

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**

Metropolitan Transportation Commission Bay Area Metro Center

#### **Mount Hamilton Conference Room**

375 Beale Street, Suite 800

(Note: Visitors must check in with the receptionist on the 7th floor) San Francisco, CA

Conference Call Number: Dial - (415) 655-0002 (Access Code: 926 454 758)

Participant ID is # button.

Thursday, April 26, 2018 9:30 a.m. –11:00 a.m.

(Revised)

#### **AGENDA**

- Welcome and Introductions
- 2. MTC/SACOG Air Quality Planning/Conformity MOU (Update and Discussion)
- 3. PM<sub>2.5</sub> Project Conformity Interagency Consultations
  - a. Confirm Projects Are Exempt from PM<sub>2.5</sub> Conformity
    - i. Projects Exempt Under 40 CFR 93.126 Not of Air Quality Concern
- 4. Approach to the Conformity Analysis for the 2019 Transportation Improvement Program and the Amended Plan Bay Area
- 5. Projects with Regional Air Quality Conformity Concerns
  - a. Review of the Regional Conformity Status for New and Revised Projects
     5a\_Regional\_AQ\_Conformity\_Review
     5a Attachment-A List of Proposed New Projects
- 6. 2020 and 2022 Congestion Mitigation and Air Quality (CMAQ) Performance Targets Potential Options
- 7. South Coast Court Ruling Vacates 1997 Revocation (Info/Update)
- 8. Consent Calendar
  - a. March 22, 2018 Air Quality Conformity Task Force Meeting Summary
- 9. Other Items

Next Meeting: May 24, 2018

MTC Staff Liaison: Harold Brazil <u>hbrazil@mtc.ca.gov</u>



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: April 13, 2018

FR: Harold Brazil W. I.

RE: PM<sub>2.5</sub> Project Conformity Interagency Consultation

MTC requests the review and concurrence from the Task Force on projects that project sponsors have identified as exempt and likely not to be a POAQC. **2a\_Exempt List 041318.pdf** lists these exempt projects.

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	NAP130008	Yountville	Hopper Creek Pedestrian Bridge and Path Project	Yountville: Along Hopper Creek from Oak Circle Open Space to	As a part of the Town's General Plan, the Town has approved the long term goal of establishing a Pedestrian Path along Hopper Creek. A number of segments have been built to date, but there is a remaining segment from Oak Circle open space to Mission along Hopper Creek that remains to be built yet. The project includes the construction of a pedestrian bridge across Hopper Creek and construction of park path leading up to the bridge on both sides of the creek. This construction will connect two existing pedestrian path segments (along Heather to Oak Circle open space and south of Mission to the southern Town Limits).	Air Quality - Bicycle and pedestrian facilities
					Construction will consist of an approximately 60 foot long prefabricated bridge and approximately 500 feet of park path. The bridge could cost as much as \$250,000 with design and engineering. Part of the path will use Oak Circle open space (owned by Town), TKRG property (easement provided), and West America Bank (no easement or access provided as of yet and will be dependent on future redevelopment or purchase). The West America Bank path area is proposed as a separate phase. Total funding estimate is approximately \$500,000. The design work is proposed to take place in FY 2013/14 with construction estimated to take place FY 2014/15.	
					The open space at the north end of the path will be redeveloped with the construction of the path as part of PK-5012. Improvements include but are not limited to: new picnic table/bench, indigenous plants, and replace old asphalt paths with colored concrete.  Funding will come from the Town with partial funding from Ad-hoc restaurant CUP requirements, a State Parks Grant, and a Metropolitan Transportation Commission (MTC) Grant.	



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## Memorandum

TO: Air Quality Conformity Task Force DATE: April 13, 2018

FR: Harold Brazil W. I.

RE: Approach to Draft Conformity Analysis for the 2019 Transportation Improvement Program

and Amended Plan Bay Area 2040

MTC staff is developing the draft 2019 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 2019 TIP and Amended PBA2040 on **Monday, June 18, 2018**. Attachment A includes a full schedule for review and approval of the conformity analysis for the draft 2019 TIP and Amended Plan Bay Area 2040.

