alto: Along the south side of Arastradero Road between the Hetch Hetchy Los Altos Pathway and Miranda Avenue: Reconstruct the sidewalk to a multi-use trail to support Safe Routes to School	2017 TIP Update - Update the funding plan to reprogram CON from FY17 to FY18	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130037	230242	Santa Clara Co	Capitol Expressway ITS and Bike/Ped Improvements	In San Jose: Capitol Expressway: Upgrade traffic signals and ITS infrastructure and install pedestrian sensors and bike detection at all intersections to allow traffic responsive and adaptive signal timing and	2017 TIP Update	EXEMPT (40 CFR 93.126) - Traffic control devices and operating assistance other than signalization	2020
Santa Clara	SCL130040	240509	VTA	Montague Expy Ped Bridge at Milpitas BART	In Milpitas: At Milpitas BART Station: Over Montague Expressway: Construct a pedestrian bridge	2017 TIP Update - Update the funding plan to reprogram \$2.8M in CON CMAQ and 359K in CON Local from FY16 to FY17	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130041	240509	Palo Alto	Adobe Creek/ Highway 101 Bicycle Pedestrian Bridge	Palo Alto: Where US 101 crosses Adobe Creek: Construct Bike/Ped Bridge. Project is phased	2017 TIP Update - Update the funding plan to add \$350K in FY17 CON Local funds and \$3.15M in FY22 CON RTP-LRP funds and reprogram \$4.35M in CON RIP from FY17 to FY22	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Santa Clara	SCL130043	240740	Morgan Hill	Monterey Road Preservation	In Morgan Hill: On Monterey Road between East Dunne Avenue and East Middle Avenue; resurface roadway.	2017 TIP Update - Update the funding plan to reprogram \$1.4M in CON STP and \$179K in CON Local funds from FY16 to FY17	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Santa Clara	SCL130044	240745	VTA	I-880 Stevens Creek Landscaping	In San Jose, at the I-880/Stevens Creek interchange provide landscaping.	2017 TIP Update - Update the funding plan to reprogram \$3.0M in CON Local funds from FY15 to FY17	EXEMPT (40 CFR 93.126) - Plantings, landscaping, etc	2040
Santa Clara	SCL150001	21754	VTA	I-680 Soundwalls - Capitol Expwy to Mueller Ave	San Jose: on I-680 corridor between Capitol Expressway and Mueller Avenue: Construct soundwalls	2017 TIP Update - Update the funding plan to reprogram \$323K in RIP from CON to PSE and \$261K in RIP from CON to ROW and reprogram PSE from FY17 to FY18, ROW from FY18 to FY19 and CON	EXEMPT (40 CFR 93.126) - Noise attenuation	2040
Santa Clara	SCL150005	94610	VTA	VTA Train to Wayside Communication System Upgrade	VTA: Communications: Upgrade the existing DOS based train-to-wayside communications (TWC) system to a Windows based system while keeping the original system's operational functionality.	2017 TIP Update - Retain this project in the TIP for informational purposes as additional federal funds are expected	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Santa Clara	SCL150006	94610	VTA	VTA: Back-up Power for Elevated Stations	VTA: Various elevated stations: Replace the generators and automatic power bypass switch for elevated stations on the Guadalupe Light Rail line.	2017 TIP Update - Retain this project in the TIP for informational purposes	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040

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Santa Clara	SCL150008	94610	VTA	VTA Track Intrusion Abatement	VTA: Various locations along trackway: Installation of fencing, barriers, signage, flashing signs, and pavement markings.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation or reconstruction of track structures, track, and trackbed in existing right-of-way	2040
Santa Clara	SCL150011	94610	VTA	VTA: N 1st Street LR Speed Improvements	VTA: North First Street: Implement light rail service and reliability improvements including fencing and signal timing	2017 TIP Update - Retain this project in the TIP for informational purposes as additional federal funding is expected	EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Santa Clara	SCL150014	230419	VTA	I-280/Winchester Study	In San Jose: I-280/Winchester Interchange: Conduct planning activities to identify and evaluate improvements in the vicinity of the I-280/Winchester Boulevard interchange.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Santa Clara	SCL150015	240747	Santa Clara Co	Gilroy Moves!	Santa Clara County: Gilroy: Non-infrastructure education and encouragement services to promote walking and biking in Gilroy.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Santa Clara	SCL150017	21011	Mountain View	Mountain View El Camino Real Streetscape Study	In Mountain View: On El Camino Real within the City Limits; Develop detailed designs for sidewalks, crosswalks, lighting, landscaping, bicycle facilities and bus stops. Project will not lead directly to	2017 TIP Update	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Santa Clara	SCL150020	240744	San Jose	North 1st Street Urban Village Plan	In the City of San Jose: North 1st Street Urban Village area: Create a land use plan, Implementation guidelines and policies.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Santa Clara	SCL150021	240744	San Jose	Berryessa BART Urban Village Plan	In San Jose: Around the Berryessa BART Station: Create new plans that will facilitate higher density uses and incentivize a mix of uses around the BART Station currently under construction.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Santa Clara	SCL170001	22425	MTC	Regional Planning Activities and PPM - Santa Clara	Santa Clara: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2017 TIP Update - Add a new project to the TIP with \$2.62M in RIP transferred from SCL090035 and \$6.1M in STP and \$787K in Local transferred from REG090038	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Santa Clara	SCL990046	94610	VTA	VTA: Preventive Maintenance	VTA: Preventive Maintenance of agency's fleet.	2017 TIP Update - Retain this project in the TIP for informational purposes as additional federal funding is expected	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Solano	SOL010006	21017	F-S Transit	Fairfield-Suisun Transit: Operating Assistance	Fairfield-Suisun Transit: Operating Assistance to support transit operations.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Solano	SOL010007	21017	Vacaville	Vacaville Transit: Operating Assistance	Vacaville Transit: Operating Assistance	2017 TIP Update	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040

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Solano	SOL090033	94683	SolTrans	SolTrans: Bus Maintenance Facility Renovation	SolTrans: Bus Maintenance Facility Renovation, Construction of Compressed Natural Gas Facility and Upgrading electrical infrastructure for future electric bus charging	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing. Update the project description for clarity	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	SOL090034	94683	SolTrans	Bus Replacement (Alternative Fuel)	SolTrans: Replace eight 45' MCI commuter coaches as they reach their useful life.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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	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.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Solano	SOL110025	94683	SolTrans	SolTrans: ADA Paratransit Operating Subsidy	SolTrans: ADA Paratransit Operating Subsidy	2017 TIP Update	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Solano	SOL110035	240600	Vallejo	Vallejo Downtown Streetscape	Vallejo: Various streets in the downtown area. Pedestrian enhancements including traffic calming, restriping, parking, signs, brick pavers, street furniture and art. Project is phased	2017 TIP Update	EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Solano	SOL110040	94683	SolTrans	SolTrans: Operating Assistance	Solano County Transit: Operating Assistance	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Solano	SOL110041	21017	F-S Transit	Fairfield Transit: 2 Gillig Bus Replacements	Fairfield-Suisun Transit: Replace two 1996 Gillig buses with two new 40' transit hybrid buses	2017 TIP Update	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	SOL130005	240556	Vacaville	Allison Bicycle / Ped Improvements	Vacaville: On Allison Drive from Nut Tree Parkway to Ulatis Creek: Install bike/ped infrastructure improvements, landscaping and a marquee sign	2017 TIP Update - Update the project scope to include crosswalk improvements, bike lockers and landscaping	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL130007	240731	Solano County	Suisun Valley Bicycle and Pedestrian Imps	Solano County: At Mankas Corner: Construct staging area with bicycle and pedestrian improvements; At Various Locations in Solano County: Add a Class II bike lane to enhance bike access to areas	2017 TIP Update - Update the funding plan to reprogram \$120K in CON Local from FY16 to FY17 and add \$250K in FY19 PE Local and \$6M in FY21 CON RTP-LRP	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL130012	240556	Dixon	Dixon SR2S Infrastructure Improvements	Dixon: Various locations along safe routes to schools: Implement pedestrian and bicycle improvements	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL130014	240556	Rio Vista	SR 12 crossing with updated lighting	In Rio Vista: At SR12 crossing: Install new updated lighted crosswalk	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL130015	240605	Vallejo	Vallejo SRTS Infrastructure Improvements	In Vallejo: In the vicinity of Wardlaw Elementary School: Implement safety improvements including striping and signage improvements	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
Solano	SOL130017	240601	Vacaville	Transit Marketing and Public Outreach	Vacaville: Citywide: Marketing and public outreach of City Coach transit benefits	2017 TIP Update	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040

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

List of 2017 TIP Projects by Air Quality Status and County

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Solano	SOL130019	94683	SolTrans	Bus Replacement (Commuter)	SolTrans: Replace 45' diesel commuter buses which have reached the end of their useful service life with 45' compressed natural gas buses.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Solano	SOL130020	240605	Suisun City	Driftwood Drive Path	Suisun City: Along S. Driftwood Dr from Marina Blvd to Josiah Cir, along E. Josiah Cir between Driftwood Dr and Whispering Bay Ln, and along E. Whispering Bay Ln from Josiah Cir to approx 200 ft south of	2017 TIP Update - Update the funding plan to add \$59K in FY16 TDA and retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL150001	240605	STA	Ingraining Walking & Rolling into School Culture	Solano County: Countywide: Implement a two pronged approach to ingrain a culture of walking & rolling within 15 selected schools. The project is a collaboration between STA and Solano County Dept. of	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	2040
Solano	SOL150002	98212	Vallejo	SR2T - Curtola Bike Path	Vallejo: On Curtola Pkwy between Lemon Street and Solano Avenue: Improve bike path	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL150003	240745	STA	SR12/Church Rd Intersection Improvements	Rio Vista: At SR12/Church Rd. Intersection: Add Standard Shoulders, EB Left Turn Lane, WB Acceleration Lane (720 ft) and Deceleration Lane (300 ft), Remove Trees in Clear Recovery Zone	2017 TIP Update - Update the funding plan to reprogram RTP-LRP from FY19 to FY21	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2040
Solano	SOL150004	98212	STA	STA SR2S Infrastructure & Non-infrastructure	Solano County: At 7 schools: Implement pedestrian infrastructure improvements; At 26 schools throughout the Cities of Benicia, Rio Vista & Vallejo: Providing education outreach	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Solano	SOL170001	22425	MTC	Regional Planning Activities and PPM - Solano	Solano: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2017 TIP Update - Add a new exempt project to the TIP with \$681K in RIP transferred from SOL090006 and \$3.8M in STP and \$495K in Local transferred from REG090038	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Sonoma	SON030005	21017	Son Co Transit	Sonoma Co Transit: Preventive Maintenance Program	Sonoma County Transit: Preventive maintenance program for agency fleet.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Sonoma	SON030012	21017	SantaRosa 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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Construction of small passenger shelters and information kiosks	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Construction of small passenger shelters and information kiosks	2040
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).	2017 TIP Update - Retain this project in the TIP for informational purposes as construction will be completed in 2016 and mitigation will be completed in 2019	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON070013	22425	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).	2017 TIP Update	EXEMPT (40 CFR 93.126) - Planning and technical studies	2040
Sonoma	SON070020	21017	SantaRosa Bus	Santa Rosa City Bus Replacement Bus Purchase	Santa Rosa CityBus: Purchase 5 Hybrid Electric Replacement Buses and 4 clean diesel buses to replace aging fixed route buses to replace fixed route buses	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040

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

List of 2017 TIP Projects by Air Quality Status and County

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Sonoma	SON070026	22490	Sonoma County	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	2017 TIP Update - Update the funding plan to reprogram \$3.3M in CON HBP from FY20 to FY21	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2030
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)	2017 TIP Update	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2030
Sonoma	SON090023	21017	SantaRosa Bus	Santa Rosa CityBus: Operating Assistance	Santa Rosa CityBus: Operating Assistance to Transit Agency	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Rehabilitation of transit vehicles	2040
Sonoma	SON090025	240748	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)	2017 TIP Update	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
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	2017 TIP Update - Update the funding plan to remove \$57K in FY12 PE Other Local	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2030
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	2017 TIP Update	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2030
Sonoma	SON090030	21017	Petaluma	Petaluma Transit: AVL System	Petaluma Transit: Purchase and install Automatic Vehicle Location (AVL) System on all vehicles in Petaluma Transit fixed route fleet.	2017 TIP Update - retain this project in the TIP for informational purposes as the project is ongoing	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Sonoma	SON110024	240748	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	2017 TIP Update	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
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	2017 TIP Update	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2030
Sonoma	SON110026	240748	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	2017 TIP Update	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2040
Sonoma	SON110049	21017	Son Co Transit	Sonoma County Transit: Replacement Bus Purchase	Sonoma County Transit: Replace five 40' Orion V CNG transit coaches with five 40' CNG Low-Floor transit coaches.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro 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.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040

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List of 2017 TIP Projects by Air Quality Status and County

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Sonoma	SON110051	21017	Petaluma	Petaluma: Purchase 2 Paratransit Cutaways FY13	In Petaluma: Purchase two (2) paratransit vans for Petaluma Paratransit. One van replaces an older van in the current fleet and one van is for an expansion of the fleet.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro 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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Sonoma	SON110054	22423	Healdsburg	Healdsburg Pedestrian Safety and Access Improvmnts	In Healdsburg: Install pedestrian safety crossing improvements adjacent to high school on Powell Ave. Install ADA improvements connecting high school and junior high school to library (Powell Ave, Prince	2017 TIP Update	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON130002	230700	Petaluma	Petaluma Complete Streets	In Petaluma: On Lakeville St from E. Washington St to Caulfield Ln and on East D St from the D St Bridge to Lakeville St: Rehabilitate the roadway, including striping for Class 2 Bike Lanes and adding ADA	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Sonoma	SON130003	240651	Windsor	Jaguar Way/Windsor Road Bicycle /Ped Improvements	In Windsor: Around the intersection of Jaguar Way and Windsor Road, the entrance to Windsor High School: Install a traffic signal and construct approximately 300 feet of Class II bicycle lanes and sidewalk.	2017 TIP Update - Update the project description to reflect reduction in scope. Update the funding plan to add \$66K in FY15 PE General Fund and \$620K in FY16 CON General Fund	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Sonoma	SON130006	240651	Santa Rosa	Downtown Santa Rosa Streetscape	Santa Rosa: Third St between Morgan and B St: Implement pedestrian improvements to channelize pedestrians to use the north side of Thrid Street at Morgan STreet and at B Street; On Santa Rosa Avenue	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Sonoma	SON130007	240651	Rohnert Park	Rohnert Park Streetscape and Pedestrian Imps	Rohnert Park: At Various locations in the Central Rohnert Park PDA: Install pedestrian and bike facility improvements	2017 TIP Update - Update the funding plan to reprogram CON from FY16 to FY17	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON130008	230700	Cotati	Cotati - Old Redwood Highway S. Preservation	In Cotati: On Old Redwood Highway, between East Cotati and Myrtle Avenue; rehabilitate roadway and add pedestrian features.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Sonoma	SON130009	230700	Rohnert Park	Rohnert Park Various Streets Preservation	In Rohnert Park: On Rohnert Park Expressway from State Farm Drive to Snyder Lane: Rehabilitation of roadway including digouts and overlay. Existing lane configuration and existing Class 2 bike lanes will	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Sonoma	SON130010	230700	Sonoma County	Sonoma County Various Streets & Roads Preservation	Sonoma County: Various locations: Rehabilitate pavement	2017 TIP Update	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Sonoma	SON130012	240651	Windsor	Conde Ln/Johnson St Pedestrian Improvements	In Town of Windsor: At the intersection of Conde Lane and Johnson Street: Realign intersection to eliminate stop signs on Conde Lane. Johnson Street becomes right in and right out only. Add RRFB	2017 TIP Update - Update the project description to reflect change in scope	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040
Sonoma	SON130013	240651	Windsor	Bell Rd/Market St/Windsor River Rd Ped Improvement	In Windsor: At the intersection of Bell Road-Market Street and Windsor River Road: Install a traffic signal and install pedestrian and bicycle signal equipment.	2017 TIP Update - Update the expanded project description for clarity	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2040

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List of 2017 TIP Projects by Air Quality Status and County

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Sonoma	SON130014	240561	Sonoma County	Sonoma County - Safe Routes to School Program	Sonoma County: Countywide: Comprehensive safe routes to school program to shift mode away from single family vehicular trips to bicycle/pedestrian/carpooling.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Sonoma	SON130015	230700	Sonoma County	Bodega Highway Pavement Rehabilitation	Bodega Hwy, beginning at the intersection of Sexton Lane and ending at the Sebastopol City Limits. The Project length is approximately 2 miles. The scope of work will includes pavement rehabilitation,	2017 TIP Update	EXEMPT (40 CFR 93.126) - Pavement resurfacing and/or rehabilitation	2040
Sonoma	SON130016	240651	Cloverdale	Cloverdale - Safe Routes to School Phase 2	Cloverdale: Various Locations: Construct sidewalks and add Class II bike lanes	2017 TIP Update - Update the funding plan to reprogram \$250K in CON STP OBAG funds from FY16 to FY17 and change the source to CMAQ	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON130020	240650	Petaluma	Petaluma Transit: Transit Signal Priority System	In Petaluma: Various intersections: Upgrade existing traffic signals to replace existing or install new Transit Signal Priority hardware on intersections within the City of Petaluma. Project is phased.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2040
Sonoma	SON150001	21011	Sonoma County	PDA Planning - Springs Area Plan	Sonoma Valley Springs Area: Planning to revitalize the area into a pedestrian and transit oriented mixed use corridor.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Sonoma	SON150002	21011	Sonoma County	PDA Planning - Airport Station/Specific Plan Amend	Sonoma County: Near the proposed Sonoma Marin Area Rail Transit Airport station: Develop a new station area plan and update of the 1984 Airport Industrial Area Specific Plan in order to transform the	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040
Sonoma	SON150003	240651	Santa Rosa	Jennings Ave Bike & Ped RR Crossing Corridor	In Santa Rosa: At Jennings Ave and SMART railroad tracks: Construct a bicycle and pedestrian crossing and develop a Safe Routes to School service program focusing on education and awareness for the	2017 TIP Update - Update the project purpose to enhancement and the expanded project description for clarity. Update the funding plan to reprogram \$1.6M in CON Local from FY16 to FY17 and remove	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Sonoma	SON150004	21017	Petaluma	Petaluma Transit: Purchase (1) Fixed Route Bus	Petaluma Transit: 40' hybrid bus: Purchase (1) new 40' Diesel Electric Hybrid Low Floor Standard Transit Bus for Petaluma Transit, replaces (1) 2003 Chevy C5500 29' medium duty bus that expended its	2017 TIP Update - retain this project in the TIP for informational purposes as the project is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Sonoma	SON150005	21017	Petaluma	Petaluma Transit: (3) Digital Two-Way Radios	Petaluma Transit: Radios: Purchase (3) Digital Two-Way Radios for (3) new Fixed Route Buses for Petaluma Transit (goes with bus replacement project in FY 15 and FY 16).	2017 TIP Update - retain this project in the TIP for informational purposes as the project is ongoing	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Sonoma	SON150007	21017	Petaluma	Petaluma Transit: ADA Set-Aside	Petaluma Transit: Annual ADA Set-Aside	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Sonoma	SON150008	21017	SantaRosa Bus	SantaRosa Bus: Bus Replacement Purchase	SantaRosa Bus: 40' Fixed Route Vehicle: Replace an aging 40' fixed route diesel bus for operation purposes.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Sonoma	SON150009	22190	Son Co TA	Highway 116/121 Intersection Improvement Project	In Sonoma County: At the intersection of State Routes 116 and 121, and Bonneau Road: Improve intersection	2017 TIP Update - Update the funding plan to change the funding source of \$2.0M in FY19 PSE from RTP-LRP to Local funds and reprogram \$22M in CON RTP-LRP from FY19 to FY21	EXEMPT (40 CFR 93.127) - Intersection signalization projects at individual intersections	2020

