

Date: May 27, 2020
W.I.: 1412
Referred by: Planning

ABSTRACT

Resolution No. 4423

This resolution finds that the amendments to the Amended Plan Bay Area 2040 and the Amended 2019 Transportation Improvement Program are in conformance with the State Implementation Plan to achieve National Ambient Air Quality Standards.

Further discussion of this subject is contained in the Executive Director's memorandum to the Planning Committee dated May 8, 2020.

Date: May 27, 2020
W.I.: 1412
Referred by: Planning

Re: Approval of the Transportation-Air Quality Conformity Analysis of the Amended Plan Bay Area 2040 and the Amended 2019 Transportation Improvement Program to the State Implementation Plan for Achieving and Maintaining National Ambient Air Quality Standards

METROPOLITAN TRANSPORTATION COMMISSION

RESOLUTION NO. 4423

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 federally designated Metropolitan Planning Organization (MPO), pursuant to Section 134(d) of Title 23 of the United States Code (USC) for the nine-county San Francisco Bay Area region (the region); and

WHEREAS, Part 450 of Title 23 of the Code of Federal Regulations (CFR), require MTC as the MPO to prepare and update a long-range Regional Transportation Plan (RTP) every four years; and

WHEREAS, California Government Code § 65080 *et seq.* (Senate Bill 375) requires MTC to prepare and update a long-range RTP, including a Sustainable Communities Strategy (SCS) prepared in conjunction with the Association of Bay Area Governments (ABAG), every four years; and

WHEREAS, MTC and ABAG jointly adopted the Final Plan Bay Area 2040 (Plan) (MTC Resolution 4300 and ABAG Resolution No. 10-17) on July 26, 2017; and

WHEREAS, MTC and ABAG have prepared an Amendment to the Plan (Amended Plan) to include the proposed Interstate 680 Express Lanes Gap Closure Project (“I-680 Gap Closure Project”) in Alameda County; and

WHEREAS, the Amended Plan and the Amended TIP must conform to the federal air quality plan, which is also referred to as the State Implementation Plan (SIP); and

WHEREAS, the Transportation-Air Quality Conformity Analysis for the Amended Plan Bay Area 2040 and the 2019 TIP meets all required EPA guidance criteria and, therefore, the region must demonstrated conformity for the 2015 Ozone NAAQS; 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; and

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

WHEREAS, MTC conducted a transportation-air quality conformity analysis for the Amended Plan and the 2019 TIP utilizing the latest planning assumptions, emissions model, and consultation provisions, including a quantitative regional emissions analysis that meets emissions budget requirements of the U. S. Environmental Protection Agency transportation conformity rule, and the Plan contributes to all required emissions reductions; and

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

WHEREAS, the conformity analysis has been circulated for 30-day public review period from March 26, 2020, through April 24, 2020; now, therefore be it

RESOLVED, that MTC makes the following conformity findings for the Amended Plan Bay Area 2040 and the 2019 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 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 Amendment to Plan Bay Area 2040 and the 2019 Transportation Improvement Program and to such other agencies as appropriate.

METROPOLITAN TRANSPORTATION COMMISSION

Scott Haggerty, Chair

This resolution was entered into by the Metropolitan Transportation Commission at a meeting of the Commission held in San Francisco, California on May 27, 2020.

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Attachment A
Resolution No. 4423
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**Transportation-Air Quality Conformity Analysis for the Amended Plan Bay Area 2040 and
the Amended 2019 Transportation Improvement Program**

The Transportation-Air Quality Conformity Analysis for the amendments to the
Amended Plan Bay Area 2040 and the
Amended 2019 Transportation Improvement Program is on file in the offices
of the Metropolitan Transportation Commission, Bay Area Metro Center,
375 Beale Street, Suite 800, San Francisco, CA 94105, or available upon request to
info@bayareametro.gov while the COVID-19 shelter-in-place orders are in effect.



TRANSPORTATION-AIR QUALITY CONFORMITY ANALYSIS



Plan BayArea 2040

FINAL SUPPLEMENTAL REPORT



Metropolitan
Transportation
Commission



Association
of Bay Area
Governments

MAY 2020

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Plan Bay Area 2040:

Transportation-Air Quality Conformity Analysis for Amended Plan Bay Area 2040 and Amended 2019 Transportation Improvement Program

May 2020



METROPOLITAN
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I. Introduction

The Metropolitan Transportation Commission (MTC) prepares a transportation-air quality conformity analysis (“conformity analysis”) when it amends or updates its Regional Transportation Plan (RTP), and/or updates its Transportation Improvement Program (TIP), or adds or deletes regionally significant, non-exempt projects into the TIP.

The purpose of this conformity analysis is to conform the Amended RTP (“Plan Bay Area 2040”) and to conform the 2019 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 and 2015 national ambient air quality standard (NAAQS) for 8-hour ozone 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 2040 and the 2019 Amended TIP. This conformity analysis also serves to re-conform the Amended Plan Bay Area 2040 and 2019 TIP for the federal 2015 ozone NAAQS.

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 transportation plan (“RTP”) or program (“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 non-attainment 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 (NOX) for ozone and 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 (MPOs) 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, 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

¹ The current version of the regulations is available on EPA’s Transportation Conformity website at: <https://www.epa.gov/state-and-local-transportation/current-law-regulations-and-guidance-state-and-local-transportation>

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 ("RTP") and program ("TIP").