### **Background**

The federally required 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 regionally significant. MTC, as the federally designated Metropolitan Planning Organization (MPO) for the nine-county San Francisco Bay Area region, 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/programmed to the projects must not exceed the amount of dollars estimated to be available. The TIP must include a financial plan that demonstrates that programmed projects can be implemented.

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 areas¹ for transportation-related criteria pollutants: ozone, PM<sub>2.5</sub>, PM<sub>10</sub>, carbon monoxide, and nitrogen dioxide.²

#### **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)

<sup>&</sup>lt;sup>1</sup> "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.

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

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 new deadline is October 1, 2018.. Based on current monitoring data<sup>3</sup>, it is likely that the San Francisco Bay Area nonattainment area will be designated as nonattainment at that time.

### Carbon Monoxide (CO) Requirements

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.

### PM<sub>2.5</sub> 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<sub>2.5</sub> 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<sub>2.5</sub> 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<sub>2.5</sub> NAAQS.

Therefore, since approved motor vehicle emissions budgets for PM<sub>2.5</sub> are not available for use in this conformity analysis, MTC must complete one of the two interim emissions tests:

- 1. <u>"Baseline Year Test".</u> Emissions for each analysis year for the "Action" are less than or equal to the level of emissions in the year 2008<sup>4</sup>; 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 April 26<sup>th</sup> Conformity Task Force meeting. MTC will review the approach with the Conformity Task Force again when we present the draft conformity analysis in June 2018. Key aspects of the conformity analysis are as follows:

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> See 40 CFR 93.119; http://www.epa.gov/otag/stateresources/transconf/baseline.htm

- 1. <u>Regional Emissions Analysis:</u> MTC will conduct a new regional emissions analysis to conform the draft 2019 TIP and the Amended PBA2040.
- 2. <u>Latest Planning Assumptions</u>: 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 and 2010 observed conditions with the most up to date highway and transit networks.
  - *EMFAC2014*; VMT estimates used in the federally approved *EMFAC2014* emission model will be consistent with the California Air Resources Board's (CARB) recommended adjustment methods.
- 3. <u>Latest Emissions Model:</u> MTC will apply EMFAC2014 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.
  - Carbon Monoxide (CO): MTC will use the CO motor vehicle emissions budget from the 2004 Revision to the *California State Implementation Plan for Carbon Monoxide, Updated Maintenance Plan for Ten Federal Planning Areas* to determine conformity with the CO standard. The CO budget will be compared to projected emissions for analysis years 2018 (the CO Maintenance Plan horizon year), 2020, 2030 and 2040.
  - PM<sub>2.5</sub>: MTC will use the "Baseline Year Test" interim emission test to demonstrate conformity with the 24-hour PM<sub>2.5</sub> standard. Consistent with EPA's Transportation Conformity Rule PM<sub>2.5</sub> and PM<sub>10</sub> Amendments; Final Rule published in the federal register in March 2010. MTC will quantify emissions for both directly emitted PM<sub>2.5</sub> and NOx (as the precursor to PM<sub>2.5</sub> 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<sub>2.5</sub> 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 emissions 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 draft 2019 TIP will include the fiscal constraint analysis. The Amended PBA2040'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 2019 TIP and Amended PBA2040.