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List of 2017 TIP Projects by Air Quality Status and County

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Sonoma	SON150011	240561	Sonoma County	Sonoma SRTS High School Pilot	In Sonoma County: Countywide: Safe routes to school high school pilot program to shift mode away from single family vehicular trips to bicycle/pedestrian/carpooling/bussing.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Grants for training and research programs	2040
Sonoma	SON150012	240735	Son Co Transit	Sonoma County Transit: Replacement CNG Buses	Sonoma County Transit: Replace two 40-foot compressed natural gas (CNG)-fueled buses.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Sonoma	SON150013	21017	Son Co Transit	Sonoma County Transit: Replace 2006 CNG Buses	Sonoma County Transit: Replace Two 40-foot CNG-fueled buses.	2017 TIP Update	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Sonoma	SON150014	21017	Petaluma	Petaluma Transit: Purchase (2) Fixed Route Buses	Petaluma Transit: (2) 35' hybrid buses: Purchase (2) new 35' Diesel Electric Hybrid Low Floor Standard Transit Bus for Petaluma Transit, replaces (2) 2003 Chevy C5500 29' medium duty buses that have	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2040
Sonoma	SON150015	21017	Petaluma	PetalumaTransit:Clipper Equip for FixedRoute Buses	Petaluma Transit: On 3 new Fixed Route buses: Install Clipper fare equipment	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Sonoma	SON150016	21017	Petaluma	PetalumaTransit:Comm Equip for 3 Fixed Route Buses	Petaluma Transit: On three (3) new Fixed Route Buses: Purchase and Install Automated Vehicle Locaton (AVL) and Transit Signal Priority Equipment	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	2040
Sonoma	SON150017	21017	SantaRosa Bus	SRCityBus Non-Revenue Vehicle and Capital Equipmnt	Santa Rosa City Bus: At Transit Mall: Implement transit enhancements and purchase a replacement non-revenue vehicle	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of support vehicles	2040
Sonoma	SON150018	21017	SantaRosa Bus	SR City Bus: Garage Hoist for Bus Repairs	Santa Rosa City Bus: Purchase a garage hoist for repairs of the buses	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of office, shop, and operating equipment for existing facilities	2040
Sonoma	SON150019	21017	SantaRosa Bus	Implementation of Reimagining CityBus	Santa Rosa CityBus: Systemwide: Operating Assistance for implementing Reimagining CityBus	2017 TIP Update	EXEMPT (40 CFR 93.126) - Operating assistance to transit agencies	2040
Sonoma	SON170001	240667	Windsor	Windsor River Road/Windsor Road/NWPRR Intersection	In Windsor: Windsor River Road/Windsor Road/SMART intersection: Rail crossing safety improvements, multi-use path, pedestrian and vehicle traffic improvements.	2017 TIP Update - Amend a new exempt project into the TIP with \$200K in FY16 PE General Fund, \$2M in FY19 CON Local, and \$6.6M in FY21 RTP-LRP	EXEMPT (40 CFR 93.126) - Railroad/highway crossing	2020
Sonoma	SON170002	22425	MTC	Regional Planning Activities and PPM - Sonoma	Sonoma County: Regional Planning Activities and Planning, Programming and Monitoring (PPM)	2017 TIP Update - Add a new exempt project to the TIP with \$847K in RIP transferred from SON090008 and \$3.8M in STP and \$495K in Local transferred from REG090038	EXEMPT (40 CFR 93.126) - Planning activities conducted pursuant to titles 23 and 49 U.S.C	2040

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Appendix A2
List of Projects in the Final 2017 Transportation Improvement Program
with Updated Conformity Analysis Years

Projects in the 2017 TIP with Updated Conformity Analysis Years

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to reprogram \$1.9M in CON Local from FY16 to FY20 and \$42.3M in CON RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to change the source for \$5M in CON funds from Local to RTP-LRP and reprogram \$146K in PE Local from FY15 to FY17, \$2M in CON Local from FY17 to	NON-EXEMPT	2030
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	2017 TIP Update - Update funding plan to reprogram \$1.5M in PE Local from FY16 to FY19. Reprogram and change source of \$250K in ROW from FY16 Local to FY22 RTP-LRP, \$6.0M in CON RTP-LRP from	NON-EXEMPT	2030
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.	2017 TIP Update - Update funding plan to reprogram \$927K in PE Local from FY17 to FY19 and remove \$1.1M in FY17 PE Local. Reprogram and change funding source of \$2.3M in ROW from FY19 Local to	NON-EXEMPT	2030
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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2030
Alameda	ALA090027	22082	Port of Oakland	7th St Grade Separation and Port Arterial Improvem	In Oakland: (1) 7th Street Grade Separation project; (2) Middle Harbor Road Improvements project; and (3) Intelligent Transportation Systems and Technology (ITST) Master Plan	2017 TIP Update - Update project name and description to change the scope. Update funding plan to change the source for \$33M from Local to Sales Tax and \$3.5M from Local to RTP-LRP, add \$16.5M in	NON-EXEMPT	2030
Alameda	ALA110001	240014	WETA	Central Bay Operations and Maintenance Facility	WETA: Construct a central bay operations and maintenance facility.	2017 TIP Update - Update the funding plan to add \$531K in FY11 PE, \$913K in FY13 CON, \$750K in FY14 CON, \$7.25M in FY15 CON, and \$16M in FY17 CON Prop 1B funds and reprogram \$3M in CON	NON-EXEMPT	2020
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.	2017 TIP Update - Update the funding plan to reprogram funds between years, change the source for \$2M in Local to RTP-LRP and add \$12.6M in RTP-LRP funds	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to reprogram \$2M in CON Local from FY18 to FY20 and \$10.3M in CON RTP-LRP funds from FY19 to FY21	NON-EXEMPT	2030
Alameda	ALA130005	240038	Dublin	Dougherty Road widening	Dublin: Dougherty Road from Sierra Lane to North City Limit: Widen from 4 lanes to 6 lanes	2017 TIP Update - Update the funding plan to reprogram and change the funding source of \$920K in FY14 ROW Local and \$7.6M in FY15 CON Local to FY15 CON Sales Tax and add \$2.1M. Add \$1.1M in	NON-EXEMPT	2020

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County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Alameda	ALA130006	240250	Dublin	Dublin Boulevard widening	In Dublin: Dublin Blvd between Sierra Court and Dublin Court: Widen from 4 lanes to 6 lanes.	2017 TIP Update - Update the funding plan to change the source for \$2.9M from Other Local to Sales Tax, add \$130K in CON Sales Tax and reprogram funds between years and phases	NON-EXEMPT	2020
Alameda	ALA130034	22042	ACTC	I-680 NB HOV/HOT Lane	Route I-680: from South of Auto Mall Parkway to State Route 84 in Alameda County, construct NB HOV/HOT Lane.	2017 TIP Update - Update scope to change southern limit from SCL County Line to Auto Mall Pkwy and update the funding plan to change the source for \$180M in RTP-LRP to Sales Tax and TCRP, remove	NON-EXEMPT	2030
Alameda	ALA150001	240062	ACTC	Route 84 widening, Pigeon Pass to I-680	In Alameda County: On SR-84 from Pigeon Pass to I-680 (PM 17.9/22.0): Widen roadway from 2 lanes to 4 lanes; On I-680 from SR 84 to north of Andrade Creek: Construct aux lane; On I-680: extend NB	2017 TIP Update - Update the funding plan to add \$4M in FY14 PE Sales Tax, \$2M in FY18 PE Sales Tax, \$2M in FY18 ROW Sales Tax, \$8.7M in PE RTP-LRP, \$17.5M in ROW RTP-LRP and \$106M in CON	NON-EXEMPT	2030
Alameda	ALA170001	230110	ACTC	State Route 262 (Mission Blvd) Improvements	In Fremont: Mission Blvd/I-680 IC: widen Mission Blvd to 3 lanes each direction through IC, rebuild the NB and SB I-680 on and off ramps	2017 TIP Update - Add a new non-exempt project to the TIP with \$3.5M in Sales Tax and \$16.6M in RTP-LRP funds	NON-EXEMPT	2030
Alameda	ALA170004	240037	ACTC	I-880/West Winton Avenue Interchange	In Hayward: At I-880/West Winton Avenue I/C: Reconstruct I/C including reconfiguration of eastbound to southbound on ramp and new connection to Southland Mall Drive	2017 TIP Update - Add a new non-exempt project to the TIP with \$3.5M in Sales Tax, \$1.5M in Other Local and \$16M in RTP-LRP	NON-EXEMPT	2030
Alameda	ALA170005	240052	ACTC	I-880/Whipple Road Interchange Improvements	In Union City/Hayward: at I-880/Whipple Rd Interchange: Implement full interchange improvements including northbound off-ramp, surface street improvements and realignment, and bike/ped	2017 TIP Update - Add a new non-exempt project into the TIP with \$3M in Sales Tax and \$57M in RTP-LRP funds	NON-EXEMPT	2030
Alameda	ALA170009	240059	ACTC	Widen I-680 NB and SB for EL from SR-84 to Alcosta	Alameda County: Northbound and southbound I-680 from Route 84 to Alcosta Boulevard: Widen for express lanes	2017 TIP Update - Amend a new nonexempt project into the TIP with \$1.5M in FY18 PE Sales Tax and \$321M in RTP-LRP funds	NON-EXEMPT	2030
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. Project is phased	2017 TIP Update - Update the funding plan to add \$11M PE Sales Tax and \$30.5M in ROW Sales Tax, change the source for \$76M in Local funds to RTP-LRP, reprogram \$2M in Con Sales Tax from FY10 to	NON-EXEMPT	2030
Contra Costa	CC-010023	21205	CCTA	I-680/SR 4 I/C Reconstruction - Phases 1, 2, 4 & 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, and 2 lane direct EB SR4 to SB I-680. Phases 1, 2, 4 & 5. Env Doc covers all	2017 TIP Update - Update the funding plan to reprogram \$4.5M in PSE Sales Tax from FY19 to FY21, \$500K in ROW Sales Tax from FY17 to FY20, and \$360M in RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
Contra Costa	CC-030002	21210	Hercules	Hercules Intercity Rail Station	In Hercules: From I-80/SR-4 to the future train station: Extend John Muir Pkwy to provide direct access including Bayfront Bridge over Refugio Creek, Bay Trail West Gap Closure, Refugio Creek Restoration,	2017 TIP Update - Update the description to reflect increase in scope. Update the funding plan to add \$4.5M in FY16 CON Sales Tax and \$4.1M in FY15 CON Local	NON-EXEMPT	2030
Contra Costa	CC-050028	22353	CCTA	I-680 SB HOV Lane Completion	Contra Costa County: I-680 from North Main Street to Livorna in the southbound direction: Construct a HOV lane	2017 TIP Update - Update the funding plan to reprogram and change the fund source of \$16.1M in FY19 CON RTP-LRP to \$1.0M CON RM2 and to \$15.1M CON Express Tolls. Funds in FY 20. Remove \$2.9	NON-EXEMPT	2030

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Contra Costa	CC-050030	98198	CC 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.	2017 TIP Update - Update the funding plan to reprogram FY18 ROW and FY19 CON to FY21	NON-EXEMPT	2030
Contra Costa	CC-050076	22355	Richmond	I-80/Central Avenue Interchange Modification	I-80/Central Ave; Ph1 Construct new signals and CMS's to redirect I-80 WB on-ramp traffic during weekend peak periods to I-580. Ph2 connect Pierce to San Mateo to relocate signal at Pierce/Central Ave	2017 TIP Update - Update the funding plan to reprogram funds between years and phases and add \$3.6M in FY21 CON RTP-LRP	NON-EXEMPT	2030
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 Havenwood Avenue to Homecoming Way, including widening of bridge over Marsh Creek. traffic signal modifications, and	2017 TIP Update - Update the description to change the project limits to Havenwood to Homecoming Way. Update the funding plan to reprogram local funds between years and phases including	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.	2017 TIP Update - Update funding plan to change the fund source of \$6.0M in XGEN and \$1.0M in FY19 ROW RTP-LRP to Sales Tax. Reprogram \$40.0M in CON RTP-LRP from FY19 to FY21, \$2.0M in ENV	NON-EXEMPT	2030
Contra Costa	CC-070026	98194	Concord	Commerce Avenue Extension	Concord: Commerce Avenue over Pine Creek to Waterworld Parkway; Extend roadway.	2017 TIP Update - Retain this project in the TIP for informational purposes	NON-EXEMPT	2030
Contra Costa	CC-070035	22360	CCTA	Reconstruct I-80/San Pablo Dam Rd Interchange	San Pablo: I-80/San Pablo Dam Rd I/C: Reconstruct I/C-relocating WB El Portal on-ramp to the full I/C northwards, providing access to McBryde through a new road from SPDR I/C, and replacing Riverside	2017 TIP Update - Update the funding plan to reprogram \$7.1M in CON Local from FY19 to FY20, \$9.2M in CON RIP from FY18 to FY20, \$57.7M in CON RTP-LRP, \$4.3M in ROW RTP-LRP, and \$1.9M in PSE	NON-EXEMPT	2030
Contra Costa	CC-070046	230218	El Cerrito	Del Norte Area TOD Complete Street Imps	El Cerrito del Norte BART Station Area: Complete Streets improvements to access, circulation and safety for bicyclists, pedestrians, local and regional bus, rapid bus, and automobile connections to BART	2017 TIP Update - Update description to include converting one-way sts to two-way and AQ description to non-exempt. Update funding plan to change the source for \$691K from Local to RTP-LRP, add	NON-EXEMPT	2030
Contra Costa	CC-070062	22122	WETA	Richmond Ferry Service	WETA: Implement new ferry transit service between Richmond and San Francisco.	2017 TIP Update - Update the expanded description. Update the funding plan to reprogram \$2.0M in FY14 CON Prop 1B to various years and phases. Add \$6.5M in FY13 CON Prop 1B, \$508K in FY17 CON	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 from Clearbrook Drive to approximately 1,000 feet beyond the crest of Kirker Pass Road; Construct northbound truck climbing lane and paved	2017 TIP Update - Update the funding plan to add \$4.2M in FY19 CON Local and \$203K in FY19 CON Local Sales Tax. Reprogram \$136K in ROW Local Sales Tax from FY16 to FY17 and \$777K in PE Local	NON-EXEMPT	2030
Contra Costa	CC-090019	240629	San Ramon	Bollinger Canyon Road Widening (Alcosta to SRVB)	San Ramon: Bollinger Canyon Road between Alcosta Blvd and San Ramon Valley Blvd: Widen from six to eight lanes. Project is phased.	2017 TIP Update - Reprogram Other Local CON funds from FY14 to FY15 and FY17	NON-EXEMPT	2020
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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2020
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	2017 TIP Update - Update the funding plan to reprogram PE to FY17, ROW to FY19 and CON to FY21	NON-EXEMPT	2030

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Contra Costa	CC-130043	230685	BAIFA	CC I-680 Southern Segment Express Lanes	In Contra Costa County: On I-680 between Alcosta Boulevard and Livorna Road (northbound) and between Alcosta Boulevard and Rudgear Road (southbound); Convert existing HOV lanes to express lanes.	2017 TIP Update - Update the project name. Update the funding plan to reprogram \$317K in FY15 ROW Express Tolls and \$128K in FY14 PE Express Tolls to FY15 CON and add \$4.5M. Add \$3.4M in FY13	NON-EXEMPT	2020
Contra Costa	CC-130046	21205	CCTA	I-680 / SR 4 Interchange Reconstruction - Phase 3	In Pacheco: At the I 680/Route 4 interchange: Widen SR4 in the median to provide a third lane in each direction from Morello Avenue to Port Chicago (SR242). Work includes widening of bridges within	2017 TIP Update - Update the funding plan to change the source for \$31.5M from RIP to RTP-LRP, add \$3.2M in RTP-LRP and \$5.87M in Sales Tax and reprogram funds between years and phases	NON-EXEMPT	2030
San Francisco	SF-010038	21549	SF DPW	Bayview Transportation Improvements	In San Francisco: From US 101 to the Hunters Point Shipyard along: 25th, I280-Illinois; Cesar Chavez, US101-Illinois; Illinois, 25th-Cargo; Cargo, Illinois-Jennings; Jennings, Cargo-Evans; Evans, Cesar	2017 TIP Update-Update the description to clarify scope and update the funding plan to reprogram \$212K in Local from FY15 ROW to FY17 CON, \$288K in Local ROW from FY15 to FY19, \$500K in CON	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to remove \$360M in RTP-LRP and reprogram remaining RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to reprogram RTP-LRP funds from FY19 to FY21 and add \$18.6M in FY21 PE RTP-LRP	NON-EXEMPT	2030
San Francisco	SF-070004	230164	SF County TA	Geary Bus Rapid Transit	Muni: On Geary Boulevard; Design and implement a BRT project.	2017 TIP Update - Update the funding plan to change the source for \$6.8M in RTP-LRP to Sales Tax and \$6.8M in RTP-LRP to Local and reprogram funds between years and phases	NON-EXEMPT	2030
San Francisco	SF-090012	240309	SFMTA	Additional Light Rail Vehicles to Expand Muni Rail	SFMTA: Procure 20 expansion light rail vehicles (LRVs).	2017 TIP Update - Update the funding plan to change the source and program year for \$2M in CON funds from FY19 RTP-LRP to FY20 Other Local and reprogram \$122M in RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
San Francisco	SF-090018	240309	SFMTA	Oakdale-Palou Interim High-Capacity Bus Corridor	Muni: Transit Preferential improvements for the Palou Avenue corridor, including bus bulbs, up to six traffic signals with transit signal priority, new bus shelters and pedestrian safety treatments.	2017 TIP Update - Update the funding plan to reprogram RTP-LRP funds from FY19 to FY21	NON-EXEMPT	2030
San Francisco	SF-090032	240171	SFMTA	SFMTA: Muni Forward 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.	2017 TIP Update - Update the funding plan to add \$17M in Sales Tax and \$134M in Local	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to remove \$35.0M in RTP-LRP, reprogram RTP-LRP from FY19 to FY21 and reprogram \$2M in CON from FY15 to FY17	NON-EXEMPT	2030
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	2017 TIP Update - Update the funding plan to change the source for \$1M in CON from RTP-LRP to Local and reprogram ROW Local from FY16 to FY18, CON Local from FY17 to FY19 and CON RTP-LRP from	NON-EXEMPT	2030