Status of Regional Transportation Plan

A regional transportation plan, or RTP, is a plan which includes both long-range and short-range strategies and 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. State law requires that RTP's include a Sustainable Communities Strategy (SCS) to identify a forecasted land use development pattern that when integrated with the future transportation system will meet the region's greenhouse gas reduction target set by CARB. As required by federal and state planning regulations, 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 ("non-attainment"). The RTP is financially constrained to ensure project costs do not exceed regionally expected transportation revenues over the planning horizon. Once adopted, the RTP guides the development of the TIP for the region.

The San Francisco Bay Area's RTP/SCS-Plan Bay Area 2040 ("the Plan")- was originally adopted in July 2017 and is an update to Plan Bay Area (2013). Plan Bay Area 2040 sets forth a strategic investment strategy to maintain existing transportation infrastructure, service, and system performance for Bay Area travelers through horizon year 2040. It includes a regional transportation investment strategy and subsequent list of highway, transit, local roadway, bicycle, and pedestrian projects identified through regional and local transportation planning processes. In addition, Plan Bay Area 2040 includes a focused growth land use pattern designed to reduce passenger vehicle travel to achieve the region's greenhouse gas reduction target set by CARB.

Starting with the current state of the region, Plan Bay Area 2040 describes its goals, a proposed growth pattern and supporting transportation investment strategy, and key actions needed to address ongoing and long-term regional challenges. The Plan also includes supplemental reports for additional details. These documents and the adopted Plan can be found at <http://2040.planbayarea.org/reports>.

In March 2018, MTC and ABAG amended Plan Bay Area 2040 to modify the scope and project cost of the U.S. Highway 101 Managed Lanes Project in San Mateo County (RTPID 17-06-0007). The amendment aligned the Plan's project assumptions to those of the preferred alternative in the project's Environmental Impact Report (EIR). The Commission approved the Transportation-Air Quality Conformity Analysis for Amended Plan Bay Area 2040 and Amended 2017 Transportation Improvement Program on March 28, 2018 (MTC Resolution No. 4325). The FHWA and FTA approved MTC's conformity determination for the Amended Plan Bay Area 2040 and the Amended 2017 TIP on May 17, 2018.

MTC and ABAG propose a second amendment to Plan Bay Area 2040 to add the project scope and cost of the Interstate 680 Express Lanes Gap Closure Project in Alameda County. The project will add an express lane to the southbound and northbound travel lanes of Interstate 680 between Alcosta Boulevard and State Route 84, closing the gap between existing and in-progress express lane projects directly to the north and south.

This conformity analysis will serve to demonstrate that the Amended Plan Bay Area 2040 conforms to the SIP. Refer to Appendix B for a detailed list of projects included in the Amended Plan Bay Area 2040.

Status of Transportation Improvement Program

The federally required transportation improvement program, or TIP, is a comprehensive listing of surface transportation projects for the San Francisco Bay Area that receive federal funds, are subject to a federally required action, or are regionally significant. MTC, as the federally designated MPO, prepares and adopts the TIP at least once every four years. The TIP covers a four-year period and must be financially constrained by year, meaning that the amount of dollars committed to the projects (also referred as “programmed”) must not exceed the amount of dollars estimated 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. MTC prepared and completed the Transportation Air Quality Conformity Analysis for the Amended Plan Bay Area 2040 and the 2019 Amended TIP, which was approved by the Commission in September 2018. FHWA and FTA issued joint approval of this conformity determination in December 2018.

The 2019 Amended TIP contains approximately 800 projects totaling about \$15.5 billion over the four-year period from fiscal year 2018-19 to 2021-22. The I-680 Express Lanes Gap Closure Project is now being revised in the TIP through TIP Amendment 2019-38 to be consistent with the changes included in the Amended Plan Bay Area 2040.

The I-680 Express Lanes Gap Closure project as proposed in the Amended Plan Bay Area 2040 is expected to be completed outside the analysis years of the Amended 2019 TIP timeframe. This conformity analysis serves to conform the 2019 TIP as amended through TIP Amendment 2019-38 and the Amended Plan Bay Area 2040.

Refer to Appendix A1 for a detailed listing of projects/programs in the 2019 Amended TIP. Note that specific funding sources are identified in the TIP itself. Appendix A2 list the projects in the 2019 Amended TIP with updated conformity analysis years.

II. Bay Area Air Pollutant Designations

National 1-Hour Ozone Standard

The Bay Area was initially designated as nonattainment for ozone on March 3, 1978. 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 1992, the co-lead agencies—BAAQMD, MTC, and ABAG—determined that the Bay Area was attaining the 1-hour ozone standard and requested that CARB forward a re-designation request and an ozone maintenance plan to EPA.

On May 25, 1995, after evaluating 1990-1992 monitoring data and determining that the Bay Area had continued to attain the standard, the EPA re-designated the Bay Area as an ozone maintenance area. Shortly thereafter, the area began violating the standard again and on July 10, 1998, the EPA published a

Notice of Final Rulemaking re-designating the Bay Area back to an ozone non-attainment area. This action became effective on August 10, 1998.

The re-designation to nonattainment triggered an obligation for the State to submit a SIP revision designed to provide for attainment of the 1-hour ozone NAAQS by November 15, 2000. This revision (the San Francisco Bay Area Ozone Attainment Plan for the 1-hour National Ozone Standard – June 1999 or “1999 Plan”) was partially approved and partially disapproved by EPA on September 20, 2001 in conjunction with a determination that the area had failed to attain by the November 2000 deadline. The attainment demonstration and its associated motor vehicle emissions budgets were among the plan elements that were disapproved.