# Attachment A: Draft Schedule for the Transportation Air Quality Conformity Analysis for 2019 Transportation Improvement Program (TIP) and Amended Plan Bay Area 2040 (PBA2040)

Activity	Timeline		
Conformity Task Force Reviews Proposed Conformity Approach	April 26, 2018		
MTC Staff Conducts Technical Analysis & Report Preparation	April-May 2018		
Begin Public Review and Comment Period	June 18, 2018		
Discuss Draft Conformity Analysis with AQCTF	June 28, 2018		
End of Public Comment Period	July 19, 2018		
AQCTF Briefing on Responses to Comments	August 23, 2018		
Committee Approval	September 12, 2018		
Commission Approval	September 26, 2018		
Expected FHWA/FTA Final Approval of 2019 TIP and AQ	December 12, 2018		
Conformity Analysis			



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# Memorandum

TO: Air Quality Conformity Task Force DATE: April 26, 2018

FR: Adam Crenshaw

RE: Review of the Regional Conformity Status for New and Revised Projects

Staff has prepared the following information in an effort to streamline the review of the regional air quality conformity implications of projects that staff proposes to revise or add into the 2017 TIP through current or future revisions. This item is for advisory purposes only. The inclusion of these projects and project changes in a proposed revision to the TIP is subject to Commission approval in the case of amendments and MTC's Executive Director or Deputy Executive Director in the case of administrative modifications. The final determination of the regional air quality conformity status of these projects will be made by the Federal Highway Administration, the Federal Transit Administration and the Environmental Protection Agency as part of their review of proposed final TIP amendments and by the Executive Director or Deputy Executive Director as part of their review for TIP administrative modifications.

### Projects Staff is Proposing to Include or Revise in the 2017 TIP

Staff has received requests from sponsors to add two new individually listed project and 11 new grouped listed projects to the 2017 TIP. Attachment A includes a list of the projects along with the regional air quality category that staff believes best describes the projects.

MTC staff is not seeking a determination on the status of these projects for project-level conformity purposes with this item.

Item 4 - Attachment A							
County	TIP ID/FMS ID	Sponsor	Project Name	Project Description	Project Expanded Description	Project Type	
			Pro	posed New Individually Listed Projects for Region	onal Air Quality Conformity Status Review		
Regional	REG170027	MTC	Targeted Transportation Alternatives	SF Bay Area: Region-wide: Implement a digitally based personalized travel assistance program that provides targeted audiences with travel information to shift from solo driving to sustainable forms of transportation.	- SF Bay Area: Region-wide: Implement a digitally-based personalized travel assistance program that provides targeted audiences with travel information to shift from solo driving to sustainable forms of transportation. The objective for this strategy is to change travel behavior from driving alone to sustainable modes (walking, biking, taking transit, carpooling, vanpooling and vehicle sharing) for all types of trips through personalized travel assistance marketing and campaigns, and contribute reducing the region's per capita GHG emissions reductions.	EXEMPT (40 CFR 93.126) - Grants for training and research programs	
Regional	REG170028	MTC	Regional Car Sharing	SF Bay Area: Region-wide: Implement strategies to grow carsharing in the Bay Area including developing policies and regulations, increasing the number of carshare vehicles, developing incentives and integration into trip planning maps and apps	SF Bay Area: Region-wide: Implement strategies to grow carsharing in the Bay Area including assistance with creating policies and regulations consistent across jurisdictions, increasing the number of carshare vehicles at transit/mobility hubs around BART and major bus stations, incorporating carshare incentives into the development review process, integrating carsharing into trip planning maps and apps and helping local governments add carshare vehicles into their fleets. The objective for this strategy is to reduce car ownership with the provision of car sharing services and contribute reducing the region¿s per capita GHG emissions reductions. Car sharing allows individuals to rent vehicles, providing access to an automobile without the costs of individual ownership. Car sharing is evolving and growing in the Bay Area through traditional roundtrip, one-way and peer-to-peer models.	EXEMPT (40 CFR 93.126) - Grants for training and research programs	
				Proposed New Group Listed Projects for Regiona	Air Quality Conformity Status Poviny		
Contra Costa	VAR170012	Contra Costa		BRIDGE NO. 28C0154, PLEASANT HILL RD OVER	BRIDGE NO. 28C0154, PLEASANT HILL RD OVER TAYLOR BLVD, 0.6	EXEMPT (40 CFR 93.126) - Widening narrow	
Contra Costa	VAN1/0012	County	Reconstruction - Local Highway Bridge Program	TAYLOR BLVD, 0.6 MI E OF GEARY ROAD. Rehabilitate existing bridge. Deck replacement and sliver widening for standard shoulders, no added capacity	MI E OF GEARY ROAD. Rehabilitate existing bridge. Deck replacement and sliver widening for standard shoulders, no added capacity	pavements or reconstructing bridges (no	
Contra Costa	VAR170012	Lafayette	GL: Bridge Rehabilitation/ Reconstruction - Local Highway Bridge Program	BRIDGE NO. PM00174, Bridge Preventive Maintenance Program (BPMP) various bridges in the City of Lafayette.	BRIDGE NO. PM00174, Bridge Preventive Maintenance Program (BPMP) various bridges in the City of Lafayette. See Caltrans Local Assistance HBP website for backup list of projects	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	
Marin	VAR170012	Marin County	GL: Bridge Rehabilitation/ Reconstruction - Local Highway Bridge Program	BRIDGE NO. 27C0016, LUCAS VALLEY ROAD OVER MILLER CREEK, 1.8 MI N OF SR 101. Replace existing 2-lane bridge with 2-lane bridge.	BRIDGE NO. 27C0016, LUCAS VALLEY ROAD OVER MILLER CREEK, 1.8 MI N OF SR 101. Replace existing 2-lane bridge with 2-lane bridge.	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	
Marin	VAR170012	Marin County	GL: Bridge Rehabilitation/ Reconstruction - Local Highway Bridge Program	BRIDGE NO. 27C0111, MARSHALL PETALUMA RD, OVER SALMON CREEK, 3.0MI W OF HICKSVALLEY RD. Replace existing 2-lane bridge with a 2-lane bridge.	BRIDGE NO. 27C0111, MARSHALL PETALUMA RD, OVER SALMON CREEK, 3.0MI W OF HICKSVALLEY RD. Replace existing 2-lane bridge with a 2-lane bridge.	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	
Marin	VAR170012	San Anselmo	GL: Bridge Rehabilitation/ Reconstruction - Local Highway Bridge Program		BRIDGE NO. 27C0100, BRIDGE AVE OVER SAN ANSELMO CREEK, 80M SW OF SIR FRANCIS DRK. Replace 2-lane bridge with 2-lane bridge	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)	