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San Francisco	SF-170001	240415	Port of SF	Mission Bay Ferry Terminal	San Francisco: At the eastern terminus of 16th St: Construct new ferry landing to service San Francisco Mission Bay and Central Waterfront as a part of the Bay area ferry transit system	2017 TIP Update - Add a new project into the TIP with \$3.4M in FY16 PE Local Operating Funds, \$1M in FY17 PE Local, \$1M in FY9 CON Local, \$8.5M in FY21 CON RTP-LRP, and \$3.6M in FY21 PSE RTP-LRP	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2030
San Mateo	SM-050001	98204	Pacifica	SR 1 - Fassler to Westport Drive Widening	In Pacifica: Route 1 between Fassler Ave. & Westport Dr.; Add an additional lane in each direction.	2017 TIP Update - Update the funding plan to reprogram \$5.6M in PSE Sales Tax to FY18, \$700K in ROW Sales tax and \$6.9M in ROW RIP to FY19, \$1.9M in CON Local to FY20 and \$31M in CON RTP-LRP to	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	2017 TIP Update - Update the funding plan to reprogram \$1.5M in CON Local and \$11.5M in CON RTP-LRP from FY19 to FY23 and \$400K in PE Local Sales Tax from FY15 to FY18	NON-EXEMPT	2030
San Mateo	SM-090009	21604	SMCTA	US 101 Aux lanes from Sierra Point to SF Cnty Line	San Mateo County: On US 101 from Sierra Point to SF County Line; Construct auxiliary lanes or managed lanes. Project also references RTP ID 240060 for managed lanes	2017 TIP Update - Update description. Update funding plan to reprogram \$4.3M in CON RTP-LRP from FY19 to FY21 and add \$60.7M. Reprogram and change the funding source of \$500K in ENV from	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	2017 TIP Update - Update the funding plan to reprogram \$600K in PE Local Sales Tax from FY14 to FY17, \$2.0M in CON Local Sales Tax from FY18 to FY20, and \$4.4M in CON RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
San Mateo	SM-110002	22120	WETA	WETA: Redwood City Ferry Service	WETA: Redwood City; Implement ferry transit service between Redwood City and San Francisco	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	NON-EXEMPT	2030
San Mateo	SM-170004	240067	Pacifica	Manor Drive Overcrossing and Milagra On Ramp	In Pacifica: Hwy 1 and Manor Drive I/C: Widen the existing overcrossing; Hwy 1 and Milagra: Construct a new on-ramp; Both intersections: install signals	2017 TIP Update - Amend a new nonexempt project into the TIP with \$16.0M in FY21 CON RTP-LRP and \$1.0M in FY17 ENV Local funds	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 interchange; widen Blossom Hill Road and reconstruct interchange to provide an additional lane in each direction, including the bridge structure over US-101 plus other	2017 TIP Update - Update the funding plan to reprogram RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
Santa Clara	SCL050009	22956	VTA	Capitol Expressway LRT Extension- Phase II	In the East Valley: The Capitol Avenue light rail line from the existing Alum Rock Transit Center to a rebuilt Eastridge Transit Center (2.6 miles): provide light rail extension	2017 TIP Update - Update the funding plan to reprogram and change the funding source of \$170M in CON funds from FY19 Sales Tax to FY21 RTP-LRP	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.	2017 TIP Update - Update the funding plan to reprogram CON RTP-LRP from FY19 to FY21	NON-EXEMPT	2030

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Santa Clara	SCL090004	230452	San Jose	Downtown San Jose Bike Lanes and De-couplet	In San Jose: Ph 1: Reduce lanes, add bike lanes and bike/ped accessibility improvements on Almaden Ave and Vine St. Ph 2: Convert one-way couplets to two-way streets; reduce lanes; add bike lanes on:	2017 TIP Update - Update the funding plan to reprogram RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
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.	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing. Update the expanded project description for clarity	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to reprogram \$2M in CON funds from FY19 to FY20 and \$11.5M in CON funds from FY19 to FY21	NON-EXEMPT	2030
Santa Clara	SCL090030	240439	VTA	SR 85 Express Lanes	In Santa Clara County: Implement roadway pricing on SR 85 carpool lane from US 101 in San Jose to US 101 in Mountain View.	2017 TIP Update - Update description and update the funding plan to change the source for \$17M in FY19 funds from RTP-LRP to Other Local, add \$5.5M in PE Local, add \$500K in ROW RTP-LRP and	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to reprogram \$1M in CON Local from FY16 to FY20 and \$150M in CON RTP-LRP funds from FY19 to FY21	NON-EXEMPT	2040
Santa Clara	SCL110002	240466	VTA	Santa Clara County - US 101 Express Lanes	In Santa Clara County: From Dunne Avenue in Morgan Hill to San Mateo County line in Palo Alto: Implement roadway pricing on US 101 carpool lane	2017 TIP Update - Update description. Update funding plan to add \$1.2M in RTP-LRP and \$4.8M in Local funds and reprogram funds between years and phases	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to reprogram RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to add \$5.9M in Local funds and \$8.1M in CON RTP-LRP and reprogram funds between years and phases	NON-EXEMPT	2030
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,	2017 TIP Update - Update the funding plan to reprogram CON RTP-LRP funds from FY19 to FY21	NON-EXEMPT	2030
Santa Clara	SCL130001	240443	VTA	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.	2017 TIP Update - Update project sponsor. Update the funding plan to add \$4M in CON RTP-LRP, change the source for \$4M from Local to RTP-LRP and reprogram funding among years	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to reprogram \$2M in ENV Local to FY18, \$2M in PSE Local and \$1.2M in ROW Local to FY20, \$3.2M in RTP-LRP to FY21 ENV, \$13.3M in RTP-LRP to FY21 PSE,	NON-EXEMPT	2030
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. Project is phased.	2017 TIP Update - Update the funding plan to reprogram \$1.3M in CON Prop-1B and \$298K in Private-Developer funds from FY15 to FY17 and \$14.7M in CON RTP-LRP from FY19 to FY21	NON-EXEMPT	2030

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

Projects in the 2017 TIP with Updated Conformity Analysis Years

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Solano	SOL110001	240581	MTC	I-80 Express Lanes - Fairfield & Vacaville Ph I&II	I-80 in Solano County from Red Top Rd to I-505: Convert existing HOV to HOT & Construct new HOT lanes from Air Base Parkway to I-505. Project also references RTP ID 230660	2017 TIP Update - Update the funding plan to reprogram \$2M in CON Local from FY16 to FY20 and \$219.6M in RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
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.	2017 TIP Update - Update the funding plan to reprogram \$19.4M in CON RTP-LRP from FY16 to FY17	NON-EXEMPT	2030
Solano	SOL110004	94151	STA	Jepson: Walters Rd Ext - Peabody Rd Widening	Jepson Parkway segment: Walters Road Extension - Peabody Widening.	2017 TIP Update - Update the funding plan to reprogram RTP-LRP funds from FY19 to FY21	NON-EXEMPT	2030
Solano	SOL110005	94151	STA	Jepson: Leisure Town Road from Vanden to Commerce	Jepson Parkway segment: Leisure Town Road from Vanden Road to Commerce. Project is phased	2017 TIP Update - Update the funding plan to reprogram \$19.4M in CON RIP funds from FY16 to FY17	NON-EXEMPT	2030
Solano	SOL110006	94151	STA	Jepson: Leisure Town Road (Commerce to New Ulatis)	Reconstruct and widen Leisure, from 900 feet South of Commerce Place to South of New Ulatis Creek	2017 TIP Update - Update the project limits and update the funding plan to reprogram \$6M in CON RIP from FY19 to FY22	NON-EXEMPT	2030
Solano	SOL110007	22795	Fairfield	Fairfield Transportation Center - Phase 3	In Fairfield: Fairfield Transportation Center; Construct second parking structure with approximately 600 automobile parking spaces and access improvements.	2017 TIP Update - Update the funding plan to reprogram \$600K in PSE TDA from FY16 to FY17 and \$6.9M in CON RTP-LRP from FY20 to FY21	NON-EXEMPT	2030
Solano	SOL110009	230635	Vacaville	Vacaville Intermodal Station - Phase 2	In Vacaville: Construction of a 137 stall surface parking lot.	2017 TIP Update - Update the description to reflect reduction in scope and update the funding plan to reprogram RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
Sonoma	SON050001	240668	Sonoma County	Laughlin Bridge over Mark West Crk 20C0246	Mark West Creek Bridge: Laughlin Rd/Brickway Blvd Extension; Construct new 2 lane bridge.	2017 TIP Update - Update the regional air quality description from Exempt to Non-Exempt and update RTP ID reference to 240668	NON-EXEMPT	2030
Sonoma	SON070004	98147	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,	2017 TIP Update - Update the funding plan to add \$827K in FY18 CON Earmark-HPP funds being transferred from SON050015 and reprogram CON RTP-LRP from FY19 to FY21	NON-EXEMPT	2030
Sonoma	SON150006	240529	Santa Rosa	US 101 Hearn Ave Interchange	Santa Rosa: US 101/Hearn Avenue over-crossing/interchange: Replace the US 101/Hearn Avenue over-crossing/interchange with a new over crossing/interchange including bike lanes, sidewalks, and re-	2017 TIP Update - Update funding plan to reprogram change the source for \$4.35M from RTP-LRP to Sales Tax and for \$800K from RTP-LRP to Other Local, reprogram funds between years and phases and	NON-EXEMPT	2030

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Projects in the 2017 TIP with Updated Conformity Analysis Years

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
Alameda	ALA170002	240318	ACTC	I-80/Ashby Avenue Interchange Improvements	Alameda County: I-80/Ashby IC: Reconstruct the interchange including constructing new bridge, two roundabouts and bike/ped improvements	2017 TIP Update - Amend a new project into the TIP with \$5.5M in FY19 PE Sales Tax, \$1.5M in FY19 ROW Sales Tax, \$4.0M in FY17 PE Sales Tax, and \$43.8M in FY21 CON RTP-LRP funds	EXEMPT (40 CFR 93.127) - Interchange reconfiguration projects	2030
Marin	MRN050001	21325	TAM	US 101 / Greenbrae Interchange Corridor Impts.	Marin: US 101 Greenbrae I/C Corridor Improvements: Sir Francis Drake To Tamalpais; Reconfigure interchange and close a gap in the non-motorized transportation network	2017 TIP Update - Update the funding plan to reprogram funds between years and phases	EXEMPT (40 CFR 93.126) - Bicycle and pedestrian facilities	2040
Multi-County	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	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2030
San Francisco	SF-130020	240309	SFMTA	SFMTA: Purchase 60 foot expansion motor coaches	SFMTA: Purchase 35 60 foot expansion motor coaches	2017 TIP Update - Retain this project in the TIP for informational purposes as it is ongoing	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minro expansions of the fleet	2030
San Mateo	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	2017 TIP Update - Update the fundign plan to reprogram all RTP-LRP to FY21	EXEMPT (40 CFR 93.126) - Construction or renovation of power, signal, and communications systems	2030
San Mateo	SM-010047	21606	Menlo Park	US 101 / Willow Road Interchange Reconstruction	Menlo Park: US 101 at Willow Road Interchange; Reconstruct and reconfigure interchange (No additional travel lanes).	2017 TIP Update - Update the project sponsor to Menlo Park and update the funding plan to reprogram \$4.32M in FY18 RIP from CON to CON-CE, change the source for \$5.8M in FY18 CON funds from RIP	EXEMPT (40 CFR 93.127) - Changes in vertical and horizontal alignment	2030
San Mateo	SM-170001	240114	San Mateo Co	Hwy 1 Congestion throughput and safety improvement	In San Mateo County along 7 miles of Highway 1 between Pacifica in the north and Half Moon Bay in the south; Install raised medians, left turn lanes, acceleration lanes, and pedestrian crossings.	2017 TIP Update - Amend a new exempt project into the TIP with \$1.0M in FY17 ENV Local Sales Tax, \$500K in FY17 PE Local Sales Tax, \$5.5M in FY21 CON RTP-LRP, and \$150K in FY17 ENV Local funds	EXEMPT (40 CFR 93.127) - Intersection channelization projects	2030
Sonoma	SON070026	22490	Sonoma County	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	2017 TIP Update - Update the funding plan to reprogram \$3.3M in CON HBP from FY20 to FY21	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2030
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)	2017 TIP Update	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2030
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 sesimic deficiencies with	2017 TIP Update - Update the funding plan to remove \$57K in FY12 PE Other Local	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2030
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	2017 TIP Update	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2030

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Projects in the 2017 TIP with Updated Conformity Analysis Years

County	TIP ID	RTP ID	Sponsor	Project Title	Project Description	Description of Change	Air Quality Description	Conformity Analysis Year*
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	2017 TIP Update	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature	2030

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Appendix B
List of Projects in the Amended Plan Bay Area

**List of Projects in Plan Bay Area
(sorted by County, then by Reference Number)**

County	Reference Number	Investment Type	Project Description	Complete and Operational By:			2017 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	Committed	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 (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	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	Yes
Bay Area Region/Multi-County	22001	Committed	Implement Sonoma-Marin Area Rail Transit District (SMART) Commuter Rail and Multi-Use Pathway Project (Initial Operating Segment)	Y			Y	Yes
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		Yes
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	New Commitment	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	Yes
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	

**List of Projects in Plan Bay Area
(sorted by County, then by Reference Number)**

County	Reference Number	Investment Type	Project Description	Complete and Operational By:			2017 TIP	Regionally Significant
				2020	2030	2040		
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	
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	Yes
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	New Commitment	Extend I-880 northbound express lanes from north of Hacienda Avenue to Hegenberger Road (included under MTC Regional Express Lane Network RTPID #240741)		Y			Yes
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		

**List of Projects in Plan Bay Area
(sorted by County, then by Reference Number)**

County	Reference Number	Investment Type	Project Description	Complete and Operational By:			2017 TIP	Regionally Significant
				2020	2030	2040		
Bay Area Region/Multi-County	230290	New Commitment	Implement Transbay Transit Center/Caltrain Downtown Extension (Phase 2 - Caltrain Downtown Extension)		Y		Y	Yes
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 has 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	Committed	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			Yes
Bay Area Region/Multi-County	230657	Committed	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			Yes
Bay Area Region/Multi-County	230658	Committed	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			Yes
Bay Area Region/Multi-County	230659	Committed	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	Yes
Bay Area Region/Multi-County	230660	Committed	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			Yes
Bay Area Region/Multi-County	230666	Committed	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	Yes
Bay Area Region/Multi-County	230668	Committed	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			Yes
Bay Area Region/Multi-County	230672	Committed	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	Committed	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	Committed	Widen I-580/I-680 interchange in each direction for express lanes (included under MTC Regional Express Lane Network RTPID #240741)				Y	Yes

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County	Reference Number	Investment Type	Project Description	Complete and Operational By:			2017 TIP	Regionally Significant
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Bay Area Region/Multi-County	230685	Committed	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	Yes
Bay Area Region/Multi-County	230686	Committed	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		Yes
Bay Area Region/Multi-County	230687	Committed	Widen I-680/I-80 interchange in each direction for express lanes (included under MTC Regional Express Lane Network RTPID #240741)			Y	Y	Yes
Bay Area Region/Multi-County	230712	Committed	Golden Gate Bridge Suicide Barrier - project development			Y		
Bay Area Region/Multi-County	230716	New Commitment	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	Committed	Widen I-680 northbound for express lane from Route 84 to Alcosta Boulevard (included under MTC Regional Express Lane Network RTPID #240741)		Y			Yes
Bay Area Region/Multi-County	240061	Committed	Widen I-680 southbound for express lane from Alcosta Boulevard to Route 84 (included under MTC Regional Express Lane Network RTPID #240741)	Y				Yes
Bay Area Region/Multi-County	240140	Committed	Implement Caltrain at-grade crossing improvements	Y				
Bay Area Region/Multi-County	240581	Committed	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	Yes
Bay Area Region/Multi-County	240583	Committed	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			Yes
Bay Area Region/Multi-County	240587	Committed	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			Yes
Bay Area Region/Multi-County	240588	Committed	Widen I-680 southbound for express lanes from Marina Vista Avenue to Livorna Road (included under MTC Regional Express Lane Network RTPID #240741)		Y			Yes
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	Y	

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Bay Area Region/Multi-County	240732	New Commitment	Regional Express Lane Network Grant Funding (included under MTC Regional Express Lane Network RTPID #240741)			Y		
Bay Area Region/Multi-County	240733	Committed	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	Committed	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	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		Yes
Bay Area Region/Multi-County	240741	New Commitment	MTC Regional Express Lane Network			Y	Y	Yes
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	New Commitment	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	Y	
Bay Area Region/Multi-County	240758	Committed	Richmond-San Rafael Bridge Access Improvement Project	Y			Y	Yes
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			Yes
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				

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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		Yes
Alameda	21131	Committed	Build a BART Oakland Airport Connector between Coliseum BART station and Oakland International Airport	Y			Y	Yes
Alameda	21132	Committed	Extend BART from Fremont to Warm Springs	Y			Y	Yes
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	Yes
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	
Alameda	22013	Committed	Construct I-580 eastbound truck climbing lane at the Altamont Summit	Y				
Alameda	22062	New Commitment	Construct Irvington BART Station in Fremont		Y			Yes
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	Yes
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	Yes
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			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	Yes
Alameda	22779	New Commitment	Improve Route 262/I-880 interchange (Phase 2), which involves grade separation at Warren Avenue/Union Pacific Rail Road	Y				Yes
Alameda	22780	New Commitment	Implement AC Transit Grand-MacArthur Bus Rapid Transit (BRT)	Y				Yes
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	

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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	Yes
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	Yes
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	
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	Yes
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			Yes
Alameda	230114	New Commitment	Widen Auto Mall Parkway from 4-lanes to 6-lanes between I-680 and I-880	Y				Yes
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			Yes
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	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				Yes
Alameda	240024	New Commitment	Implement Oakland Army Base infrastructure improvements (includes reconstructing Maritime Street, realigning Burma Road and Wake Avenue)	Y			Y	

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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 Doughery Road from 4-lanes to 6-lanes between Sierra Lane and North City Limit	Y			Y	Yes
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				Yes
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	Yes
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				Yes
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		Yes
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			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	Yes
Alameda	240254	New Commitment	Widen Greenville Road from 2-lanes to 4-lanes between I-580 and Patterson Pass Road	Y				Yes
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				

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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				Yes
Alameda	240264	New Commitment	Widen Fremont Boulevard to 6-lanes and 2-bike lanes from Grimmer Boulevard to I-880	Y				Yes
Alameda	240272	New Commitment	Widen Thornton Avenue from 2-lanes to 4-lanes between Gateway Boulevard and Hickory Street			Y		Yes
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	Committed	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	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	Yes
Alameda	240683	Committed	Expand Alamo Canal Trail from Dublin to Pleasanton	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		
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				Yes

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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	Yes
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	Yes
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	Yes
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	Yes
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				Yes
Contra Costa	22351	Committed	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	Yes
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	Yes
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	Yes
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	
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		
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	Y	

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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	Yes
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			Yes
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 addiitonal 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				
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	
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				
Contra Costa	230233	New Commitment	Extend James Donlon Boulevard to Kirker Pass Road by constructing a new 2-lane expressway		Y		Y	Yes
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	Yes
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				

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Contra Costa	230247	New Commitment	Widen Lone Tree Way to 6-lanes from O'Hara Avenue to Brentwood Boulevard	Y				Yes
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	Replace the old 2-lane Fitzgibbon 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				Yes
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	Yes
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-rapid transit service in select corridors in Contra Costa County	Y				Yes
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	
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				Yes
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	Yes
Contra Costa	240333	New Commitment	Replace CCCTA existing diesel trolley fleet with electric trolleys and necessary infrastructure	Y				