As a result of the EPA’s finding of failure to attain and partial disapproval of the 1999 Plan, the State was required to submit a SIP revision for the Bay Area to EPA by September 20, 2002 that included an updated volatile organic compounds (VOC) and nitrogen oxides (NOX) emissions inventory, new transportation conformity budgets, and provided for attainment of the 1-hour ozone standard no later than September 20, 2006. 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.

The 2001 Plan contains a control strategy with seven stationary source measures, five transportation control measures (TCMs), and eleven further-study measures. In the 2001 Plan, the District also committed to strengthening the then existing 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 provided 271 tons per day of combined VOC and NOx emission reductions between 2000 and 2006. The 2001 Plan also included an attainment assessment based on Bay Area data.

On November 30, 2001, ARB submitted the 2001 Plan, which included VOC and NOx motor vehicle emissions budgets (164.0 tons per day (tpd) and 270.3 tpd, respectively) for the 2006 attainment year, 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 ozone non-attainment area. On February 14, 2002, the EPA found the motor vehicle emissions budgets in the 2001 Plan adequate for transportation conformity purposes, based on its preliminary determination that the plan provided for timely attainment of the 1-hour ozone standard.

On April 22, 2004, based on air quality monitoring data from the 2001, 2002, and 2003 ozone season, EPA determined that Bay Area had attained the national 1-hour ozone standard. Because of this determination, requirements for some of the elements of the 2001 Ozone Attainment Plan, submitted to EPA to demonstrate attainment of the 1-hour standard, were suspended. The determination of attainment did not mean the Bay Area had been re-designated as an attainment area for the 1-hour standard. To be re-designated, the region would have had to submit a formal re-designation request to EPA, along with a maintenance plan showing how the region would continue to attain the standard for ten years. However, this re-designation 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.

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 non-attainment for the national 8-hour ozone standard. EPA had one year to review the recommendations and were to notify states by November 12, 2009, if they planned to modify the state-recommended areas. EPA issued final designations by March 12, 2010, based on more up to date monitoring data.

On October 1, 2015, EPA strengthened the 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. The proposed implementation rule for the 2015 ozone standard was published November 17, 2016 and proposed a framework for nonattainment area classifications and SIP requirements. In addition, the proposed rule follows the approach adopted for the previous Classifications Rule and SIP Requirements Rule (SRR) for the 2008 ozone NAAQS.

In September 2016, CARB recommended to EPA that the San Francisco Bay Area be designated in nonattainment for the 70 ppb 2015 ozone NAAQS. EPA concurred with CARB’s recommendation and on April 30, 2018, EPA completed area designations for most of the United States (including the San Francisco Bay Area). On June 4, 2018, EPA published a final rule that designated 51 areas as nonattainment for the 2015 ozone NAAQS. These final designations took effect on August 3, 2018, 60 days after the notice was published in the *Federal Register*. Nonattainment areas must demonstrate conformity of transportation plans and transportation improvement programs (TIPs) to the 2015 ozone NAAQS by August 3, 2019², the end of the grace period.

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

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 (particles that 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

² Transportation Conformity Guidance for 2015 Ozone Nonattainment Areas at: <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100UN3X.pdf>

as particulate matter 2.5 (PM_{2.5}) and particulate matter 10 (PM₁₀). Based on air quality monitoring data, the Bay Area was found to be attaining the 1997 PM_{2.5} standards.

In 2006, the EPA revised the air quality standards for particle pollution. The 24-hour PM_{2.5} standard was strengthened by lowering the level from 65 micrograms per cubic meter (µg/m³) to 35 µg/ m³. The annual fine particle standard at 15 µg/ m³ remained the same. Also, in 2006, the EPA published a final rule that 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. The established criteria and procedures require that those areas designated as nonattainment areas must undergo a regional conformity analysis for PM_{2.5}. Furthermore, the procedures also mandate that areas designated as non-attainment 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 non-attainment 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 became 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.

Under 40 CFR 93.102(b)(4) of EPA’s regulations, transportation conformity applies to maintenance areas through the 20-year maintenance planning period, unless the maintenance plan specifies that the transportation conformity requirements apply for a longer time period. Pursuant to the CAAA’s section 176(c)(5) and as explained in the preamble of the 1993 final rule, conformity applies to areas that are designated nonattainment or are subject to a maintenance plan approved under the CAAA section 175A. The section 175A maintenance planning period is 20 years, unless the applicable implementation plan specifies a longer maintenance period³. The EPA further clarified this conformity provision in its January 24, 2008 final rule⁴.

The approved maintenance plan for the San Francisco-Oakland-San Jose Carbon Monoxide nonattainment area did not extend the maintenance plan period beyond 20 years from re-designation. Consequently, transportation conformity requirements for CO ceased to apply after June 1, 2018 (i.e., 20 years after the effective date of the EPA’s approval of the first 10-year maintenance plan and re-designation of the area to attainment for CO NAAQS). As a result, as of June 1, 2018, transportation conformity requirements no longer apply for the CO NAAQS in the San Francisco-Oakland-San Jose CO nonattainment area for Federal Highway Administration/Federal Transit Association projects as defined in 40 CFR 93.101.

