

METROPOLITAN TRANSPORTATION COMMISSION

Bay Area Metro Center 375 Beale Street, Suite 800 San Francisco, CA 94105 415.778.6700 www.mtc.ca.gov

Air Quality Conformity Task Force Meeting

Metropolitan Transportation Commission

Join Zoom Meeting @ https://bayareametro.zoom.us/j/81546856396

Meeting ID: 815 4685 6396

(Additional Zoom Meeting Call-In Info on Next Page)

October 22, 2020 9:30 a.m. -11:00 a.m.

AGENDA

- 1. Welcome and Introductions
- 2. PM_{2.5} Project Conformity Interagency Consultations
 - a. Confirm Projects Are Exempt from PM_{2.5} Conformity Projects Exempt Under 40 CFR 93.126 – Not of Air Quality Concern
- 3. Approach to Draft Conformity Analysis for the Amended Plan Bay Area 2040 and the 2021 Amended Transportation Improvement Program
- 4. Consent Calendar
 - a. September 24, 2020 Air Quality Conformity Task Force Meeting Summary
- 5. Other Items

Next Meeting: December 3, 2020

MTC Staff Liaison: Harold Brazil hbrazil@bayareametro.gov

Harold Brazil is inviting you to a scheduled Zoom meeting.

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213.19.144.110 (Amsterdam Netherlands)

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103.122.166.55 (Australia)

64.211.144.160 (Brazil)

69.174.57.160 (Canada)

207.226.132.110 (Japan)

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METROPOLITAN TRANSPORTATION COMMISSION

Bay Area Metro Center 375 Beale Street San Francisco, CA 94105 TEL 415.778.6700 WEB www.mtc.ca.gov

Memorandum

TO: Air Quality Conformity Task Force DATE: October 12, 2020

FR: Harold Brazil W. I.

RE: PM_{2.5} Project Conformity Interagency Consultation

MTC requests the review and concurrence from the Air Quality Conformity Task Force (AQCTF) that the list of the project sponsor has identified as exempt and likely not to be a POAQC. **2a_Exempt List 101220.pdf** lists the exempt project under 40 CFR 93.126.

40 CFR 93.126 Exempt Projects List

County	TIP ID	Sponsor	Project Name	Project Description	Expanded Description	Project Type under 40 CFR 93.126
NAP	NAP170008	Napa County	Silverado Trail Phase L Rehab	Napa County: On Silverado Trail from Oak Knoll Ave to Hardman	Napa County: On Silverado Trail from Oak Knoll Ave to Hardman Ave: Rehabilitate existing asphalt concrete pavement,	Safety - Pavement resurfacing or rehabilitation
				Ave: Rehabilitate existing asphalt concrete pavement, retain	retain existing Class II bicycle lanes, replace existing rumble dots (audible pavement markers) along bike lane line following	
				existing Class II bicycle lanes, replace existing rumble dots	overlay.	
				(audible pavement markers) along bike lane line following		
				overlay.		



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Memorandum

TO: Air Quality Conformity Task Force DATE: October 12, 2020

FR: Harold Brazil W. I.

RE: Approach to Draft Conformity Analysis for the Amended Plan Bay Area 2040 and the 2021 Amended Transportation Improvement Program

MTC staff is developing the draft 2021 Transportation Improvement Program (TIP) conformity analysis which will also re-conform the recently Amended Plan Bay Area 2040 (PBA2040) and seeks the Air Quality Conformity Task Force's review of the proposed approach to adhere to federal conformity regulations. MTC is scheduled to release the Draft Transportation Air Quality Conformity Analysis for the 2021 TIP and Amended PBA2040 on **Monday**, **November 9**, 2020. Attachment A includes a full schedule for review and approval of the conformity analysis for the draft 2021 TIP and Amended Plan Bay Area 2040.

In addition, the draft 2021 TIP contains regionally significant projects consistent with those contained in the previous regional emissions analysis, and the design concept and scope of each regional project are consistent also. Therefore, for the draft Air Quality Conformity Analysis for the 2021 TIP and Amended PBA2040 – MTC intends to rely on the regional emission analysis for the I-680 Express Lane Gap Closure project 2019 TIP/Amended Plan Bay Area 2040 amendment conformity analysis.