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County	Reference Number	Investment Type	Project Description	Complete and Operational By:			2017 TIP	Regionally Significant
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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				Yes
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				Yes
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	Yes
Contra Costa	240637	New Commitment	Enhance streetscape on 23rd Street in Richmond to encourage bicycle and pedestrian use	Y				
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 Stage 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	Yes
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 Terminal 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		

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Marin	240678	New Commitment	Implement bicycle and pedestrian improvements countywide including Safe Routes to School elements			Y	Y	
Marin	240691	New Commitment	Marin Sonoma Narrows HOV Lane and corridor improvements			Y		Yes
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	Y	
Marin	240723	New Commitment	Transit operations and maintenance			Y	Y	
Marin	240724	New Commitment	Transit Capital			Y	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			Y	
Napa	94073	New Commitment	Construct new southbound Route 221 to southbound Route 29 flyover, including auxiliary lane to Route 12/Route 29			Y	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			Y	
Napa	230392	New Commitment	Extend Devlin Road from Airport Boulevard to Green Island Road	Y			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			Yes
Napa	230518	New Commitment	Improve intersection at Petrified Forest Road/Route 128	Y			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	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			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	New Commitment	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	Yes
San Francisco	21549	New Commitment	Implement Bayview Transportation Improvements		Y		Y	
San Francisco	22415	New Commitment	Extend historic streetcar service from Fort Mason along Fisherman's Wharf to Caltrain Station		Y		Y	Yes
San Francisco	22512	Committed	Provide capital improvements to support ferry service between Treasure Island to San Francisco	Y			Y	Yes
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	Yes
San Francisco	230164	New Commitment	Implement Bus Rapid Transit (BRT) on Geary Boulevard from Van Ness Avenue to 33rd Avenue		Y		Y	Yes
San Francisco	230490	New Commitment	Re-build and widen Harney Way to 8-lanes		Y		Y	Yes
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	Yes
San Francisco	240155	New Commitment	Implement Better Market Street - Transportation Elements		Y		Y	Yes

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San Francisco	240158	New Commitment	Implement EN TRIPS Circulation & Streetscape Improvement Projects - Phase 1 Transportation Improvements without Transit Effectiveness Project Recommended	Y				
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	Yes
San Francisco	240182	New Commitment	Implement BART Metro Program in San Francisco			Y	Y	Yes
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	Yes
San Francisco	240334	New Commitment	Construct Southern Intermodal Terminal and extend MUNI T-Line from Bayshore/Sunnydale to Caltrain Bayshore Station		Y			Yes
San Francisco	240344	New Commitment	Expand Sfpark	Y			Y	
San Francisco	240349	New Commitment	Widen I-280/Mariposa off-ramp	Y				Yes
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	Yes
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	
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		

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San Francisco	240544	New Commitment	Implement San Francisco's Lifeline Transportation program			Y	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	Yes
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	Yes
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	Yes
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	Yes
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	Yes
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	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	Yes
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	Yes
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				Yes
San Mateo	22227	New Commitment	Construct a 6-lane arterial from Geneva Avenue/Bayshore Boulevard intersection to U.S. 101/Candlestick Point interchange	Y				Yes
San Mateo	22229	Committed	Reconstruct U.S. 101/Sierra Point Parkway interchange (includes extension of Lagoon Way to U.S. 101)		Y			Yes
San Mateo	22230	New Commitment	Add auxiliary lane in each direction on I-280 between Westborough and Hickey Boulevard		Y			Yes
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		Yes
San Mateo	22271	New Commitment	Widen Skyline Boulevard (Route 35) to 4-lane roadway from I-280 to Sneath Lane		Y			Yes
San Mateo	22274	New Commitment	Install an Intelligent Transportation System (ITS) and a Traffic Operation System countywide			Y	Y	

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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				Yes
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	Yes
San Mateo	98204	New Commitment	Construct Route 1 (Calera Parkway) northbound and southbound lanes from Fassler Avenue to Westport Drive in Pacifica		Y		Y	Yes
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				
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				
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				Yes
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			Yes
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	Y	
San Mateo	240087	New Commitment	Implement non-capacity Increasing local road Intersection modifications and channelization countywide			Y		
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				Yes
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		Yes
San Mateo	240161	New Commitment	Provide overcrossing at I-280/John Daly Boulevard		Y			Yes
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				Yes
San Mateo	240176	Committed	Widen Triton Drive between Foster City Boulevard and Pilgrim Drive	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	Y	

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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				Yes
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	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	Yes
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	Yes
Santa Clara	22010	New Commitment	Construct second exit lane on I-280 to Foothill Expressway	Y				Yes
Santa Clara	22118	New Commitment	Extend Hill Road from East Main Avenue to Peet Avenue		Y			Yes
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				Yes
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			Yes
Santa Clara	22179	New Commitment	Widen Central Expressway from 4-lanes to 6-lanes between Lawrence Expressway and San Tomas Expressway		Y			Yes
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	Yes
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	Committed	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			Yes
Santa Clara	22845	New Commitment	Construct auxiliary lane on southbound U.S. 101 from Ellis Street to eastbound Route 237	Y				Yes
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			

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County	Reference Number	Investment Type	Project Description	Complete and Operational By:			2017 TIP	Regionally Significant
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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	Yes
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		Y	
Santa Clara	98119	Committed	Extend high-rail transit from Winchester Station to Route 85 (Vasona Junction)			Y	Y	Yes
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	Yes
Santa Clara	230210	New Commitment	Rehabilitate San Tomas Expressway Box Culvert	Y			Y	
Santa Clara	230234	New Commitment	Realign Marcella Avenue		Y			
Santa Clara	230235	New Commitment	Extend Center Avenue to Marcella Avenue (includes constructing a bridge over Llagas Creek)		Y			Yes
Santa Clara	230242	New Commitment	Implement Capitol Expressway Traffic Operations System (TOS)	Y			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		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	Yes
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	Conduct environmental and design studies to widen and create new alignment for Route 152 (from Route 156 to U.S. 101)		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			Yes
Santa Clara	230410	New Commitment	Construct auxiliary lane on southbound U.S. 101 from Great America Parkway to Lawrence Expressway	Y				Yes
Santa Clara	230411	New Commitment	Construct auxiliary lane on eastbound Route 237 from Mathilda Avenue to Fair Oaks Avenue	Y				Yes
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	Yes

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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		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				Yes
Santa Clara	230466	New Commitment	Construct Caltrain grade separation at Branham Lane	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				
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	Yes
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	Yes
Santa Clara	240159	Committed	Implement King Road Rapid Transit Project	Y				Yes
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				
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				Yes
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				Yes
Santa Clara	240403	New Commitment	Widen Dixon Landing Road from 4-lanes to 6-lanes between North Milpitas Boulevard and I-880	Y				Yes
Santa Clara	240404	New Commitment	Widen Calaveras Boulevard overpass from 4-lanes to 6-lanes		Y		Y	Yes
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				Yes
Santa Clara	240411	New Commitment	Implement improvements on Santa Teresa Boulevard between Main Avenue and DeWitt Avenue	Y				

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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				Yes
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	
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	New Commitment	Implement sidewalk and pedestrian enhancements on Saratoga Avenue			Y		
Santa Clara	240436	New Commitment	Improve southbound U.S. 101 between San Antonio Road to Carlestone Road/Rengstorff Avenue			Y		
Santa Clara	240439	Committed	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	Yes
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	Yes
Santa Clara	240463	Committed	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	Yes
Santa Clara	240464	Committed	Convert Route 87 HOV lanes to express lanes between Route 85 and U.S. 101 (included under VTA Express Lane Network RTPID #240742)	Y				Yes
Santa Clara	240466	Committed	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	Yes
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		Yes
Santa Clara	240469	Committed	Implement express lanes on Route 17 between I-280 and Route 85 (included under VTA Express Lane Network RTPID #240742)		Y			Yes
Santa Clara	240470	New Commitment	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	Committed	Implement express lanes on Route 237 between Mathilda Avenue to Route 85 (included under VTA Express Lane Network RTPID #240742)		Y		Y	Yes
Santa Clara	240481	Committed	Convert Route 237 HOV lanes to express lanes between North First Street to Mathilda Avenue (included under VTA Express Lane Network RTPID #240742)	Y				Yes
Santa Clara	240482	Committed	Implement express lanes on I-680 from Calaveras Boulevard to Montague Expressway (included under VTA Express Lane Network RTPID #240742)	Y				Yes
Santa Clara	240484	Committed	Implement express lanes on I-880 between the Alameda County Line and U.S. 101; includes the extension of dual express lanes northbound I-880 between Route 237 and Mission Boulevard. (included under VTA Express Lane Network RTPID #240742)	Y				Yes
Santa Clara	240485	Committed	Implement express lanes on U.S. 101 between Cochrane Road and Masten Avenue (included under VTA Express Lane Network RTPID #240742)		Y			Yes
Santa Clara	240491	Committed	Implement express lanes on U.S. 101 between Masten Avenue and 10th Street (included under VTA Express Lane Network RTPID #240742)		Y			Yes
Santa Clara	240492	Committed	Implement express lanes on U.S. 101 between 10th Street and Route 25 (included under VTA Express Lane Network RTPID #240742)		Y			Yes

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Santa Clara	240494	New Commitment	Implement System Operations and Management Program for Santa Clara County			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	Y	
Santa Clara	240512	Committed	Implement Guadalupe Express light rail improvements			Y		Yes
Santa Clara	240513	Committed	Implement express lanes on I-280 between Leland Avenue and Magdalena Avenue (included under VTA Express Lane Network RTPID #240742)		Y			Yes
Santa Clara	240514	Committed	Implement express lanes on I-280 between US 101 and Leland Avenue (included under VTA Express Lane Network RTPID #240742)		Y			Yes
Santa Clara	240515	Committed	Implement express lanes on I-280 between southbound El Monte Road and Magdalena Avenue (included under VTA Express Lane Network RTPID #240742)		Y			Yes
Santa Clara	240516	Committed	Implement express lanes on I-680 between Montague Expressway and US 101 (included under VTA Express Lane Network RTPID #240742)		Y			Yes
Santa Clara	240517	Committed	Implement express lanes on I-880 between U.S. 101 and I-280 (included under VTA Express Lane Network RTPID #240742)		Y			Yes
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	Y	
Santa Clara	240519	Committed	Implement North First Street light rail speed Improvements			Y		Yes
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				Yes
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	New Commitment	Local streets and roads operations and maintenance			Y	Y	
Santa Clara	240742	Committed	VTA Express Lane Network			Y	Y	Yes
Solano	21341	Committed	Construct new Fairfield/Vacaville multimodal train station for Capitol Corridor intercity rail service (Phases 1, 2 and 3)		Y		Y	Yes
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	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		Y	
Solano	22985	Committed	Implement transit hub in the Benicia Industrial Park	Y			Y	Yes

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Solano	94151	New Commitment	Construct 4-lane Jepson Parkway from Route 12 to Leisure Town Road at I-80		Y		Y	Yes
Solano	98212	New Commitment	Expand bicycle and pedestrian facilities				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	Yes
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				
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			Yes
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				Yes
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	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	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	
Solano	240594	Committed	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	
Solano	240596	New Commitment	Conduct corridor studies of Solano highways and freeways and install non-ITS performance measures				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	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	Y
Solano	240609	New Commitment	Rehabilitate transit guideways (includes docking facilities and channel maintenance for WETA ferries)				Y	

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Solano	240610	Committed	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			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			Yes
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				Yes
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	
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	Widen U.S. 101 in each direction with 1 HOV lane from Old Redwood Highway to the Marin/Sonoma County line		Y		Y	Yes
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				Yes
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	Y	
Sonoma	240650	New Commitment	Enhance bus service frequencies in Sonoma County			Y	Y	

**List of Projects in Plan Bay Area
(sorted by County, then by Reference Number)**

County	Reference Number	Investment Type	Project Description	Complete and Operational By:			2017 TIP	Regionally Significant
				2020	2030	2040		
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			Yes
Sonoma	240672	Committed	Implement Marin Sonoma Narrows Stage 1 (Sonoma County)	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 C
Travel Forecasting Assumptions (Plan Bay Area 2040: Technical Summary
of Predicted Traveler Responses to Planning Scenarios)

Plan Bay Area 2040: Technical Summary of Predicted Traveler Responses to Planning Scenarios

Technical Paper

Metropolitan Transportation Commission

May 2016

[https://metrotrans-my.sharepoint.com/personal/dory_mtc_ca_gov/documents/2016/05/26/release/predicted traveler responses to planning scenarios.docx](https://metrotrans-my.sharepoint.com/personal/dory_mtc_ca_gov/documents/2016/05/26/release/predicted%20traveler%20responses%20to%20planning%20scenarios.docx)

1 Introduction

This technical paper presents selected 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) Plan Bay Area 2040 scenario planning effort. A brief overview of the technical methods used in the analysis as well as a brief description of the key assumptions made for each scenario precede the presentation of results.

For information regarding the broader Plan Bay Area 2040 effort, please see PlanBayArea.org.

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 below, along with the following two supporting tools: a population synthesizer and a vehicle emissions model.

Population Synthesizer

MTC's travel model is an agent-based simulation. The "agents" in our case 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 a setting described by the input land development patterns and input transportation projects and policies. In order to use this type of simulation, each agent must be characterized in a fair amount of detail.

Software that creates lists of households and persons for travel model simulations are known as population synthesizers. MTC's population synthesizer attempts to locate households described in the 2000 Decennial Census Public 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 sums more or less match those predicted by other Census summary tables (when synthesizing historical populations) or the land use projections made by our land use modeling tools/procedures (when forecasting populations). For example, if our land use tools project 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 the land use forecasts) along the following dimensions:

1. Household "type", i.e. individual household unit or non-institutionalized group quarters (e.g., college dorm);
2. Household income category;
3. Age of the 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 dwelling (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 0.5)*, released in January 2015, calibrated to year 2000 conditions and validated against year 2000, year 2005, and year 2010 conditions¹.

Travel Model One is of the so-called “activity-based” archetype. 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 include the simulation of *individual* behavior of passenger, commercial, and transit vehicles on roadways and transit facilities (the model system does simulate the behavior of *aggregations* of vehicles and transit riders). In regional planning work such as is 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 system 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”² 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 choices³ are as follows (organized sequentially):

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 in which to attend school).
2. Household automobile ownership – Each household, given its location and socio-demographics, as well as each member's 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.

¹ Additional information is available here: <http://analytics.mtc.ca.gov/foswiki/Main/Development>.

² An interactive map of these geographies is available here: <http://analytics.mtc.ca.gov/foswiki/Main/TravelModelOneGeographies>.

³ 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: https://en.wikipedia.org/wiki/Choice_modelling.

4. Work/school tour⁴ 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-mandatory⁵ 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 for the duration of the tour) 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 model – 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 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 *BA YCAST* or *BA YCAST-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

⁴ A “tour” is defined as a round trip from and back to either home or the workplace.

⁵ Travel modeling practice 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 as well to communicate efficiently with others in our space. We neither assume nor believe that all non-work/school-related travel is non-mandatory or optional.

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 (in deference to efficiency, the model must have boundaries) 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 journey-to-work flows (from the 2000 Decennial Census, specifically), which are allocated via 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 air passenger survey data collected in 2006 and planning information developed as part of MTC’s *Regional Airport Planning Study*⁶.

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 *EMFAC 2014* version of the California Air Resources Board emissions factor software⁷.

⁶ Additional information is available here: <http://mtc.ca.gov/our-work/plans-projects/economic-vitality/regional-airport-plan>.

⁷ Additional information is available here: <http://www.arb.ca.gov/msei/msei.htm>.

3 Input Assumptions

In total, six scenarios were simulated and selected results are presented and discussed in the remainder of the document. Two categories of scenarios are included: historical and forecast. The historical scenarios include simulations representing conditions in 2005 and 2010, labeled “Year 2005” and “Year 2010”, respectively. The historical scenarios are provided to give the reader data for a scenario for which they are at least somewhat familiar. In deference to brevity, the Year 2005 results are only presented for the Air Quality and Climate Implications results section. The four forecast scenarios are labeled “0 – No Project”, “1 – Main Streets”, “2 – Connected Neighborhoods”, and, “3 – Big Cities”. Forecast scenario results are presented for a year 2035 simulation.

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 is the physical network upon which automobiles, trucks, transit vehicles, bicycles, and pedestrian travel. Transit supply refers to the facilities upon which public transit vehicles travel (the roadway, along rail lines, ferry routes, and other dedicated infrastructure), as well as the stop locations, routes, and frequency of transit service. Prices include the monetary fees 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 are discussed, organized by the above four dimensions; additional notes on “other assumptions” concludes the section. This organization should allow the reader to compare the input assumptions across scenarios.

Land Use

Additional information regarding the land development patterns is available in the May MTC Planning Committee packet⁸. 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 the UrbanSim model (distribution details) are run through the MTC population synthesizer as described above. The journey from control totals through UrbanSim and the population synthesizer introduces very minor inconsistencies between the ABAG-estimated regional control totals, which are carried through UrbanSim, and the totals implied by the synthetic population. These inconsistencies are presented in Table 1 below.

⁸ Available here: <http://mtc.legistar.com/gateway.aspx?M=F&ID=a78d1547-7db3-4dd2-afdb-2d14fe3aec71.pdf>.

Table 1: Demographic Statistics of Control and Simulated Populations

Alternative	Year	Households				Population		
		ABAG Results Households	Group Quarters	Synthetic Populatio n	Percent Difference [†]	ABAG Results	Synthetic Population	Percent Difference
Historical	2010	2,609,000	126,478	2,718,166	-0.6%	7,155,830	7,077,656	-1.1%
0 –No Project	2035	3,271,577	166,554	3,415,226	-0.7%	9,113,526	9,038,334	-0.8%
1- Main Streets	2035	3,271,577	166,554	3,415,224	-0.7%	9,113,526	9,044,388	-0.8%
2 –Connected Neighborhoods	2035	3,271,577	166,554	3,415,224	-0.7%	9,113,526	9,045,838	-0.7%
3 –Big Cities	2035	3,271,577	166,554	3,415,228	-0.7%	9,113,526	9,039,892	-0.8%

[†] –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 population 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 Year 2010 scenario and the year 2035 scenarios. Note the growth in retirees and decline in unemployed adults in the forecast scenarios.