³ See 58 FR 62188, 62206 (November 24, 1993)

⁴ See 73 FR 4420, at 4434-5 (January 24, 2008)

Approved Motor Vehicle Emissions Budgets and Conformity Tests

The Bay Area has conformity requirements for national ozone and PM_{2.5} standards. Under the ozone standard, the Bay Area has to meet an on-road motor vehicle emission “budget” test. Because the Bay Area does not have on-road motor vehicle emission budgets for PM_{2.5} that have been determined to be adequate by EPA, it has to meet an emission interim test for the PM_{2.5} standard. To make a positive conformity finding for ozone MTC must demonstrate that the calculated on-road 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.

On-road motor vehicle emissions budgets for VOC and 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 on-road motor vehicle emission budgets are to be used for conformity analyses until they are replaced.

The on-road 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)

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.

Monitoring data shows that the Bay Area currently meets the national standards for both annual and 24-hour PM_{2.5} levels. However, because the health effects of PM are serious and far-reaching, and no safe threshold of exposure to PM has yet been identified, it is important efforts continue to further reduce PM emissions and concentrations.⁵

Under US EPA guidelines, a region with monitoring data showing that it currently attains an air quality standard can submit a “re-designation 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} re-designation 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, CARB submitted a “clean data finding” request on behalf of the Bay Area. On January 9, 2013, EPA took final action to determine 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 period. Based on EPA’s determination, the requirements for the Bay Area to submit an attainment demonstration, together with RACMs, an 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.

⁵ See BAAQMD’s 2017 *Clean Air Plan: Spare the Air, Cool the Climate* at: http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en

Since an approved on-road 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 RTP or TIP (the “build” scenarios) on-road motor vehicle emissions are less than or equal to emissions in the “baseline year” emission inventory. The “baseline year” for the 2006 24-hour PM_{2.5} standard is the year 2008⁶.

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

1. The latest planning assumptions and emission models are used.
The transportation plan (“RTP”) and program (“TIP”) 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.
2. The transportation plan (“RTP”) and program (“TIP”) provide for the timely implementation of TCMs.
3. Interagency and public consultation is part of the process.

III. Conformity Analysis & Results

Approach to Conformity Analysis

The latest planning assumptions were used when preparing this conformity analysis. Regional estimates of future travel data were estimated using MTC’s land use model (referred to as “*Bay Area UrbanSim*”) and travel model (referred to as “*Travel Model One*”). This integrated model framework allows for analysis of how transportation projects affect the surrounding land use pattern, as well as how changes to residential and commercial activity affect transportation demand. *Travel Model One* (version 0.6) released in July 2016, is calibrated to year 2000 conditions and validated against year 2000, year 2005, and year 2010 conditions. The model generates spatially- and temporally- specific estimates of travel data—roadway usage and speed. This travel data is input into CARB’s latest Emission FACTors (EMFAC2017) model to estimate on-road motor vehicle emissions.

In 2016, MTC updated the method by which Amended Plan Bay Area 2040 programmatic category projects are assessed and represented in Travel Model One in the analysis years between the year 2040 (the Horizon Year for the Amended Plan Bay Area) and the 2019 Amended TIP. Please see Appendix C for the complete approach (for regional conformity modeling purposes) description.

The EMFAC2017 model shows how California on-road 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. EMFAC2017 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,

⁶ Additional information is available here: <https://www.epa.gov/state-and-local-transportation/baseline-year-baseline-year-test-40-cfr-93119>

Advanced Clean Car Standards, and the Smartway/Phase I Heavy Duty Vehicle Greenhouse Gas Regulation. The model 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 EMFAC2017 Technical Support Document.⁷

On September 27, 2019, the EPA and the National Highway Traffic Safety Administration published the “Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program.” (84 Fed. Reg. 51,310 (Sept. 27, 2019.)). The SAFE Vehicle Rule Part One impacts some of the underlying assumptions in the EMFAC2017 model. In response, CARB staff developed off-model adjustment factors to account for the impacts of this rule. On March 12, 2020, the EPA confirmed these adjustment factors to be acceptable for use in transportation conformity determinations⁸.

*Bay Area UrbanSim*⁹ and *Travel Model One* are responsive to numerous inputs, including demographic, pricing, travel behavior, and highway and transit network assumptions. For this conformity analysis, the two models use demographic and highway and transit network assumptions consistent with the Amended Plan Bay Area 2040¹⁰. Highway and transit networks were updated for each analysis year to reflect investments in the Amended Plan Bay Area 2040 (see Appendix B) and the 2019 Amended TIP (see Appendix A1 and A2). Pricing assumptions applied in *Travel Model One* 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. Refer to Appendix D for detailed travel modeling assumptions used in this conformity analysis.¹¹

Regional vehicle miles traveled (VMT) and engine starts (which are needed for emission calculations) are forecasted using a combination of output from *Travel Model One* and base year (2010) EMFAC2017 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.

A separate process was used to develop demographic assumptions for the PM_{2.5} “baseline year” of 2008. *Bay Area UrbanSim* generates Transportation Analysis Zone (TAZ)-level data set in 5-year increments. The calculation of data for the interim year 2008 requires a multi-stop process. First, regional control totals for each attribute are calculated using straight-line extrapolations between the two adjacent 5-year increments (2005 and 2010). 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.