Background

Transportation conformity is required under CAA section 176(c) (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 NAAQS or any interim milestones. EPA'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 SIP. Transportation conformity applies to designated nonattainment and maintenance areas ¹ for transportation-related criteria pollutants: ozone, PM_{2.5}, PM₁₀, carbon monoxide, and nitrogen dioxide.²

Safer Affordable Fuel Efficient Vehicles Rule

On September 18, 2019, the Trump Administration announced that it would enact the Safer Affordable Fuel Efficient (SAFE) Vehicle Rule. When finalized, the rule revoked California's

¹ "Maintenance areas" are those areas that were initially designated nonattainment for a criteria pollutant and subsequently redesignated to attainment after 1990. Maintenance areas have SIPs developed under CAA section 175A.

² See "Transportation Conformity Guidance for 2008 OzoneNonattainment Areas"; https://www3.epa.gov/otaq/stateresources/transconf/regs/420b12045.pdf.

authority to implement the Advanced Clean Cars (I and II) and zero emission vehicles (ZEV) mandates. Consequently, it also invalidated California's tool to estimate mobile source emissions—commonly known as "EMFAC"—which assumes the clean car mandates are implemented. Planning agencies across California use EMFAC to estimate mobile source emissions to demonstrate their respective plans conform to the SIP and meet federal clean air standards. 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 determinations³

Ozone Requirements

On February 13, 2015, the U.S. Environmental Protection Agency (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 0.075 ppm on March 12, 2008.

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, the U.S. Environmental Protection Agency (EPA) strengthened the National Ambient Air Quality Standards (NAAQS) for ground-level ozone to 70 parts per billion (ppb), based on extensive scientific evidence about ozone's effects on public health and welfare. On June 28, 2017, EPA announced that it is using its authority under the Clean Air Act (CAA) to extend by 1 year the deadline for promulgating initial area designations for the ozone national ambient air quality standards (NAAQS) that were promulgated in October 2015. The deadline was October 1, 2018 and based monitoring data⁴, the San Francisco Bay Area nonattainment area was designated to be in nonattainment by EPA.

The San Francisco Bay Area region, being in nonattainment for the 2015 ozone NAAQS, must show compliance with these requirements by completing the transportation conformity process, which conforms the most recent Regional Transportation Plan (RTP) – currently the Amended Plan Bay Area 2040 – and Transportation Improvement Program (TIP) – currently the MTC's 2021 TIP to the State Implementation Plan (SIP).

Carbon Monoxide (CO) Requirements

The approved 1998 maintenance plan for the San Francisco-Oakland-San Jose Carbon Monoxide nonattainment area did not extend the maintenance plan period beyond 20 years from redesignation. 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 redesignation of the area to attainment for CO NAAQS). As a result, as of June 1, 2018 – transportation conformity requirements no longer applies 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.

https://ww3.arb.ca.gov/msei/emfac off model adjustment factors final draft.pdf

³ Additional information is available here:

⁴ See "Draft 2017 Clean Air Plan. Spare the Air and Cool the Climate"; https://http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/baaqmd_2017_cap_draft_122816-pdf.pdf?la=en.

PM_{2.5} Requirements

The Bay Area's designation as nonattainment was published in the Federal Register on November 13, 2009 and the designation became effective on December 14, 2009. Nonattainment areas were required to meet the standard by 2014 and transportation conformity requirements began to apply to the Bay Area on December 14, 2010.

On February 8, 2013, EPA took final action and determined that the San Francisco Bay Area nonattainment area attained the 2006 24-hour PM_{2.5} National Ambient Air Quality Standard (NAAQS). This determination was based upon complete, quality-assured, and certified ambient air monitoring data showing that this area has monitored attainment of the 2006 24-hour PM_{2.5} NAAQS based on the 2009–2011 monitoring period. Based on the above determination, the requirements for the San Francisco Bay Area nonattainment area to submit an attainment demonstration (including transportation conformity emission budgets), together with reasonably available control measures (RACM), a reasonable further progress (RFP) plan, and contingency measures for failure to meet RFP and attainment deadlines were suspended for as long as the Bay Area continues to attain the 2006 24-hour PM_{2.5} NAAQS.