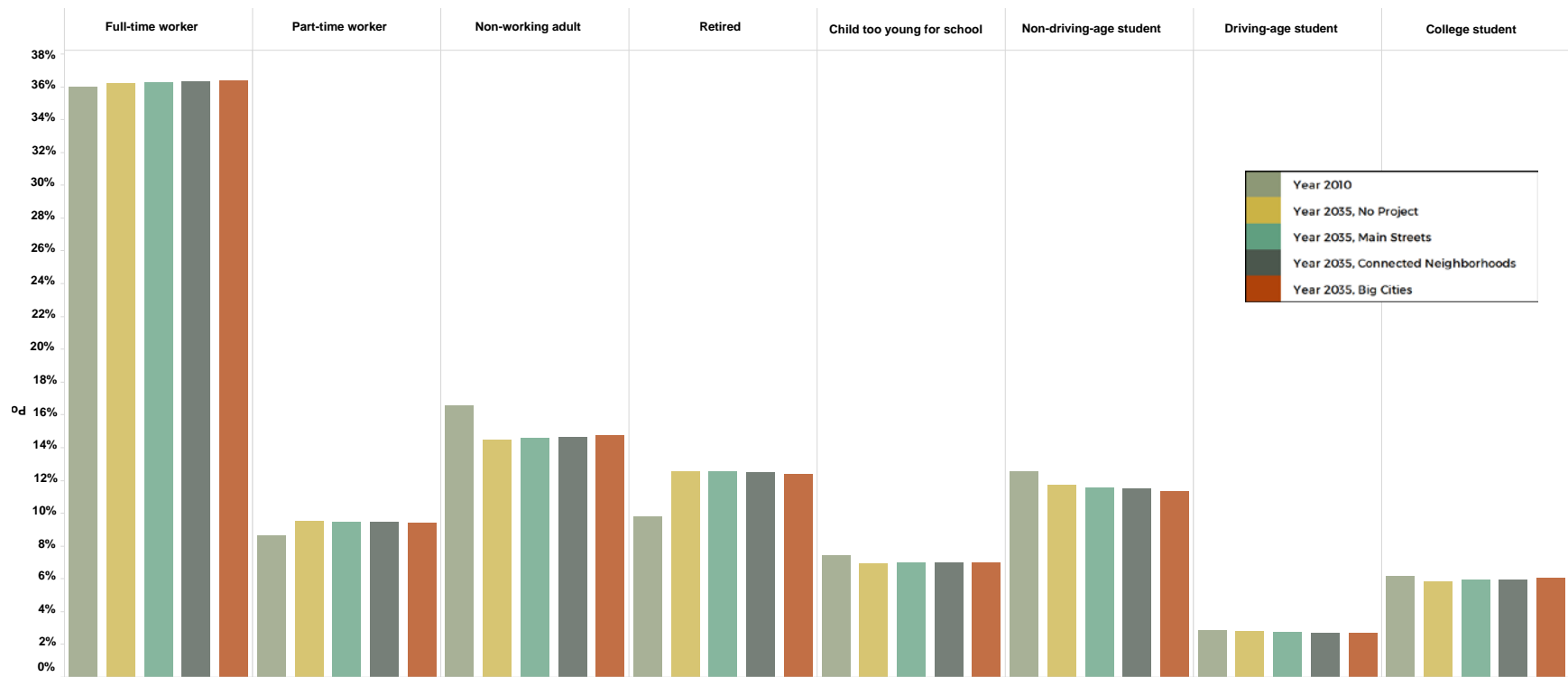


Figure 1: Person Type Distributions

Roadway Supply

The historical year 2010 scenario has a roadway network that represents the infrastructure in place in 2010.

The No Project scenario is the baseline network developed and used for the Plan Bay Area 2040 Project Performance Assessment⁹.

Various roadway projects, including express lanes, were added to the Main Streets, Connected Neighborhoods, and Big Cities networks in an attempt to respond to the changes in forecasted land development patterns. For additional details, please see the May MTC Planning Committee packet¹⁰.

A graphical depiction of the changes in the roadway network is presented in Figure 2 below. The chart shows the change in lane-miles (e.g., a one-mile segment on a four-lane road is four lane-miles) available to automobiles in simulation year 2035 relative to year 2010. In San Francisco, travel lanes are dedicated to transit vehicles in the forecast year, resulting in a reduction in lane-miles.

⁹ For additional information, please see

<http://metropolitantransportationcommission.github.io/performance/reference/>.

¹⁰ Available here: <http://mtc.legistar.com/gateway.aspx?M=F&ID=a78d1547-7db3-4dd2-afdb-2d14fe3aec71.pdf>.

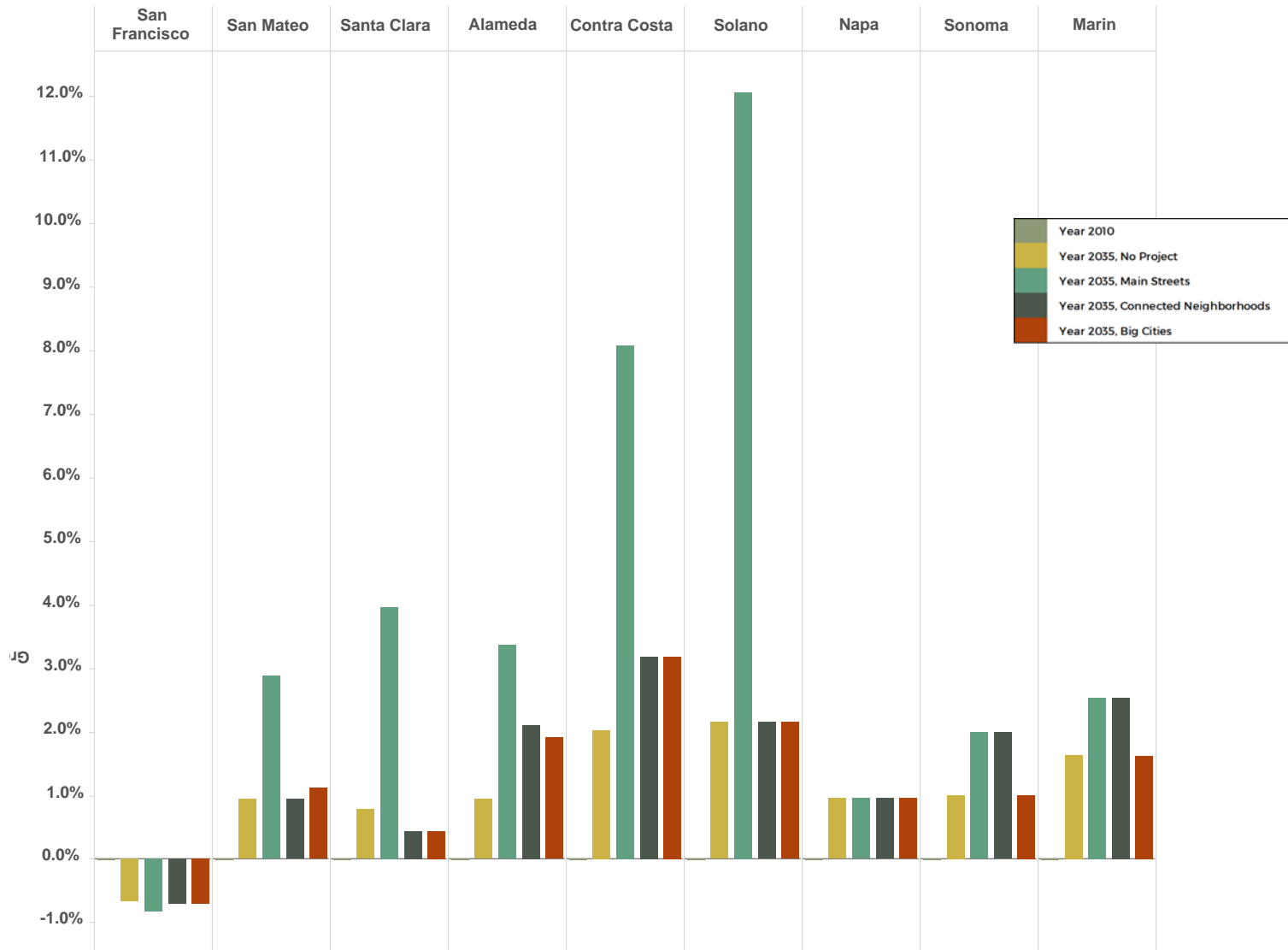


Figure 2: Change in Roadway Lane Miles from 2010

Transit Supply

The historical year 2010 scenario has a transit network that represents the infrastructure in place in 2010.

The No Project scenario is the baseline network developed and used for the Plan Bay Area 2040 Project Performance Assessment¹¹.

Various transit projects were added to the Main Streets, Connected Neighborhoods, and Big Cities networks in an attempt to respond to the changes in forecasted land development patterns. For additional details, please see MTC's May Planning Committee packet¹².

A graphical depiction of the changes in the roadway network is presented in Figure 3 below. The chart shows the change in passenger seat miles (e.g., a one-mile route segment with 20 passengers is 20 passenger seat miles) available to transit passengers in simulation year 2035 relative to year 2010.

¹¹ For additional information, please see <http://metropolitantransportationcommission.github.io/performance/reference/>.

¹² Available here: <http://mtc.legistar.com/gateway.aspx?M=F&ID=a78d1547-7db3-4dd2-afdb-2d14fe3aec71.pdf>.

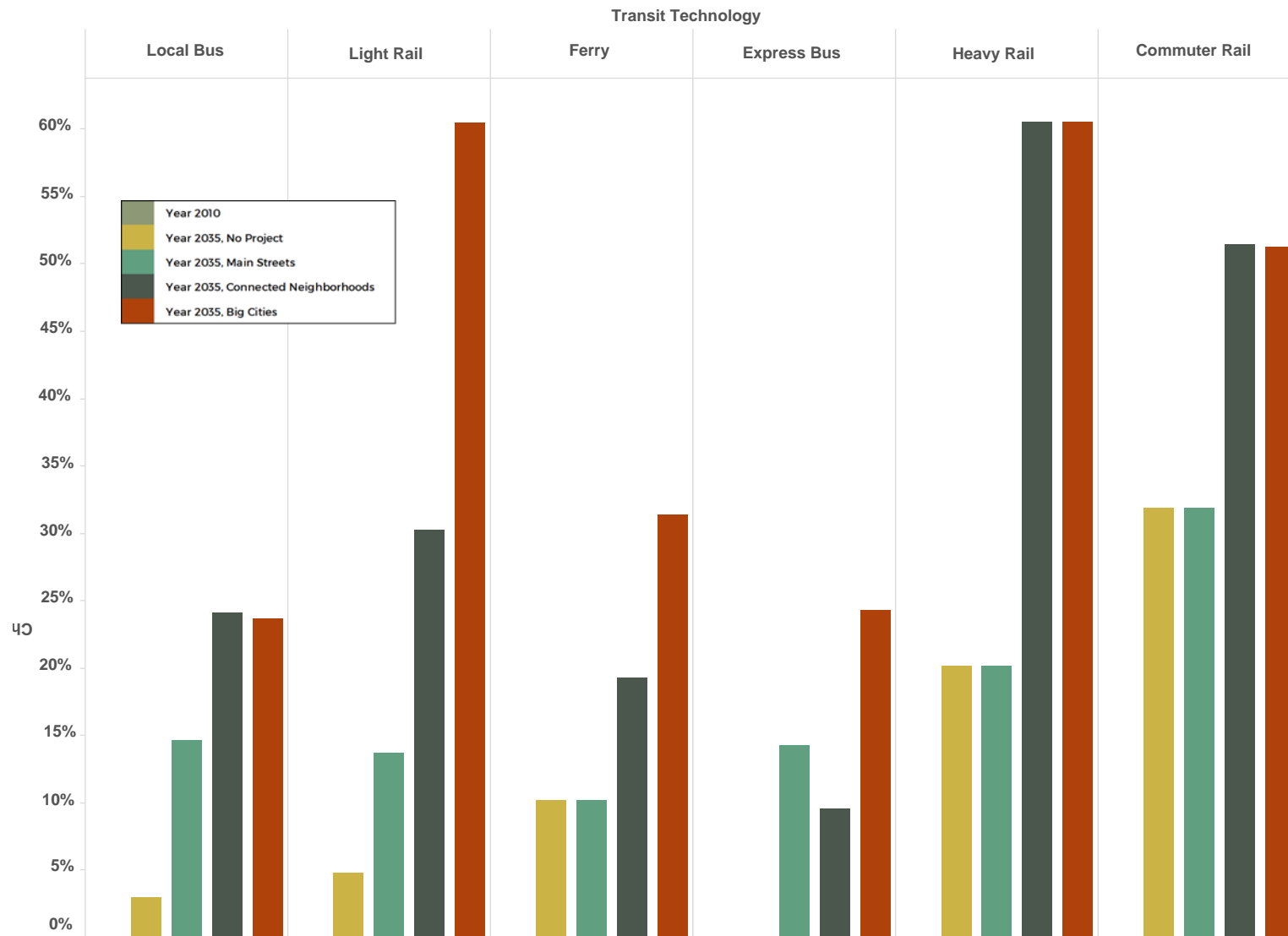


Figure 3: Change in Transit Passenger Seat Miles from Year 2010

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, 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 facilitate easy understanding of the prices, and 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) parking fees; (v) perceived automobile operating cost and gas taxes; 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 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 4). 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 scenarios.

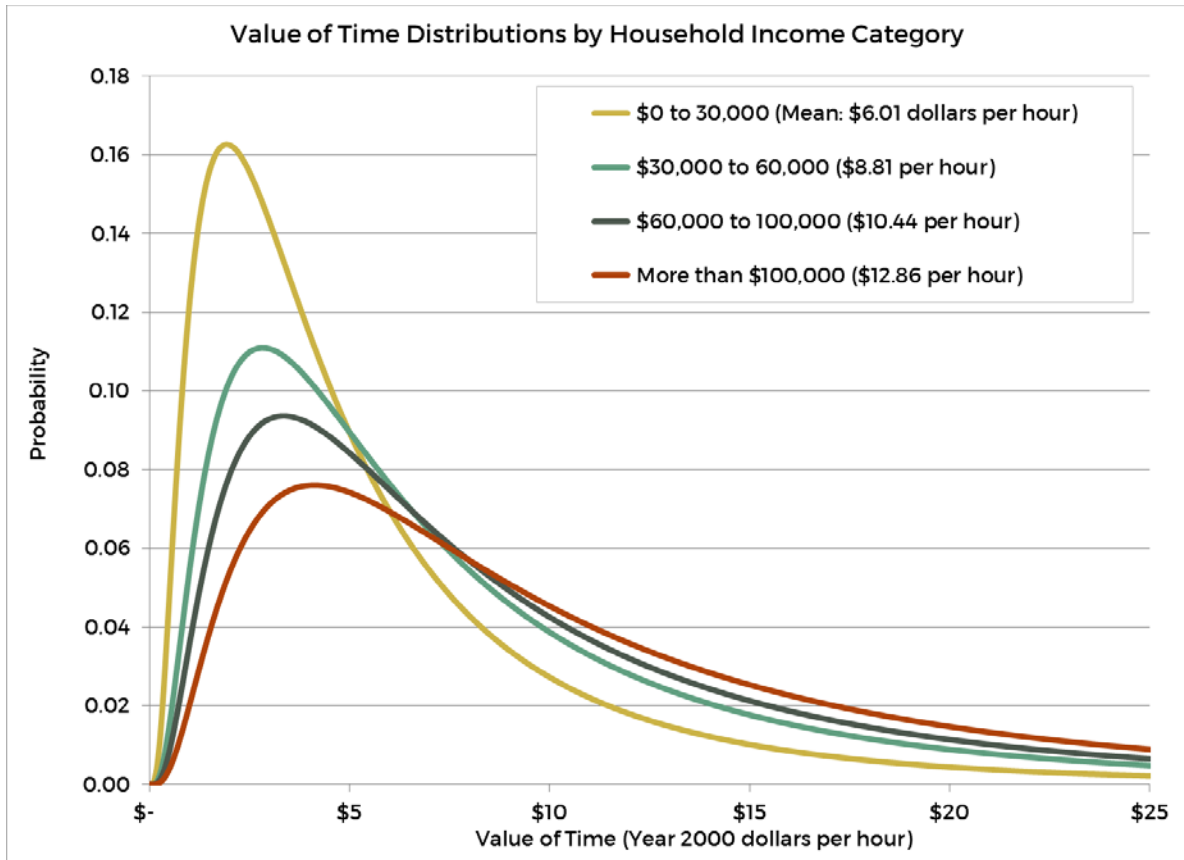


Figure 4: Value of Time Distribution by Household Income (Year 2000 dollars)

Bridge Tolls

The bridge tolls assumed in the year 2010 baseline scenario are shown below in Table 2. Please note that Table 2 includes the price of tolls in year 2010 expressed in both year 2000 and year 2015 dollars.

The No Project scenario assumes the toll schedule in place as of July 1, 2012. This schedule is consistent with the year 2010 tolls presented in Table 2, though there are differences in the tolls for multi-axle vehicles, which are not shown in Table 2¹³.

The bridge tolls assumed in Main Streets, Connected Neighborhoods, and Big Cities are summarized in Table 3. Again, the price of tolls in year 2035 are expressed in year 2000 and year 2015 dollars.

¹³ Complete details are available here: <http://bata.mtc.ca.gov/getting-around#/>.

Table 2: Year 2015 Common Peak Period Bridge Tolls[†]

Bridge	2-axle, single occupant toll		2-axle, carpool* toll	
	\$2000	\$2015	\$2000	\$2015
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	\$4.02	\$5.00	\$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).

Table 3: Year 2035 Common Peak Period Bridge Tolls for Scenarios 1, 2, and 3[†]

Bridge	2-axle, single occupant toll		2-axle, carpool* toll	
	\$2000	\$2015	\$2000	\$2015
San Francisco/Oakland Bay Bridge	\$5.72	\$8.00	\$2.86	\$4.00
Antioch Bridge	\$5.01	\$7.00	\$2.50	\$3.50
Benicia/Martinez Bridge	\$5.01	\$7.00	\$2.50	\$3.50
Carquinez Bridge	\$5.01	\$7.00	\$2.50	\$3.50
Dumbarton Bridge	\$5.01	\$7.00	\$2.50	\$3.50
Richmond/San Rafael Bridge	\$5.01	\$7.00	\$2.50	\$3.50
San Mateo Bridge	\$5.01	\$7.00	\$2.50	\$3.50
Golden Gate Bridge	\$4.47	\$6.25	\$3.04	\$4.25

[†] – 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).

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 segment the express lane network in the scenarios into logical segments, with each segment

receiving a time-of-day-specific per mile fee. To illustrate the detail involved in this coding, Figure 5, Figure 6, and Figure 7 (abstractly) present the morning commute period price for the year 2035 simulations. Please note that the simulated prices are not perfectly 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 a higher toll than those simulated in the model.