Analysis Years

The analysis years for the budget and baseline year tests are to be within five years from the date the analysis is done, the horizon year of the RTP and intermediate years as necessary so that analysis years

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

⁸ Additional information is available here: https://www3.arb.ca.gov/msei/emfac_off_model_adjustment_factors_final_draft.pdf

⁹ Additional information is available here: http://2040.planbayarea.org/sites/default/files/2017-07/Land_Use_Modeling_PBA2040_Supplemental%20Report_7-2017.pdf

¹⁰ Additional information is available here: <http://www.planbayarea.org/2040-plan/final-preferred-scenario>

¹¹ Additional information is available here: http://2040.planbayarea.org/sites/default/files/2017-07/Travel_Modeling_PBA2040_Supplemental%20Report_7-2017_0.pdf

This document is part of the Final Amended 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.

are not more than ten years apart. For this conformity analysis, the analysis years are 2020, 2030 and 2040 for the 2008 and 2015 ozone and 2006 PM_{2.5} standards. MTC used *Travel Model One* to forecast travel data for the 2020, 2030 and 2040 analysis years. The forecasted travel data for each analysis year were then input into the EMFAC2017 model to calculate on-road motor vehicle emissions.

Consultation Process

MTC has consulted on the preparation of this conformity analysis 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 analysis assumptions, consults on TCM implementation issues, and reviews the results of the conformity analysis. The task force meetings are open to the public. Consultation with the Air Quality Conformity Task Force related to the preparation of this conformity analysis includes the following:

March 2020

- Review approach to Conformity Analysis for Draft Amended Plan Bay Area 2040 and the Amended 2019 TIP

April 2020

- Review responses to comments on Conformity Analysis for Draft Amended Plan Bay Area 2040 and the Amended 2019 TIP
- Complete the Conformity Determination for Amended Plan Bay Area 2040 and the Amended 2019 TIP and respond to public comments

Comparison of Motor Vehicle Emissions to Budgets

As explained earlier, on-road motor vehicle emissions budgets are established in the SIP for VOCs and NO_x. To make a positive conformity finding, the regional on-road motor vehicle emissions must be equal to or less than these budgets. The results of the vehicle activity forecasts and on-road motor vehicle emission calculations are described in the following section.

Ozone Motor Vehicle Emission Budgets

For VOC and NO_x, the on-road motor vehicle emission budgets also reflect emission reductions from five Transportation Control Measures (TCMs) incorporated in the 2001 Ozone Attainment Plan (Table 1).

Table 1: VOC and NO_x Emissions Budgets from 2001 Ozone Attainment Plan (tons/day)

VOC	
2006 On Road Motor Vehicle Emissions	168.5
2006 Mobile Source Control Measure Benefits	(4.0)
2006 TCM Benefits	(0.5)
2006 Emissions Budget	164.0
NO _x	
2006 On Road Motor Vehicle Emissions	271.0
2006 TCM Benefits	(0.7)
2006 Emissions Budget	270.3

The vehicle activity forecasts by analysis year for the Amended Plan Bay Area 2040 and the 2019 Amended TIP (the “build” scenarios) are shown in Table 2. Travel data (from MTC’s *Travel Model One*) was input into CARB’s EMFAC2017 emissions model, thereby generating regional vehicle activity and emissions estimates.

In addition, MTC will use the 1-hour motor vehicle emissions budget from the 2001 Ozone Attainment Plan as the 8-hour motor vehicle emissions budget to demonstrate conformity to both the 2008 and 2015 8-hour ozone standards. The ozone budgets for VOCs and NOx were compared to quantified emissions for analysis years 2020, 2030 and 2040.

EPA designated¹² the San Francisco Bay Area as “Marginal” for nonattainment of the 2008 and 2015 ozone standards with the applicable attainment year of 2021. CFR 93.118(d)(2) requires the regional emissions analysis to be performed for the attainment year for the 2015 ozone NAAQS, if it is within the timeframe of the transportation plan and conformity determination – and the CAAA requires areas to attain the national ambient air quality standards as expeditiously as practicable, but no later than specified dates. To demonstrate attainment, an area must predict that emissions during the “season” preceding the attainment date will meet the level of the standard. In general, the attainment dates for 8-hour ozone are in June. Therefore, the relevant ozone season for predicting attainment will be the ozone season in the calendar year preceding the attainment date which means the 2020 year will be the applied attainment date/year (for the 2015 ozone standard only) in this conformity analysis.

Table 2: Vehicle Activity Forecasts

	2020	2030	2040
Vehicles in use	4,349,915	5,268,777	6,115,830
Daily VMT (1000s)	156,513	170,448	184,361
Daily Engine Starts	21,679,855	26,213,115	30,299,263

Comparison of Estimated Regional On-Road Motor Vehicle Emissions to the Ozone Precursor Budgets

The vehicle activity forecasts for the Amended Plan Bay Area 2040 and the 2019 Amended TIP, Table 2, are converted to emission estimates by MTC using EMFAC2017. Tables 3 compare the results of the various analyses with the applicable budgets. The analyses indicate that the on-road 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 EMFAC2017 model.