	Item 4 - Attachment A							
County	TIP ID/FMS ID	Sponsor	Project Name	Project Description	Project Expanded Description	Project Type		
San Mateo	VAR170012	Department of Parks and Recreation	GL: Bridge Rehabilitation/ Reconstruction - Local Highway Bridge Program	BRIDGE NO. PM00190, Bridge Preventive Maintenance Program (BPMP) various bridges in District 4.	BRIDGE NO. PM00190, Bridge Preventive Maintenance Program (BPMP) various bridges in District 4.	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)		
San Mateo	VAR170012	South San Francisco	Reconstruction - Local	BRIDGE NO. 35C0148L, GRAND AVENUE WB OVER CALTRAIN UPRR INDUSTRIAL, 0.1 MI E OF US 101. Rehabilitate existing bridge. Structural steel painting and deck treatment, (no added capacity).	BRIDGE NO. 35C0148L, GRAND AVENUE WB OVER CALTRAIN UPRR INDUSTRIAL, 0.1 MI E OF US 101. Rehabilitate existing bridge. Structural steel painting and deck treatment, (no added capacity).	pavements or reconstructing bridges (no		
San Mateo	VAR170012	South San Francisco	Reconstruction - Local	BRIDGE NO. 35C0148R, GRAND AVENUE WB OVER CALTRAIN UPRR INDUSTRIAL, 0.1 MI E OF US 101. Rehabilitate existing bridge -Structural steel painting and deck treatment (no added capacity).	BRIDGE NO. 35C0148R, GRAND AVENUE WB OVER CALTRAIN UPRR INDUSTRIAL, 0.1 MI E OF US 101. Rehabilitate existing bridge - Structural steel painting and deck treatment (no added capacity).	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)		
Santa Clara	VAR170012	Cupertino	Reconstruction - Local	BRIDGE NO. 37C0011, STEVENS CR BLVD OVER STEVENS CREEK, 0.2 MI E/O STEVENS CYN RD. Scour Countermeasures	BRIDGE NO. 37C0011, STEVENS CR BLVD OVER STEVENS CREEK, 0.2 MI E/O STEVENS CYN RD. Scour Countermeasures	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature.		
Solano	VAR170012	Solano County	Reconstruction - Local	BRIDGE NO. 23C0118, MAIN PRAIRIE RD OVER ULATIS CREEK, 0.3 MI E OF RTE 113. Replace existing 2-lane bridge with a new 2-lane bridge	BRIDGE NO. 23C0118, MAIN PRAIRIE RD OVER ULATIS CREEK, 0.3 MI E OF RTE 113. Replace existing 2-lane bridge with a new 2-lane bridge	EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)		
San Mateo	VAR170007	Caltrans	GL: Safety Improvements SHOPP Collision Reduction	Near Los Gatos, SR-17 from south of Summit Road to north of Alma College Road. Install lighting, warning signs, flashing beacons, guardrail, rumble strips, wet-night visibility striping, and channelizers, and apply High Friction Surface Treatment (HFST).	Near Los Gatos, SR-17 from south of Summit Road to north of Alma College Road. Install lighting, warning signs, flashing beacons, guardrail, rumble strips, wet-night visibility striping, and channelizers, and apply High Friction Surface Treatment (HFST).	EXEMPT (40 CFR 93.126) - Projects that correct, improve, or eliminate a hazardous location or feature.		