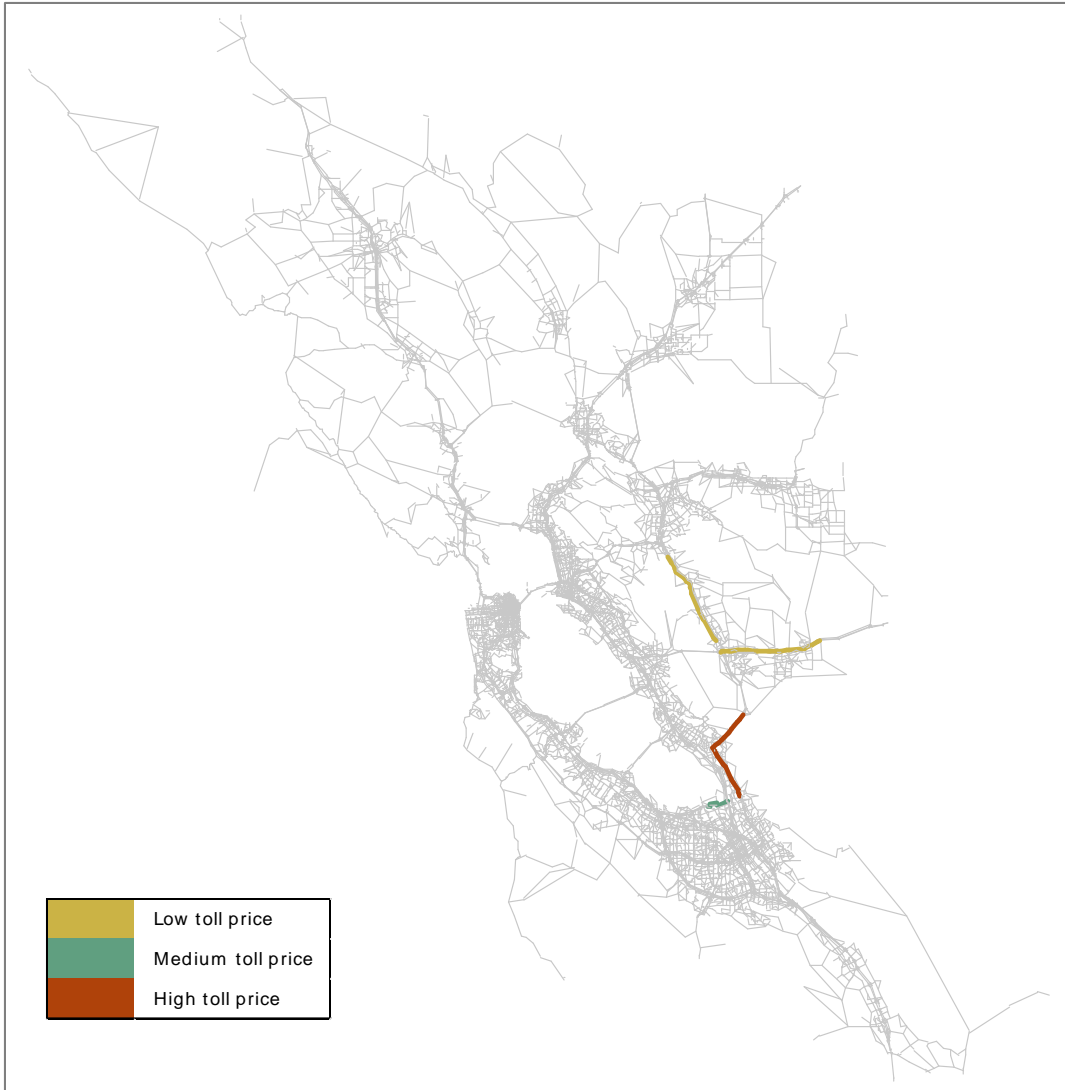


Figure 5: Morning Commute Express Lane Prices for Scenario 0 - No Project and Scenario 2 – Connected Neighborhoods

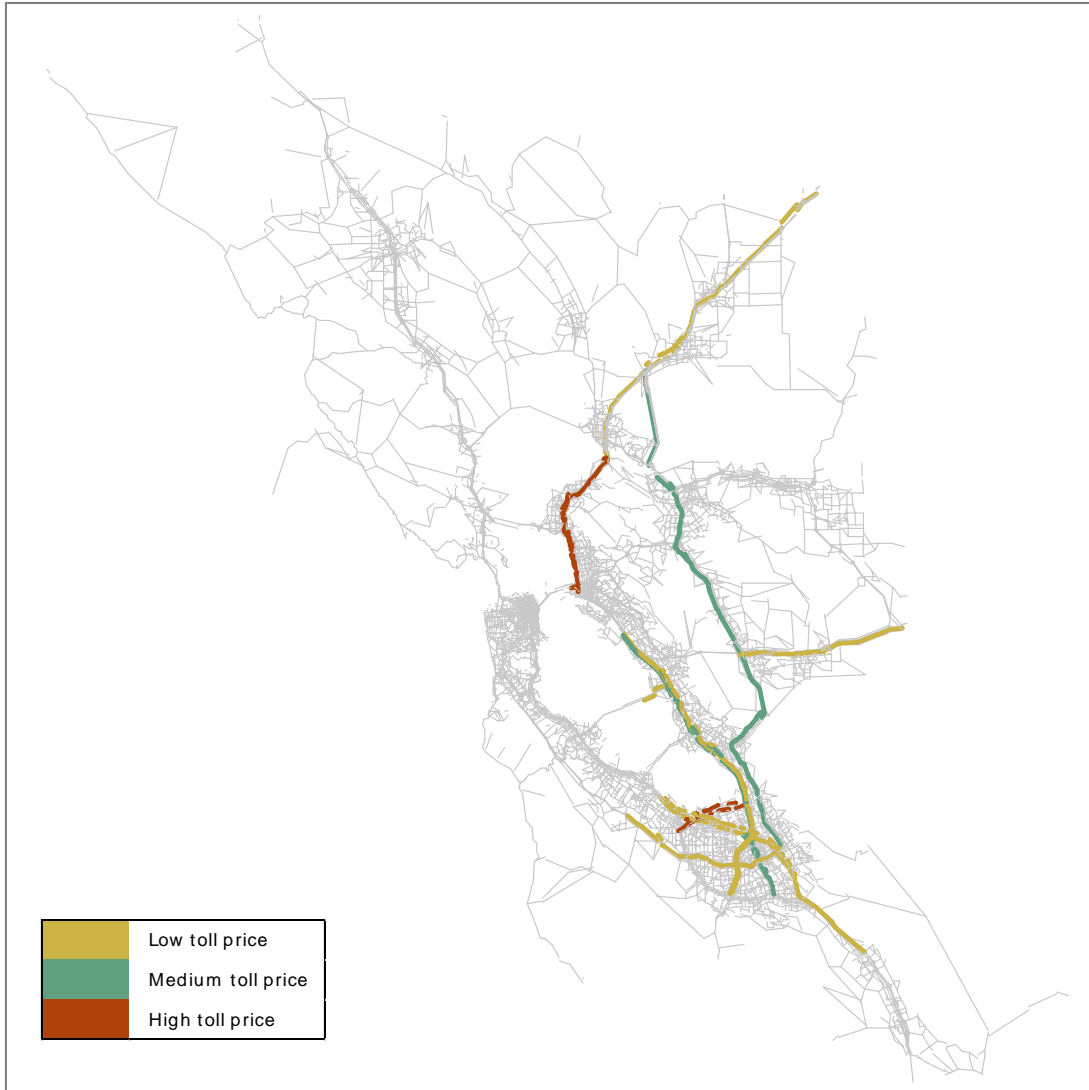


Figure 6: Morning Commute Express Lane Prices for Scenario 1- Main Streets

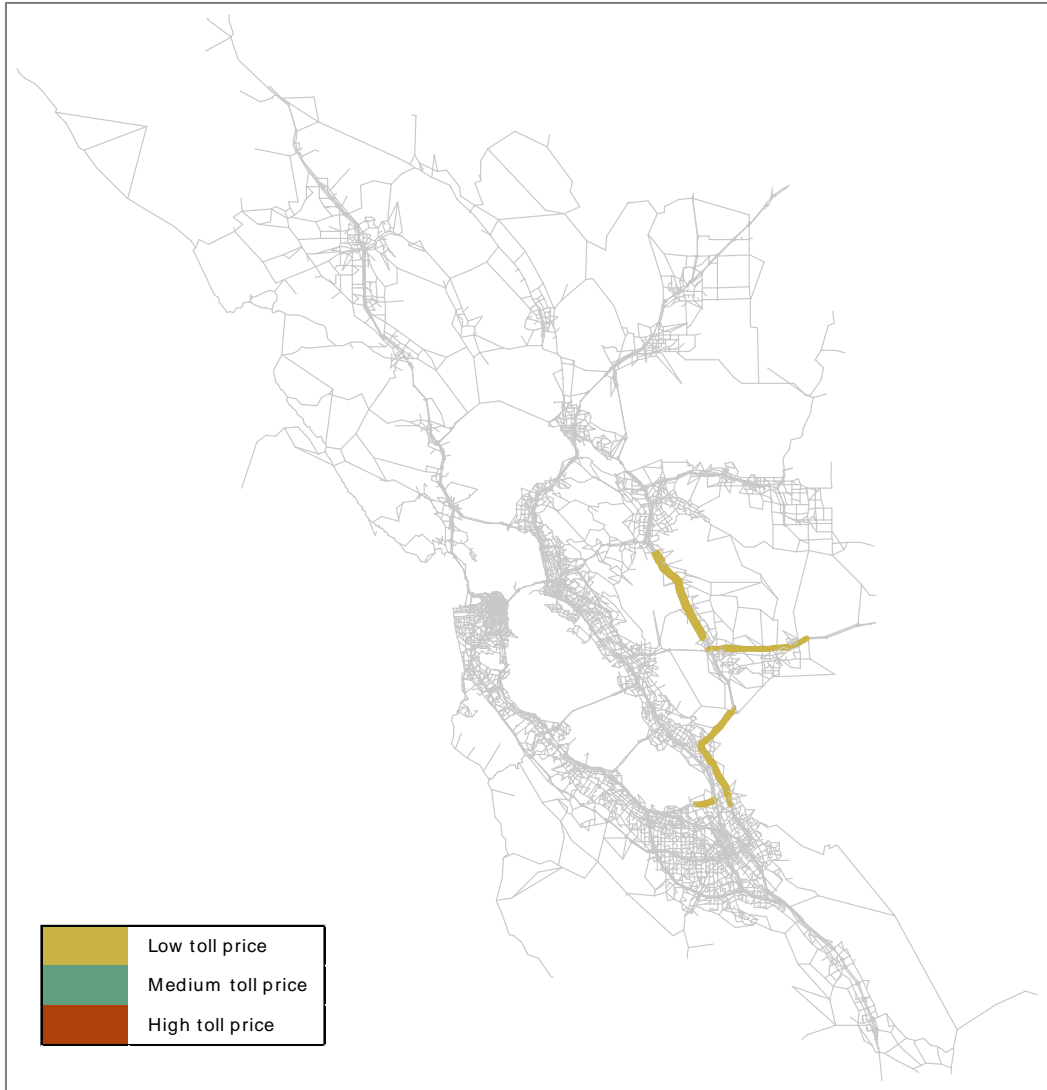


Figure 7: Morning Commute Express Lane Prices for Scenario 3 - Big Cities

Transit Fares

The forecast year transit networks pivot off a year 2015 baseline network, i.e. the alternatives begin with 2015 conditions and add/remove service to represent the various alternatives. The transit fares in 2015 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 4 includes fare prices in year 2015 expressed in both year 2000 and year 2015 dollars (i.e., the table does *not* include information about the cost of taking transit in the year 2000).

Table 4: Year 2015 Common Transit Fares

Operator	Base fare	
	\$2000	\$2015
San Francisco Municipal Transportation Agency (Muni)	\$1.57	\$2.25
Alameda/Contra Costa Transit (AC Transit) –Local buses	\$1.47	\$2.10
Santa Clara Valley Transportation Authority (VTA) –Local buses	\$1.40	\$2.00
Santa Clara Valley Transportation Authority (VTA) –Express buses	\$2.80	\$4.00
San Mateo County Transit (Sam Trans) –Local buses	\$1.40	\$2.00
Golden Gate Transit –Marin County to San Francisco Service	\$3.67	\$5.25
County Connection (CCCTA)	\$1.40	\$2.00
Tri-Delta Transit	\$1.40	\$2.00
Livermore Amador Valley Transit Authority (Wheels, LAVTA)	\$1.40	\$2.00

Note: this is a sample, rather than an exhaustive list, of Bay Area transit providers and fares.

Parking Prices

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

Appendix D
List of Transportation Control Measures (TCM) Projects

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.

When forecasting, we assume that parking prices change over time per a simple model: parking cost increases linearly with employment density. Across the scenarios, therefore, the parking charges vary with employment density.

Perceived Automobile Operating Cost and Gas 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 regional planning efforts across the state, the Regional Targets Advisory Committee (formed per 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 2013 (and expressed in year 2010 dollars), the MPOs agreed¹⁴ to procedures to consistently estimate forecast year fuel and non-fuel-related prices. The average fleet-wide fuel economy implied by the *EMFAC 2014* software is used to represent the average fleet-wide fuel economy. A summary of our assumptions are presented below in Table 5. Note that the prices in Table 5 are presented in year 2015 (i.e., current year) dollars, year 2010 dollars (the units used in the above referenced documentation), and year 2000 dollars (units of the travel model).

In all of the year 2035 scenarios save the No Project, a regional gas tax of 10 cents per gallon (\$2015 dollars) is assumed.

¹⁴ Please see the memorandum titled "Automobile Operating Cost for the Second Round of Sustainable Communities Strategies" dated August 27, 2014.

Table 5: Perceived Automobile Operating Cost Calculations

Measure	Analysis Year	
	2010	2035
Average fuel price (Year 2000 dollars per gallon)	\$2.51	\$3.86
Average fuel price (Year 2010 dollars per gallon)	\$3.17	\$4.87
Average fuel price (Year 2015 dollars per gallon)	\$3.61	\$5.54
EMFAC-implied fuel economy (miles per gallon)	20.10	40.36
Non-fuel-related operating cost (\$2000 per mile)	\$0.04	\$0.07
Non-fuel-related operating cost (\$2010 per mile)	\$0.05	\$0.09
Non-fuel-related operating cost (\$2015 per mile)	\$0.06	\$0.10
Perceived automobile operating cost (\$2000 per mile) [†]	\$0.17	\$0.17
Perceived automobile operating cost (\$2010 per mile) [†]	\$0.21	\$0.21
Perceived automobile operating cost (\$2015 per mile) [†]	\$0.24	\$0.24

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

Cordon Tolls

The Connected Neighborhoods and Big Cities scenarios include a cordon toll in San Francisco. The scheme requires all vehicles to pay a \$6.00 (\$2015) fee to enter or leave the greater downtown San Francisco area during the evening commute period. 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 East.

Other Key Assumptions

Technology currently allows large numbers of Bay Area residents to work at home. In the forecast years, MTC assumes the trend of workers working at home revealed in Census data from 1980 through 2014 will continue through 2040. Figure 8 presents the historical data, the trend, and the MTC forecasts. These telecommuting assumptions are the same across all year 2035 scenarios, including the No Project.

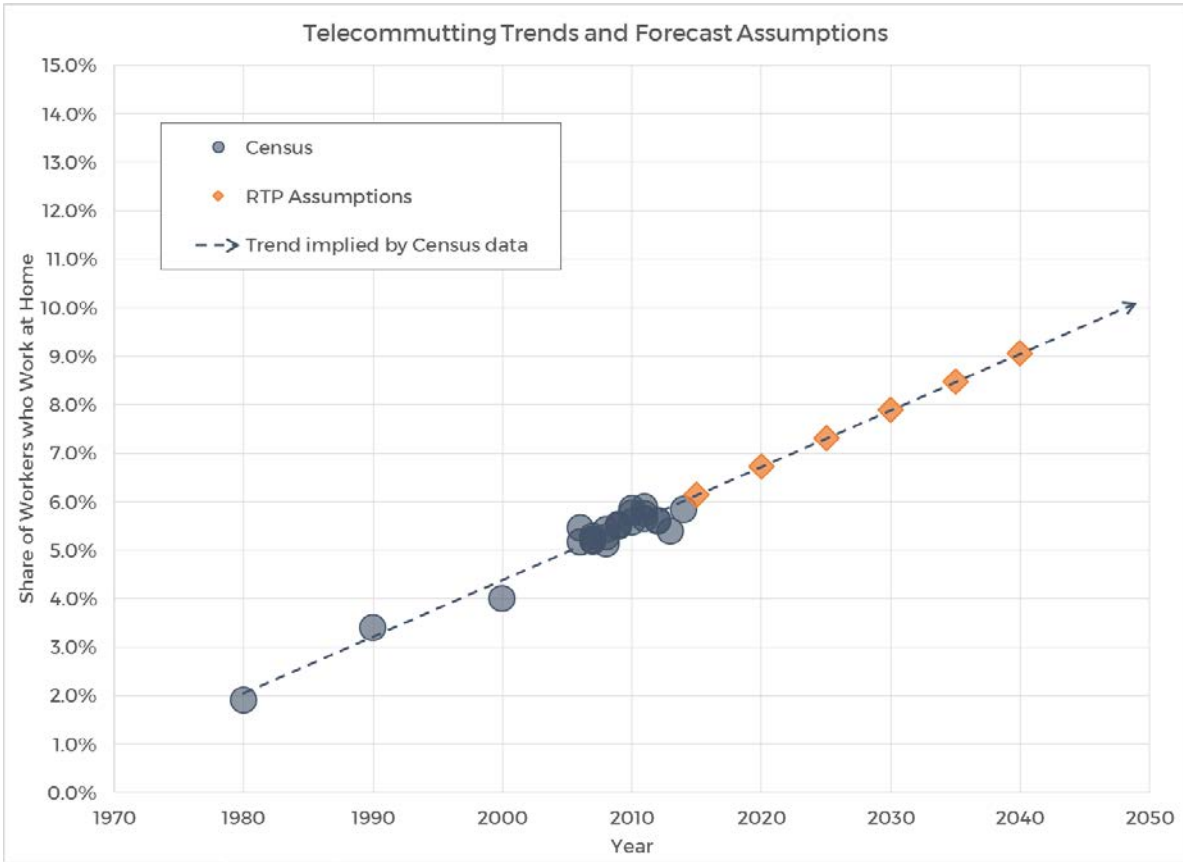


Figure 8: Work at Home Observations, Trends, and Forecasts

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 scenarios.

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 scenarios described in the previous section. Information from the travel model is also used to help assess the performance of each of the scenarios per agency-adopted targets. This information is described in MTC's May Planning Committee memorandum¹⁵.

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 MTC's May Planning Committee memorandum¹⁶.

Automobile Ownership

Figure 9 presents the automobile ownership rates across the four scenarios in the year 2035 simulations as well as year 2010. The differences across scenarios are not dramatic. A key finding is the general increase in zero automobile households in the Connected Neighborhoods and Big Cities scenarios.

¹⁵ Available here: <http://mtc.legistar.com/gateway.aspx?M=F&ID=a78d1547-7db3-4dd2-afdb-2d14fe3aec71.pdf>.

¹⁶ Ibid.