Therefore, since approved motor vehicle emissions budgets for PM_{2.5} are not available for use in this conformity analysis, MTC must complete one of the two interim emissions tests:

- 1. "Baseline Year Test". Emissions for each analysis year for the "Action" are less than or equal to the level of emissions in the year 2008⁵; or
- 2. <u>"Build/No-Build Test".</u> Emissions for each analysis year in the "Action" scenario are less than or equal to emissions from the "Baseline" scenario.

Analysis Approach

MTC will review the proposed conformity approach at this October 22, 2020 Conformity Task Force meeting. MTC will review the approach with the Conformity Task Force again when we present the draft conformity analysis in December 2020. Key aspects of the conformity analysis are as follows:

- 1. <u>Regional Emissions Analysis:</u> The transportation conformity rule designated by EPA allows for the reliance on the previous regional emissions analysis for conformity redeterminations. MTC will be preparing a conformity redetermination using the latest conformity analysis for the 2019 TIP and Amended Plan Bay Area 2040 to conform the draft 2021 TIP and the Plan.
- 2. Latest Planning Assumptions: MTC will use the latest planning assumptions, including:
 - UrbanSim; regional land use forecasting model UrbanSim relies on regional control totals of jobs, housing, and population, developed and adopted by ABAG, to analyze the effects of land use and transportation strategies on the forecasted regional development pattern. UrbanSim simulates the interactions of households, businesses, developers, and governments within the urban market. UrbanSim produces land use outputs, including the forecasted location of new jobs and housing for a forecasted scenario. MTC and ABAG staff have evaluated the model outputs through an extensive planning process which involved input by local jurisdictions.
 - *Travel Model One*; Updated travel demand forecasts using MTC's *Travel Model One* (version 0.6), released July 2016, was validated against the years 2000, 2005

⁵ See 40 CFR 93.119; http://www.epa.gov/otaq/stateresources/transconf/baseline.htm

- and 2010 observed conditions with the most up to date highway and transit networks.
- *EMFAC2017*; VMT estimates used in the federally approved *EMFAC2017* emission model will be consistent with the California Air Resources Board's (CARB) recommended adjustment methods.
- 3. <u>Latest Emissions Model:</u> As mentioned above, MTC will apply EMFAC2017 model system to produce emission estimates.
- 4. Emissions Budget/Interim Emissions:
 - Ozone: 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 with the 8-hour ozone standard. The ozone budget for ROG and NOx was compared to quantified emissions for analysis years 2020, 2030 and 2040.
 - PM_{2.5}: MTC will use the "Baseline Year Test" interim emission test to demonstrate conformity with the 24-hour PM_{2.5} standard. Consistent with EPA's Transportation Conformity Rule PM_{2.5} and PM₁₀ Amendments; Final Rule published in the federal register in March 2010. MTC will quantify emissions for both directly emitted PM_{2.5} and NOx (as the precursor to PM_{2.5} emissions) and for the baseline year test, emissions from the planned transportation system are compared to emissions that occurred in the baseline year for analysis years 2020, 2030 and 2040. The analysis will be carried out using inputs for the winter season, during which the Bay Area experiences its highest levels of PM_{2.5} concentrations. MTC will present documentation regarding the projects proposed for inclusion in the Build scenarios.
- 5. <u>Transportation Control Measure (TCM) Implementation</u>: The motor vehicle emission estimates for ROG and NOx will include the effects of TCMs A-E in the 2001 Ozone Attainment Plan. These TCMs are now fully implemented.
- 6. <u>Financial Constraint</u>: The TIP 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. The 2021 TIP includes the fiscal constraint analysis. The Amended Plan Bay Area 2040's draft Investment Strategy comprises a 24-year fiscally constrained set of transportation projects and programs that support the region's land use and transportation goals. The original Plan Bay Area 2040's total plan investment totals \$310 billion in year of expenditure (YOE) dollars. Of this total, roughly \$74 billion is considered to be discretionary revenue.
- 7. <u>Interagency and Public Consultation</u>: MTC will conduct the appropriate agency and public consultation for the Draft Transportation Air Quality Conformity Analysis for the Amended Plan Bay Area 2040 and the 2021 TIP.