¹² See Nonattainment and Unclassifiable Area Designations for the 2015 Ozone Standards -- April 30, 2018; https://www.epa.gov/sites/production/files/2018-04/documents/placeholder_1.pdf

Table 3: Emissions Budget Comparisons for Ozone Precursors – Summertime Conditions (tons/day)

Year	VOC Budget ¹	On-Road Motor Vehicles Net VOC Emissions ³	On-Road Motor Vehicles Net VOC Emissions with CARB Adjustment Factors ³
2020	164.0	32.20	32.20
2030	164.0	21.47	21.54
2040	164.0	17.27	17.45

Year	NO _x Budget ¹	On-Road Motor Vehicles Net NO _x ³	On-Road Motor Vehicles Net NO _x Emissions with CARB Adjustment Factors ³
2020	270.3	56.58	56.58
2030	270.3	33.31	33.34
2040	270.3	33.11	33.18

¹ 2001 Ozone Attainment Plan

² 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.

³ TCM Reduction Benefits of (0.5) tons/day of ROG and (0.7) tons/day of NO_x applied to all On-Road Motor Vehicles emission inventories in the Table 3 above

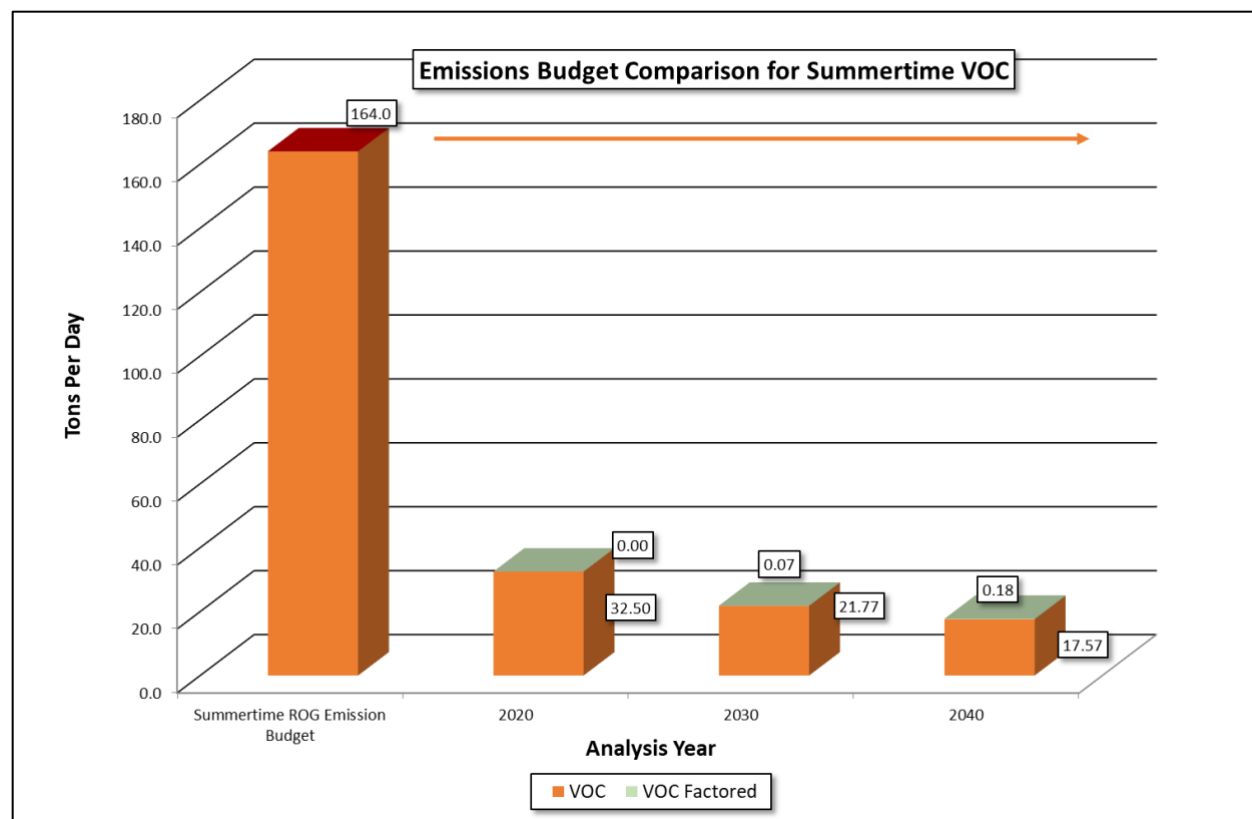


Figure 2: Emissions Budget Comparisons for Ozone Precursors (VOC)