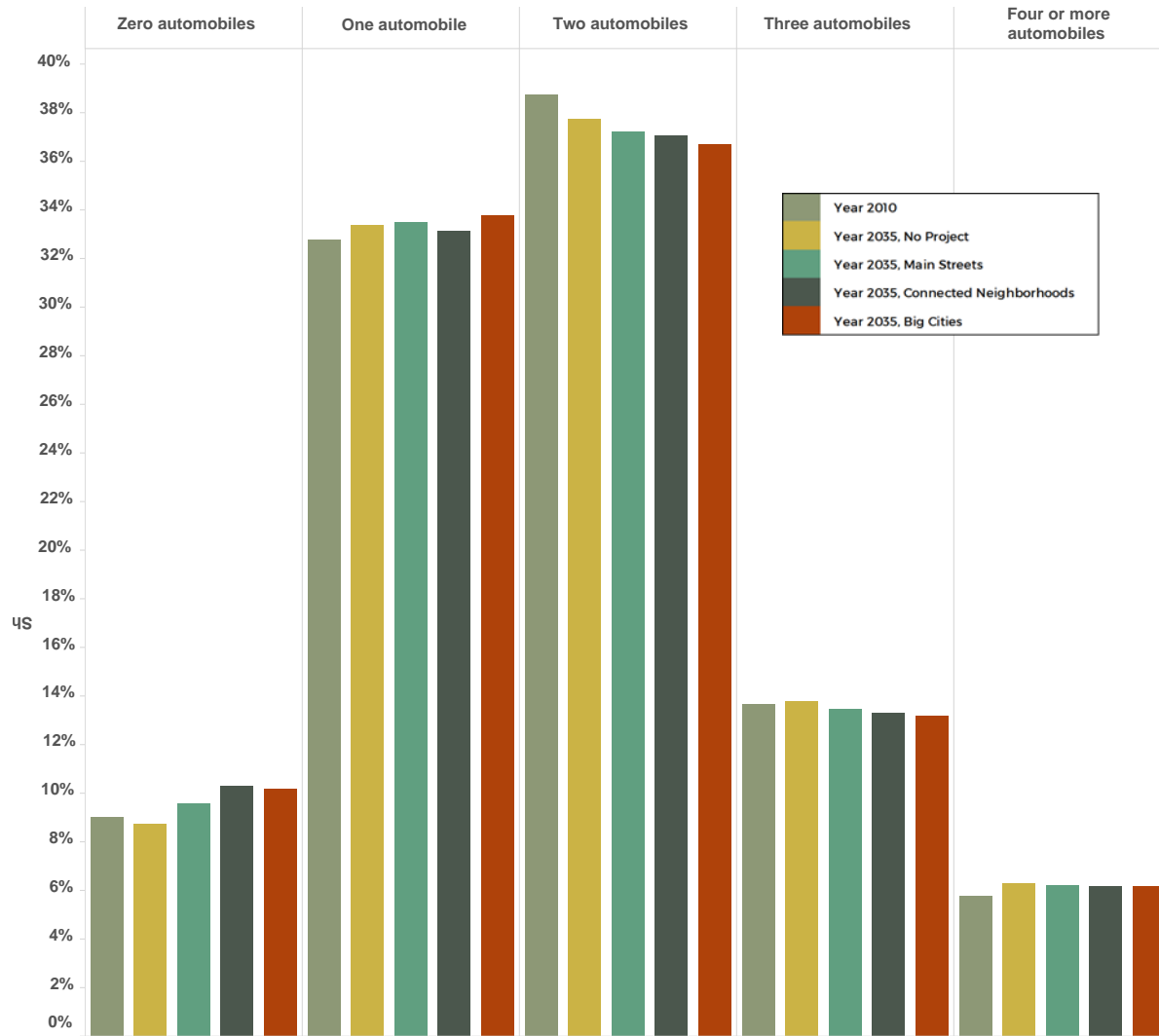


Figure 9: Year 2035 Automobile Ownership Results

Activity Location Decisions

Figure 10 and Figure 11 present the average trip distance by travel model for all travel and for trips on work tours, respectively. The key finding here is that the Connected Neighborhoods and Big Cities scenarios bring activities slightly closer together relative to 2010.

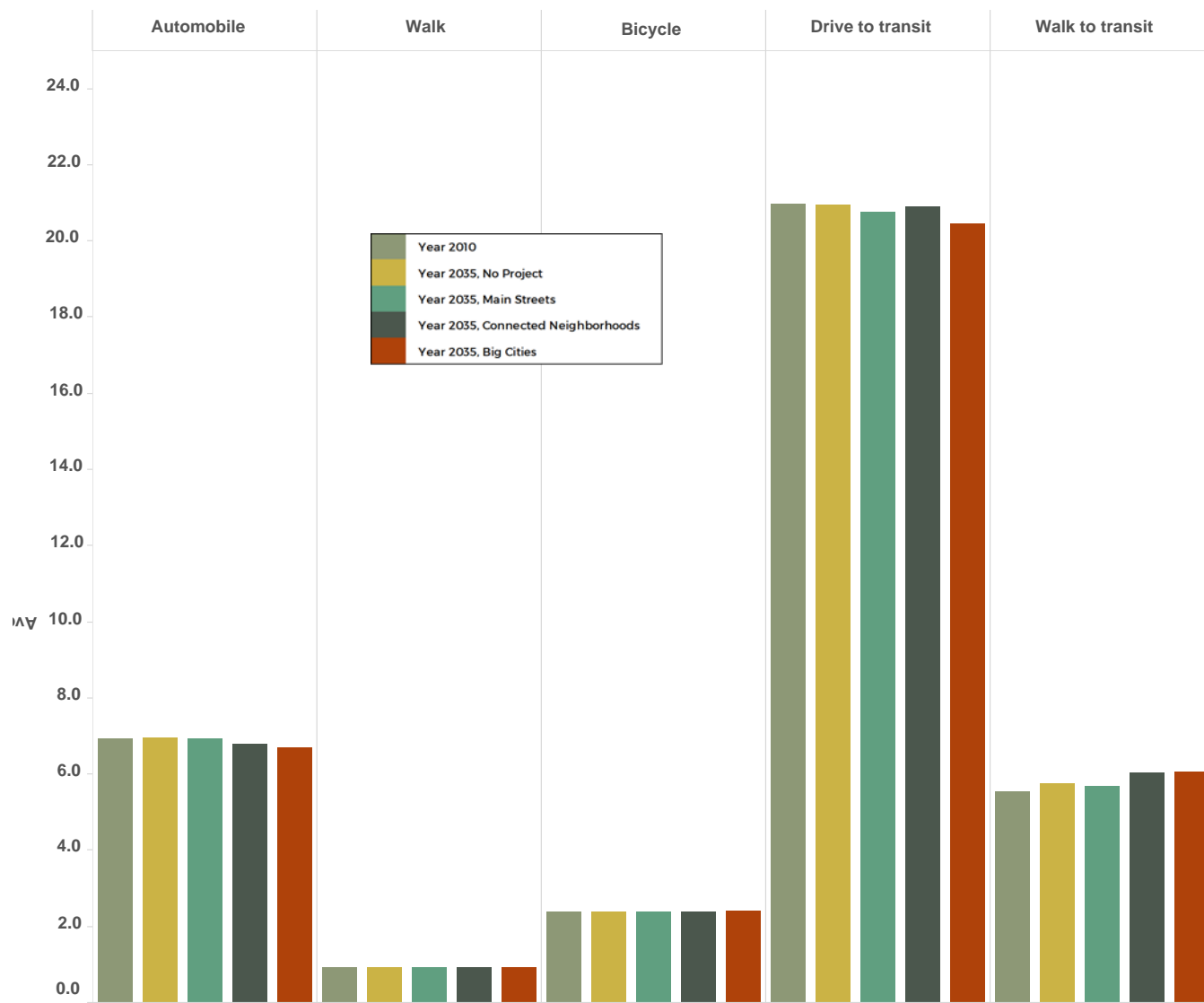


Figure 10: Year 2035 Average Trip Distance

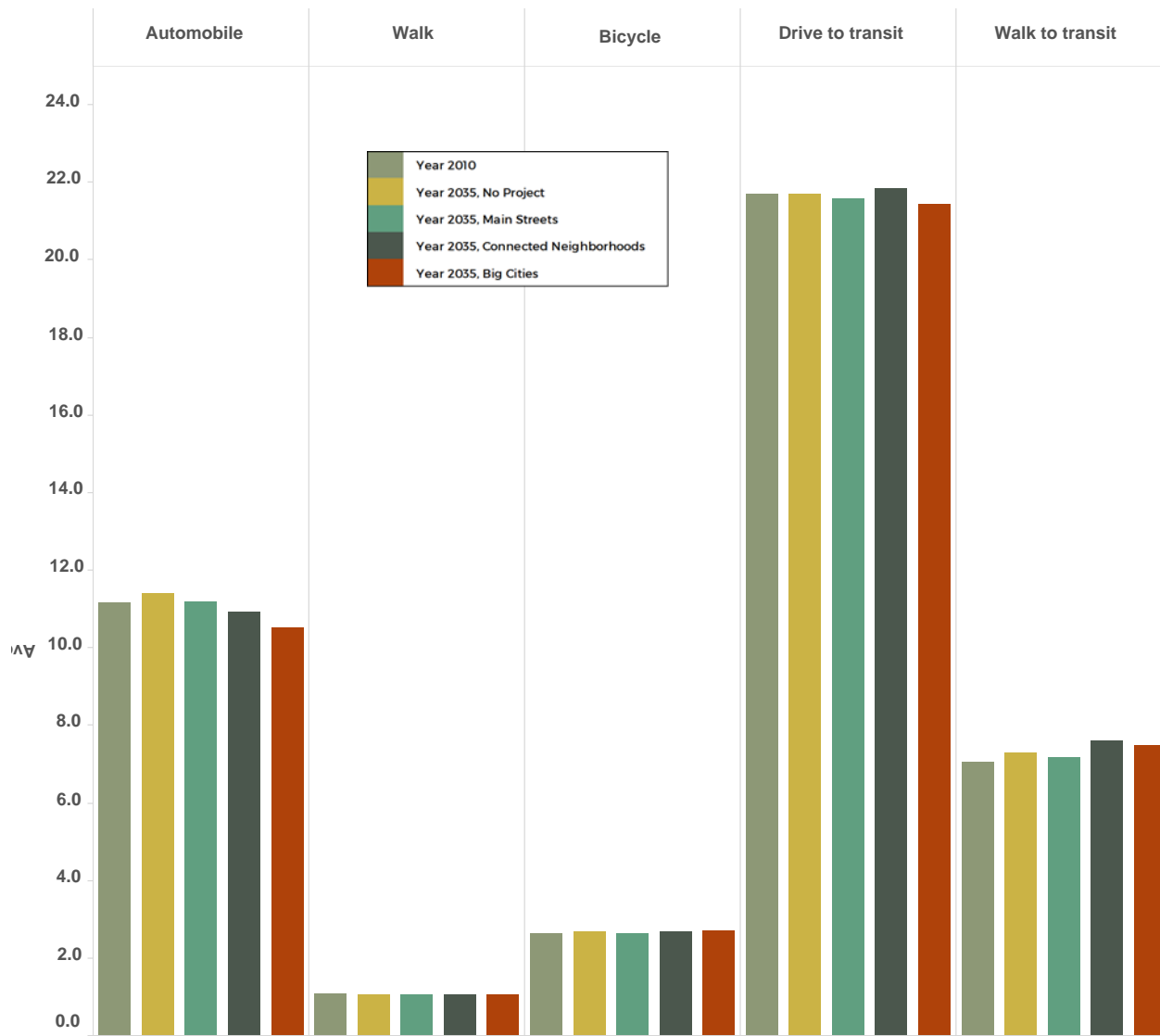


Figure 11: Year 2035 Average Trip Distance for Travel on Work Tours

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 passenger 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 all households;
- traveling with one passenger in a private automobile and opting to pay to use an express lane (“two occupants, pay to use HOT”), an option available to all households provided they would benefit from using an express lane (if the express lane facility which benefits travelers allows two-occupant vehicles to travel for free, than these travelers are categorized as “two occupants, no HOT”); and,
- traveling with two or more passengers in a private automobile (“three-or-more occupants”) – these travelers are allowed to travel for free on express lane facilities across all the scenarios (as well as carpool facilities).

The travel model explicitly considers numerous non-automobile options which are collapsed in these summaries 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 12 and Figure 13 present the share of trips made by various travel modes. Figure 12 shows shares of travel in automobiles 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 84 percent in 2010 to just below 82 percent in 2035 in the Big Cities scenarios. Figure 13 presents companion results for non-automobile travel modes, including public transit, walking, and bicycling. Here, we see an increase in walking and transit in the Connected Neighborhoods and Big Cities scenarios, which reflect the increase in transit service and increasingly efficient land development patterns.

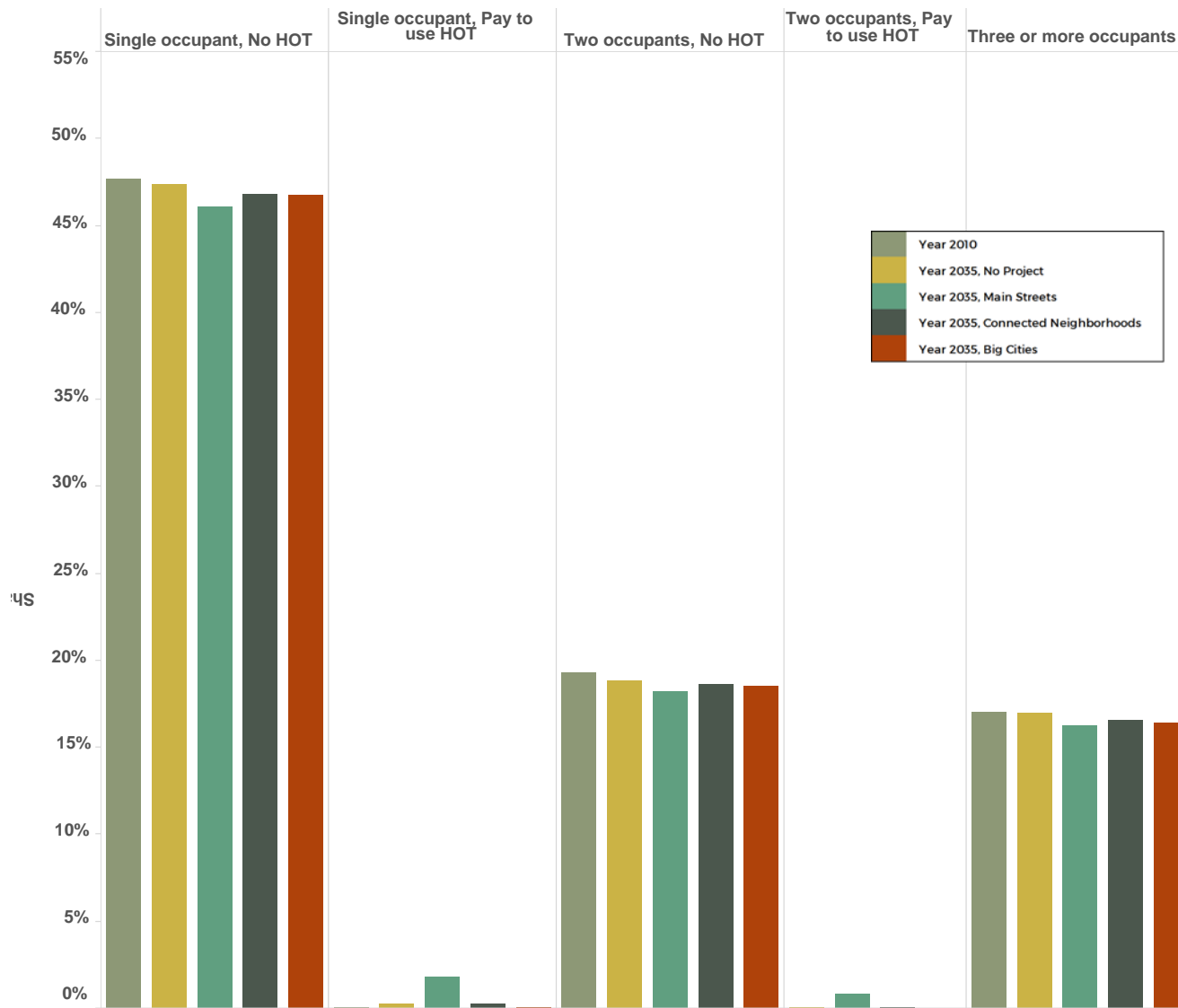


Figure 12: Year 2035 Automobile Mode Shares for All Travel

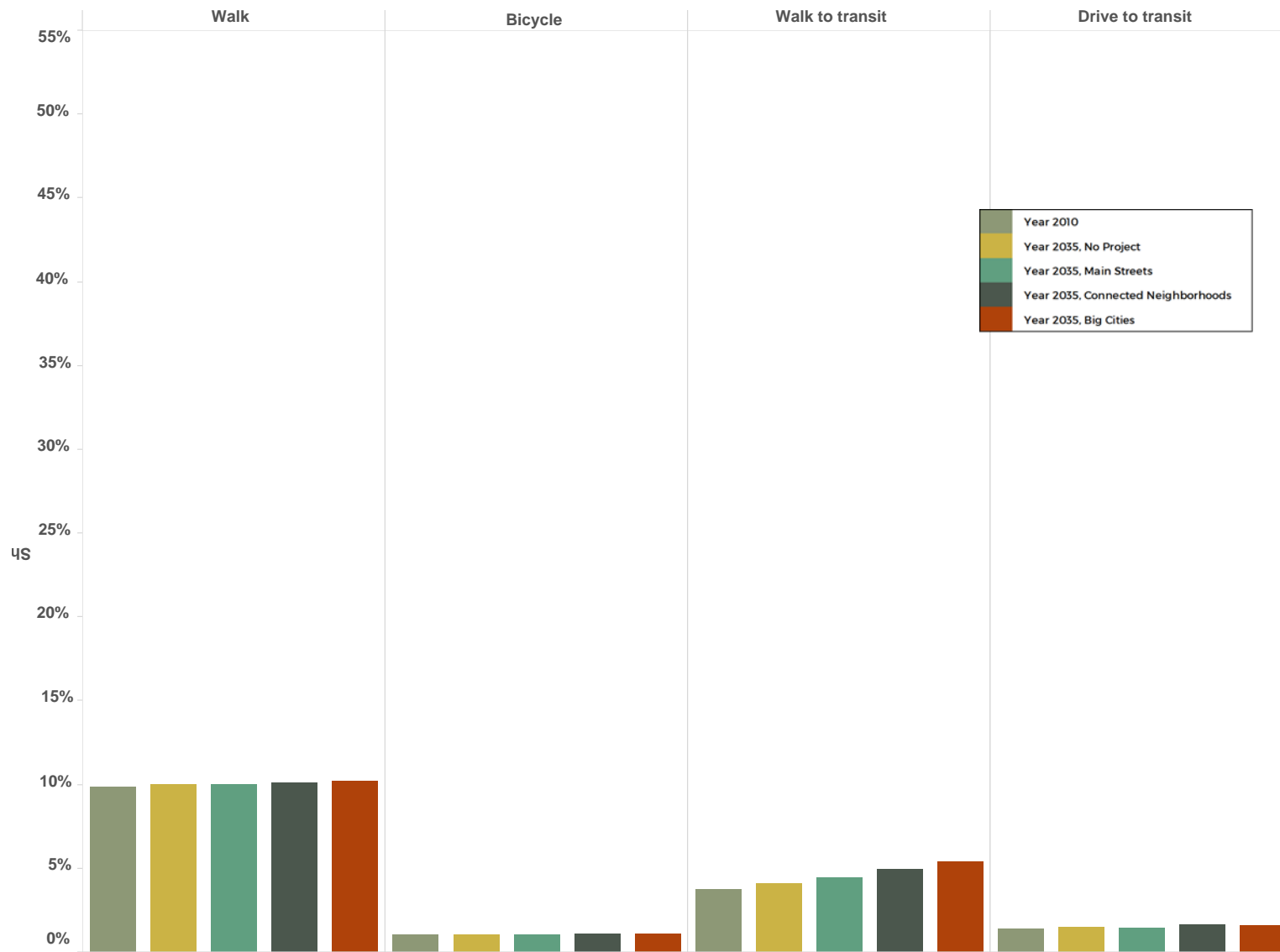


Figure 13: Year 2035 Non-Automobile Mode Shares for All Travel

Aggregate Transit Dem and Estim ates

Bay Area residents choosing to travel by transit are explicitly assigned to a specific transit route. As a means of organizing our results, MTC groupstransit 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 or to work, 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 streetcar services (F-Market and E-Caltrain), 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, Sonoma-Marín Area Rail Transit (SMART), Amtrak’s Capitol Corridor, and Altamont Commuter Express.