Attachment A: Draft Schedule for the Transportation Air Quality Conformity Analysis for the Amended Plan Bay Area 2040 and the 2021 Transportation Improvement Program (TIP)

Activity	Timeline
Conformity Task Force Reviews Proposed Conformity Approach	October 22, 2020
MTC Staff Conducts Technical Analysis & Report Preparation	October 2020
 Release Draft Conformity Analysis for Public Review and Begin Public Comment Period Discuss Draft Conformity Analysis with AQCTF 	November 9, 2020
Discuss Draft Conformity Analysis with AQCTF	December 3, 2020
End of Public Comment Period	December 10, 2020
AQCTF Briefing on Responses to Comments	Via Email after – December 10, 2020
Committee Approval	February 10, 2021
Commission Approval	February 24, 2021
Expected FHWA/FTA Final Approval of 2021 TIP and AQ Conformity Analysis	April, 2021

Air Quality Conformity Task Force Summary Meeting Notes September 24, 2020

Participants:

Panah Stauffer – EPA Joseph Vaughn – FHWA Dick Fahey – Caltrans Lucas Sanchez – Caltrans

Dominique Kraft – FTA Kevin Chen – MTC Gail Payne – City of Alameda Cathy Chea – MTC

Szu-han Chen – CDM Smith

Stefan Schuster – CDM Smith

Kevin Krewson – Caltrans

Andrea Gordon – BAAQMD

Adam Crenshaw – MTC

Harold Brazil – MTC

Patrick Pittenger – FHWA

1. Welcome and Self Introductions: Harold Brazil (MTC) called the meeting to order at 9:35 am.

2. PM_{2.5} Project Conformity Interagency Consultations

a. Consultation to Determine Project of Air Quality Concern Status

i. Central Avenue Safety Improvements Project

Gail Payne (City of Alameda) began the Central Avenue Safety Improvements project presentation by indicating the project began in 2014 with a Caltrans planning grant and the City looked at what it would take to make the project multi modal with a road diet and bike lanes. Ms. Payne indicated the goal of the project provides safety and mobility improvements by constructing roundabouts and other traffic calming measures, a protected bikeway, and pedestrian and transit improvements.

Ms. Payne went on to describe the scheduling of the Central Avenue Safety Improvements project as follows:

Outreach October 2020 MTC TIP Adoption November 18, 2020

City Council Adoption Dec 15, 2020 or Jan 5, 2021

Environmental Document CEQA: Late 2020

NEPA: Early 2021

Final Design 2021 Construction 2022 Ms. Payne also discussed went on to describe the impacts of the Central Avenue Safety Improvements project:

Safety: 22-24 fewer collisions in 5-year period

Bikeway: For entire corridor with protected bikeway between west end and

Washington Park

Corridor travel time: Decreases by 12-17 minutes (due to roundabouts and signal timing

changes)

Parking(on-street): Eliminates 70 spaces -20% loss

Panah Stauffer (EPA) wanted to confirm that the ADT numbers did not change from the build and no-build scenarios in the opening and horizon years and Szu-han Chen (CDM Smith) stated that there was actually a difference between the two scenarios due to the traffic diversion predicted by the travel demand model volume estimates. Mr. Chen added most of the traffic diversion occurs at Lincoln Avenue. Dick Fahey (Caltrans) discussed getting a better understanding of the traffic diversion in terms of increased volumes and requested (along with Ms. Stauffer) truck and non-truck volumes in the Central Avenue Safety Improvements project study area.