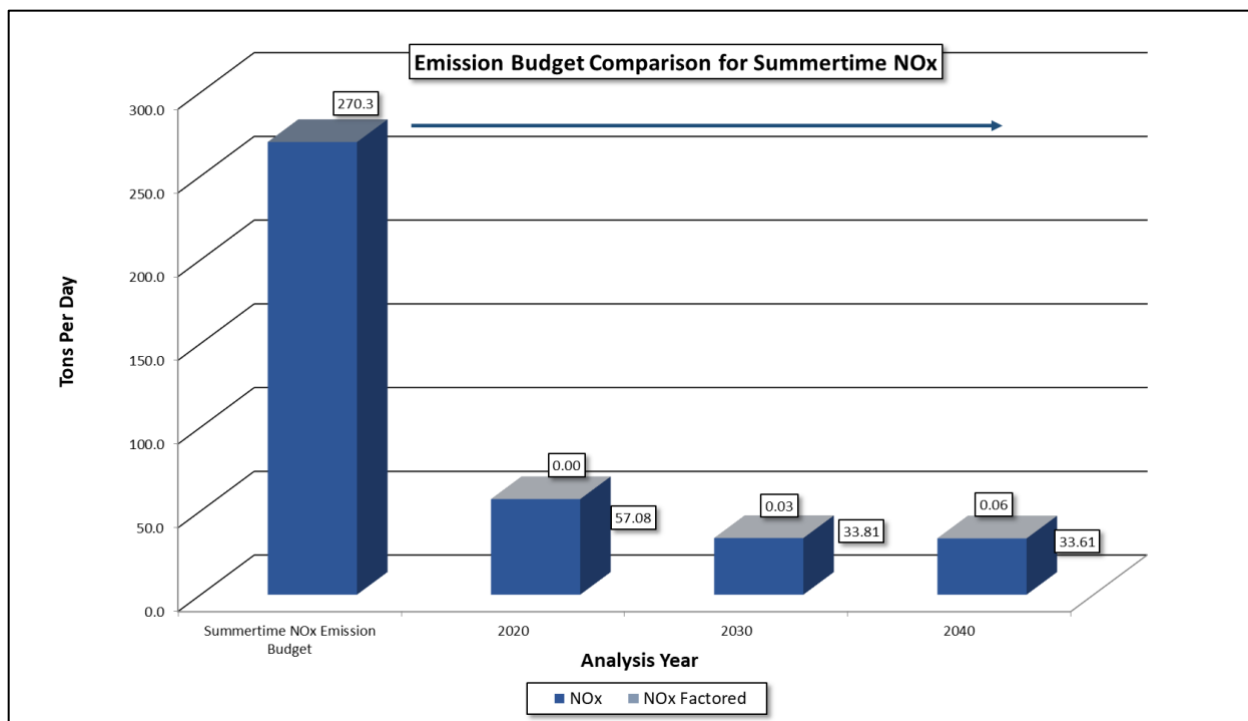


Figure 3: Emissions Budget Comparisons for Ozone Precursors (NOx)

The estimated effectiveness of the various TCMs, 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 4: Emission Reductions for Transportation Control Measures A – E in State Implementation Plan (tons/day)

TCM	VOC Emission Reductions through December 2006	NO _x 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 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 vehicle activity forecasts by analysis year for the Amended Plan Bay Area 2040 and the 2019 Amended TIP (the “build” scenarios) are shown in Table 5. Travel data (from MTC’s *Travel Model One*) was input into CARB’s EMFAC2017 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	2020	2030	2040
<i>Baseline Year</i>				
Vehicles in Use	4,631,001	4,349,915	5,268,777	6,115,830
Daily VMT (1000s)	154,100	156,513	170,448	184,361
Engine Starts	29,299,933	21,679,855	26,213,115	30,299,263

Table 6: Emissions Comparison for the PM_{2.5} Baseline Year Test

	2008	2020	2020 ²	2030	2030 ²	2040	2040 ²
<i>Baseline Year</i>							
PM _{2.5}	8.26	4.30	N/A	4.10	4.10	4.36	4.36
NO _x	194.58	51.72	N/A	27.13	27.13	26.49	26.49

¹ Emissions for wintertime only

² **CARB Adjustment Factors** applied to years 2030 and 2040 – no CARB Adjustment Factors available for the year 2020