Figure 14 presents the estimates of transit boardings by these categories on the typical weekday simulated by the travel model. Ridership increases from about 1.7 million daily boardings in 2010 to over 3.0 million daily boardings in the 2035 Big Cities scenario.

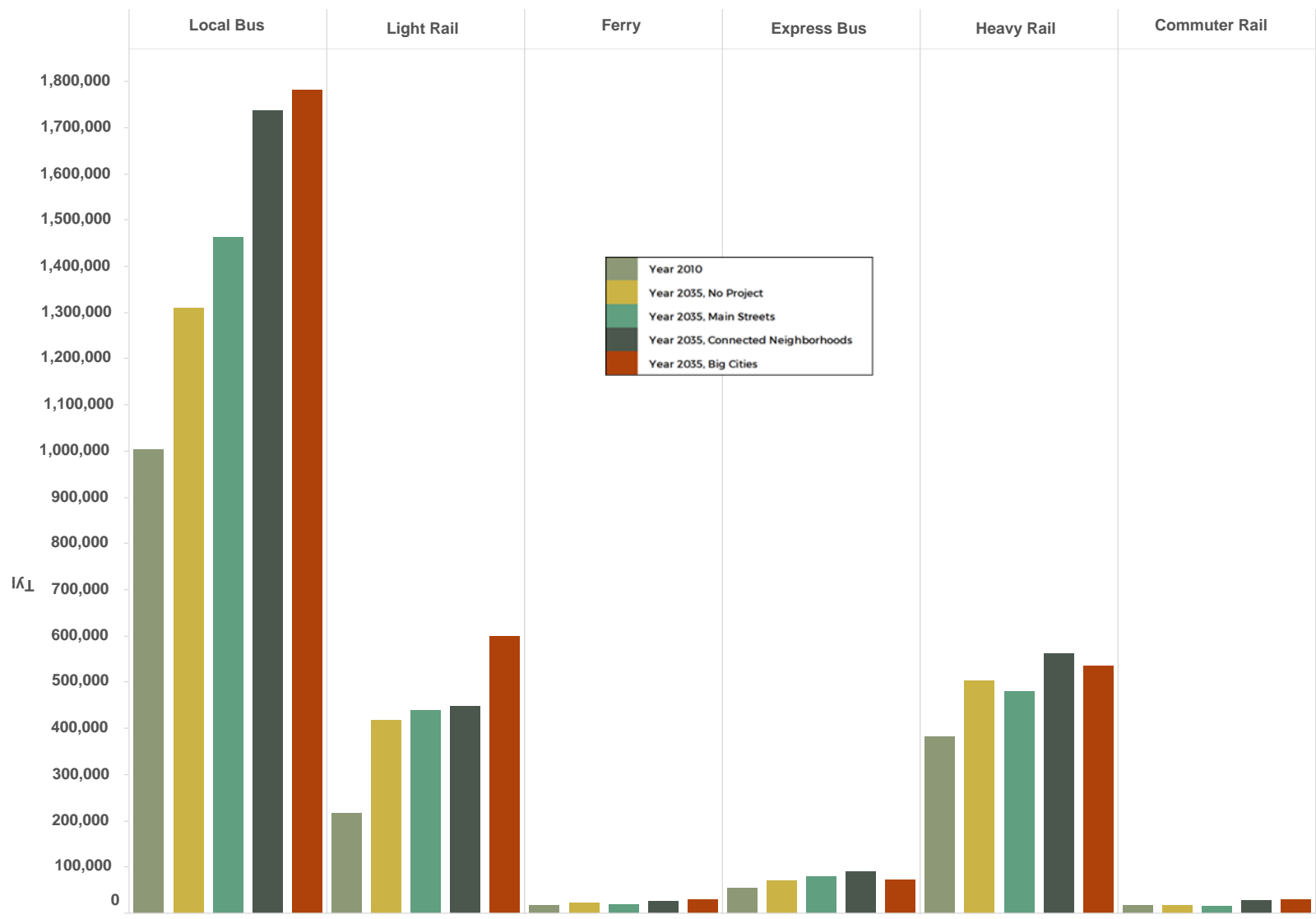


Figure 14: Year 2035 Typical Weekday Transit Boardings by Technology

Roadway Utilization and 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 includes monetary and non-monetary (time) expenditures). Several measures of interest are generated by the assignment process, including 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 (1) plus so-called "intra-zonal" VMT (i.e., travel that occurs at a geographic scale finer than the travel model's network representation), which is computed off-line; and,
- (3) the quantity (2) adjusted to match the 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 (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 15 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 2035. Overall, VMT varies only slightly across the year 2035 alternatives, with the Big Cities scenario having the lowest VMT.

Figure 16 presents the average freeway speed across scenarios. 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 2035 No Project scenario. Each of the alternatives improves freeway speeds

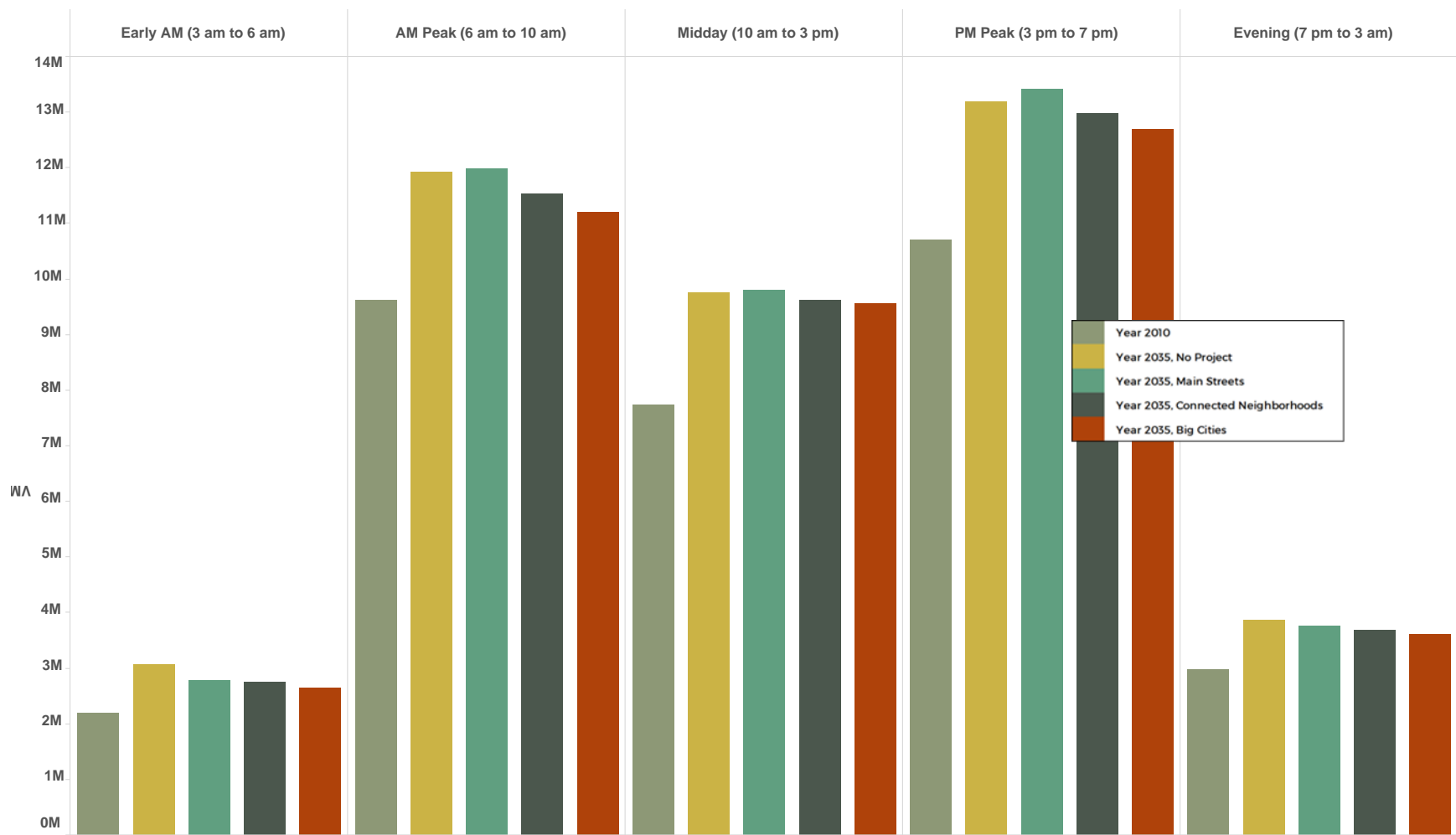


Figure 15: Year 2035 Vehicle Miles Traveled per Hour by Time Period

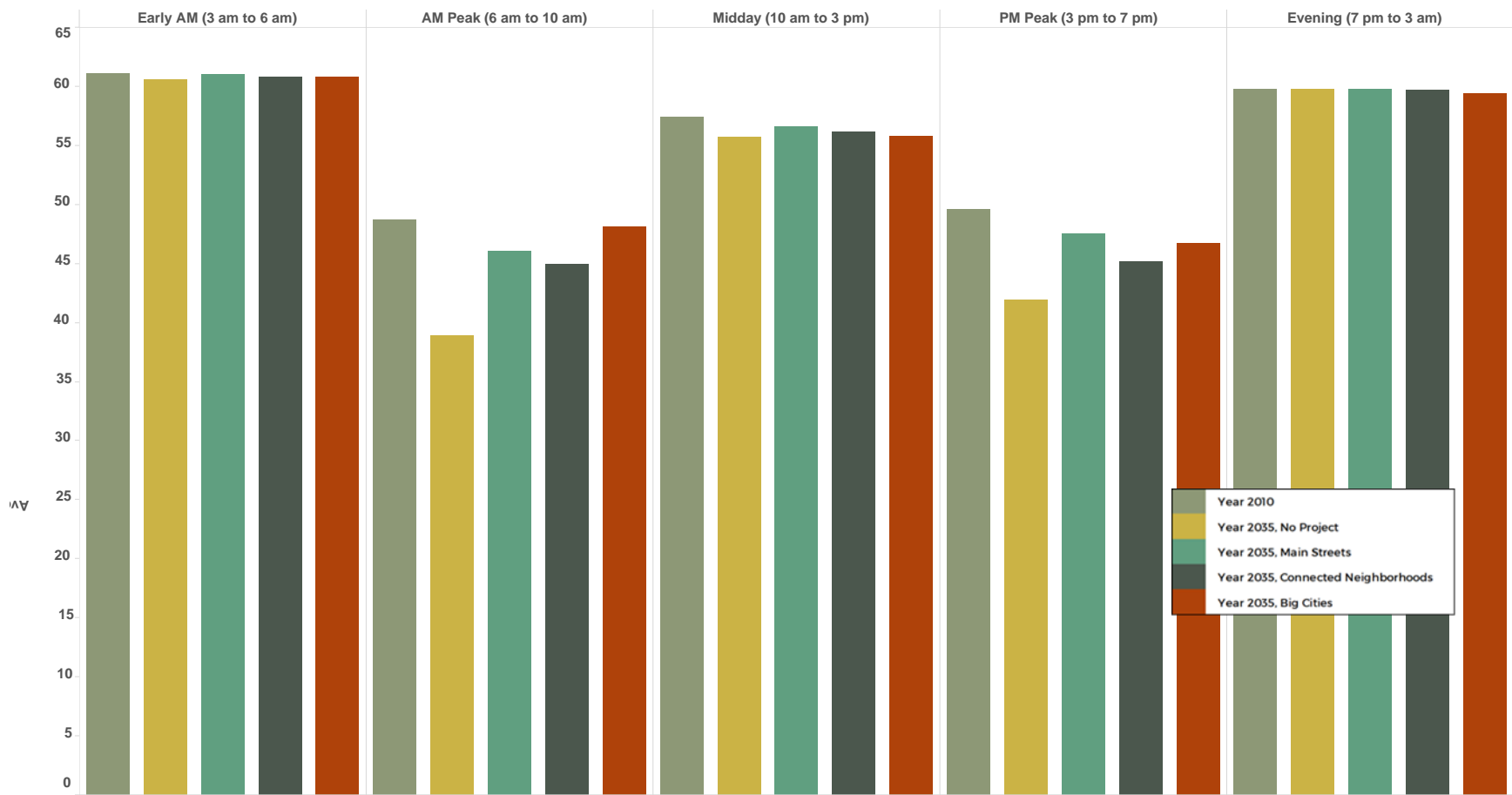


Figure 16: Year 2035 Average Vehicle Speeds on Freeways

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Appendix D
List of Transportation Control Measures (TCM) Projects

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	15CGD201931111921	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	
WestCat	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	
	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	Constr't 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 Public Works Dept.	Union City Intermodal Station –Pedestrian connections and New East Plaza	\$ 1,124,000
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 Dept. of Public Works	Broadway Streetscape Improvements Project – Phase II	\$ 2,000,000
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 Public Works Dept.	Union City Intermodal Station – West Plaza Enhancements	\$ 1,713,500
City of Oakland, CEDA	MacArthur Transit Hub Streetscape Improvement Project	\$ 1,918,000
Town of Los Gatos Parks & Public Works Dept.	Streetscape & Gateway	\$ 2,400,000
City of San Leandro Community Dev. Dept.	East 14 th Street South Area Revitalization Project – La Palma District	\$ 1,600,000
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			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			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													
		SF	280	Highway 101/Interstate 280 Interchange to Sixth Street	(3.2)													
		SF	80	Cesar Chavez to Interstate 80/Fourth Street	(1.5)										e			
		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	Thornton 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	See separate beat 16/SC schedule	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	e	15,573	17
		NAP	12	Napa Co. Line to Sonoma Co. Line	11.60													
		NAP	29	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)													
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	1.67													
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	25,685	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	Hillcrest Avenue to Pacheco Blvd.	20.39	07/01/07	07/17/09	5:30-9:30		15:30-19:00		2	1			b	11,520	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 380	(0.0)													
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
		SOL	80	Magazine Street to Abernathy Road	14.04													
29	Roadrunner Tow	SOL	80	Magazine Street to Abernathy Road	0	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
Methodology for Bay Area Conformity Determinations

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, NO_x 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 NO_x 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 NO_x 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).

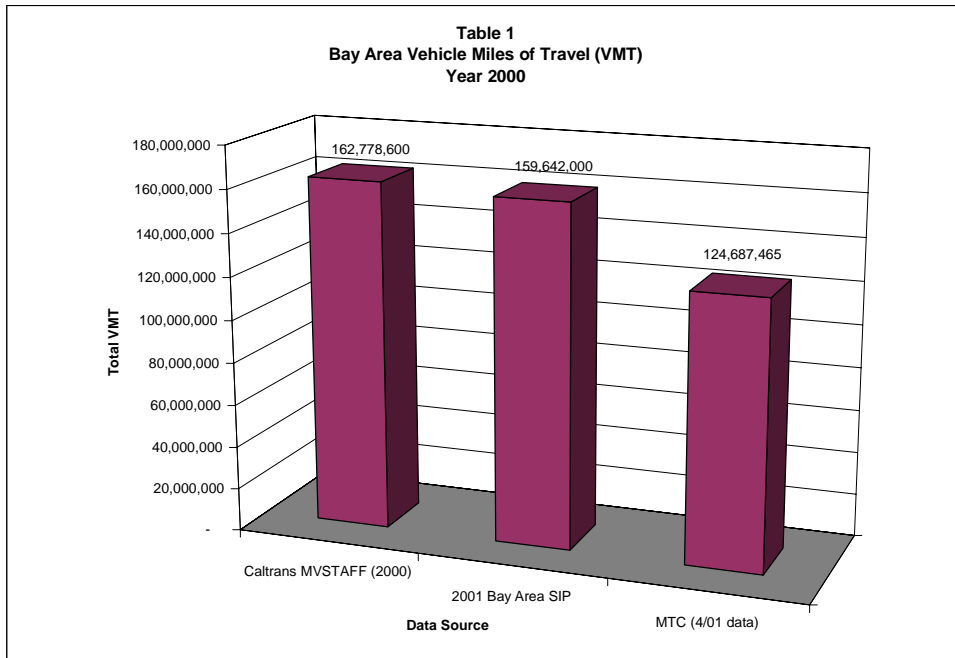
The decision to use ARB's VMT estimate instead of the VMT estimate from MTC's BAYCAST-90 travel demand model for calendar year 2000 was made in an agreement between MTC and ARB. As Table 1 illustrates, MTC's 2000 VMT estimate for the region is about 22 percent lower than both ARB and Caltrans' estimates.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

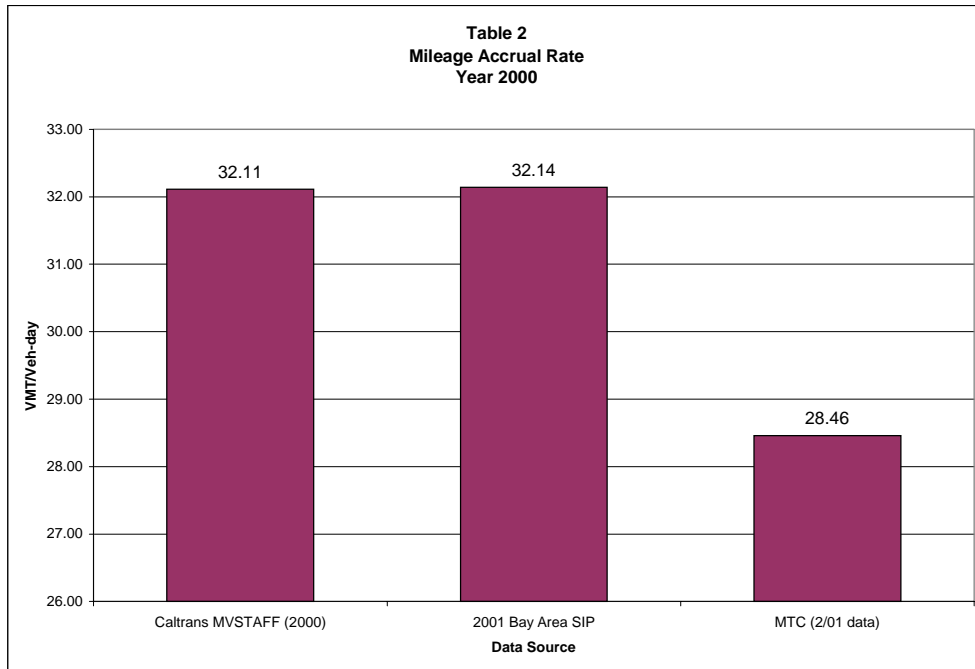
Additional justification for using the ARB VMT estimation methodology is found in the estimate of the number of miles driven by each vehicle per day (i.e., the mileage accrual

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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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:

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

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.