Final Determination: After the meeting and after receiving the requested additional traffic volume data – with input from EPA, FTA, FHWA (deferring their determination to Caltrans) and Caltrans, the Task Force concluded Central Avenue Safety Improvements project was not of air quality concern.

ii. West Grand Ave Bus/HOV Lane Extension Project

Kevin Chen (MTC) began the West Grand Ave Bus/HOV Lane Extension project presentation by indicating the purpose of this project is to improve person throughput crossing the San Francisco-Oakland Bay Bridge by improving traffic operations at the bridge approaches, reducing delays, and improving travel time reliability for buses. Mr. Chen added the project also improves bike/ped accessibility by completing critical gaps in the Oakland bicycle network.

Mr. Chen also identified the need for the West Grand Ave Bus/HOV Lane Extension project by noting the excessive and recurring queues occurring on the eastern part of the West Grand Ave on-ramp and on westbound West Grand Ave that spill over beyond the Maritime St intersection. These gaps in the Oakland bicycle network impose barriers to accessing existing bicycle infrastructure and promoting active transportation as an alternative mode.

Mr. Chen gave a detailed description fo the West Grans Ave Bus/HOV Lane Extension project stating, as part of the Bay Bridge Forward initiative to improve transit access and increase person throughput on the Bay Bridge corridor, MTC in collaboration with Caltrans and the City of Oakland, is undertaking the project to:

• Convert approximately half a mile (2,500 feet) of the existing right shoulder on West Grand Avenue to a bus lane in the westbound direction, between the Frontage Road intersection and the on-ramp to the Bay Bridge;

- The lane will be designated as a full-time bus lane, while allowing high occupancy vehicles (HOVs) to access the lane during the peak commute hours;
- In addition, the project will also provide a multi-use path for bicyclists and pedestrians along the eastbound direction on West Grand Avenue, utilizing the existing sidewalk and right shoulder, between Maritime Street and Mandela Parkway.

In conclusion, Mr. Chen acknowledged the following:

- This project will improve travel speeds and reduce delays for buses and HOVs;
- The 2,500 feet lane extension will be dedicated as a full-time buses-only lane, while allowing high occupancy vehicles (HOVs) to access the lane during the peak commute hours;
- The project does not increase the number of buses on this route;
- The project has no impact on the capacity of truck percentage, and there will be no redistribution of traffic;
- The project is included in the current adopted regional transportation plan (Plan Bay Area 2040), and assessed in the latest Plan and TIP's regional transportation conformity analysis;
- This project should not be considered a project of air quality concern.

Final Determination: With input from EPA, FTA, Caltrans and FHWA (deferring their determination to Caltrans), the Task Force concluded that the West Grand Ave Bus/HOV Lane Extension project was not of air quality concern.

b. Confirm Projects Are Exempt from PM_{2.5} Conformity

i. Projects Exempt Under 40 CFR 93.126 - Not of Air Quality Concern

Dick Fahey (Caltrans) if the San Antonio Road Bridge project in Marin County was adding capacity and Adam Crenshaw (MTC) indicated he would follow-up with the project sponsor.

Final Determination; After following-up with Marin County for the San Antonio Road Bridge project and with input from FTA, FHWA, EPA, Caltrans and MTC, the Task Force agreed that the projects on the exempt list **2b_Exempt List 09162020.pdf** are exempt from PM_{2.5} project level analysis.

3. Projects with Regional Air Quality Conformity Concerns

Adam Crenshaw (MTC) stated MTC is proposing to add nine individually listed projects to the 2019 TIP and Patrick Pittenger (FHWA) ask why the Union City Transit Electric Bus Procurement project (ALA190029) was both on the 40 CFR 93.126 exempt list of projects and the individual regional project list. Mr. Crenshaw indicated that the 40 CFR 93.126 list was for project-level conformity purposes and the individual list was for regional conformity purposes. The Task Force had no other comments.

4. Consent Calendar

a. August 27, 2020 Air Quality Conformity Task Force Meeting Summary

Final Determination; With input from all members, the Task Force concluded that the consent calendar was approved.

5. Other Items

Harold Brazil (MTC) and Adam Crenshaw (MTC) mentioned MTC will be conducting a conformity analysis for the 2021 TIP beginning toward the end of October 2020.