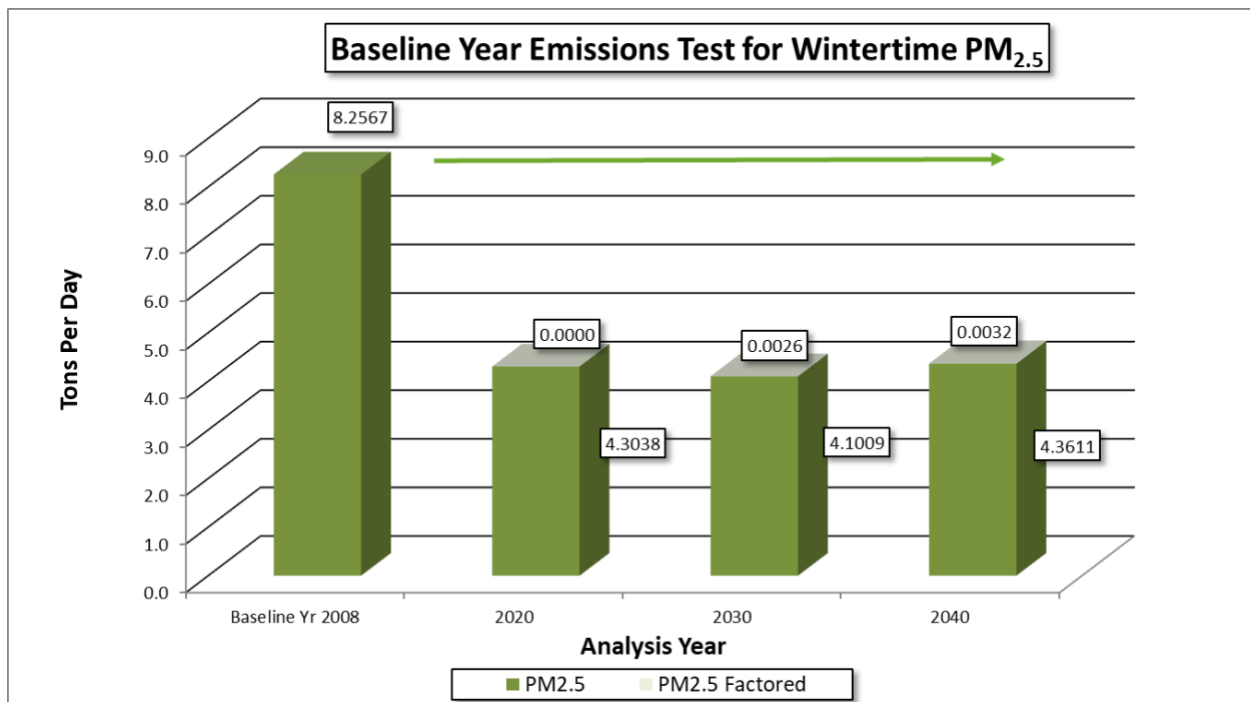


Figure 4: Baseline Year Emissions Test for PM_{2.5}

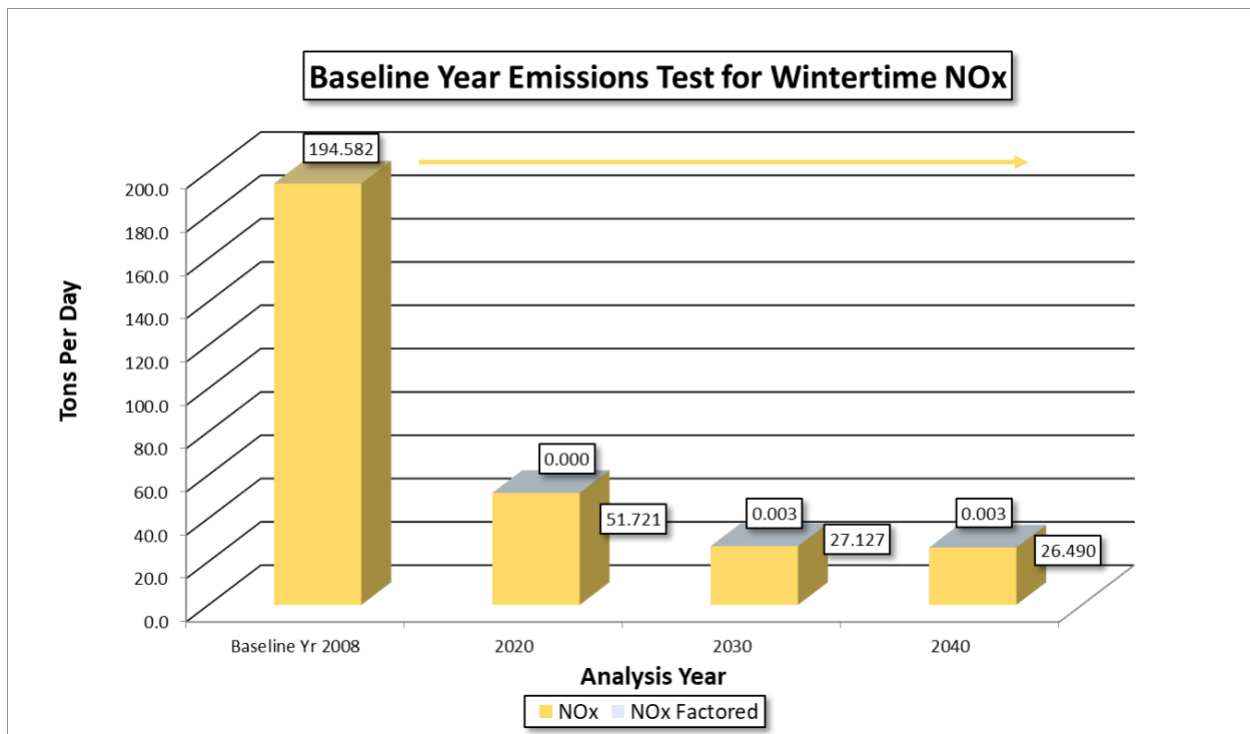


Figure 5: Baseline Year Emissions Test for Wintertime NO_x

IV. Transportation Control Measures

History of 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 TCMs 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 Measure in the State Implementation Plan

TCM	Description
Original TCMs from 1982 Bay Area Air Quality Plan	
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 ¹	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 ²	Gasoline Conservation Awareness Program (GasCAP)
TCM 12 ²	Santa Clara County Commuter Transportation Program
Contingency Plan TCMs Adopted by MTC in February 1990 (MTC Resolution 2131)	
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 ¹	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
New TCMs in 2001 Ozone Attainment Plan	
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

¹ Deleted by EPA action from ozone plan

² 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 (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	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

reductions will be based on the projects funded.

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.

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.

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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.

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
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

V. Response to Public Comments

The Final Transportation-Air Quality Conformity Analysis for the Amended Plan Bay Area 2040 and the Amended 2019 TIP was released for a 30-day public review and comment period, starting March 26, 2020, and ending on April 24, 2020.

A summary of the comments and responses are provided in Attachment B, Item 5 of the May 8, 2020, joint meeting of the MTC Planning Committee with the ABAG Administrative Committee.

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. 4387.
- The Amended Plan Bay Area 2040 and the Amended 2019 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 2040 and the Amended 2019 Amended Transportation Improvement Program are lower than the applicable motor vehicle emission budgets for the 2008 and 2015 national 8- hour ozone standards.
- For PM_{2.5} and NO_x, the Baseline Year test shows that the motor vehicle emissions are lower under the Build scenario for the various analysis years when compared to the baseline year emissions scenario.

Appendix A-1
List of Projects in the Final 2019 TIP