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# Memorandum

TO: Air Quality Conformity Task Force DATE: April 13, 2018

FR: David Vautin, MTC

RE: 2020 and 2022 Congestion Mitigation and Air Quality (CMAQ) Performance Targets – Potential Options

New federal performance requirements mandate that metropolitan planning organizations (MPOs) such as MTC set short-range transportation performance targets on issues ranging from roadway safety and infrastructure condition to traffic congestion and environmental benefits. Staff is currently seeking feedback from regional stakeholders, including those participating in the Regional Advisory Working Group (RAWG), on year 2020 and 2022 targets related to the Congestion Mitigation and Air Quality (CMAQ) program.

**Attachment A** to this memo is a more detailed agenda item from a recent RAWG meeting with proposed Bay Area targets for congestion, modal shift, and air quality benefits from CMAQ-funded projects. In late April and early May, staff will meet with Caltrans to reach consensus on the appropriate targets, considering feedback received from stakeholders this month. Caltrans is then responsible for setting appropriate targets by late May to meet federal target-setting deadlines, after which MTC will approve consistent targets for the appropriate performance measures.

Staff is available to answer any questions the task force may have about MTC's CMAQ target-setting activities.

### Attachment A: Regional Advisory Working Group Item on CMAQ Target-Setting



Agenda Item 3
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## Memorandum

TO: Regional Advisory Working Group DATE: March 30, 2018

FR: Dave Vautin

RE: 2020 and 2022 Congestion Mitigation and Air Quality (CMAQ) Performance Targets – Potential Options

The Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21) transformed the policy and programmatic framework for surface transportation investments by establishing new requirements for performance management to ensure the most efficient investment of Federal transportation funds. To implement MAP-21 and the Fixing America's Surface Transportation (FAST) Act, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) have established a Transportation Performance Management program to provide a framework to support improved investment decision-making by focusing on national transportation goals, increasing the accountability and transparency of the Federal highway programs, and establishing performance-based planning and programming.

Between April 2016 and January 2017, federal agencies finalized all performance management rules to fulfill MAP-21 and FAST Act requirements. The rules established 29 transportation performance measures covering the following federal goal areas: Safety; Infrastructure Condition; System Reliability; Freight Movement and Economic Vitality; Congestion Reduction; and Environmental Sustainability. While most targets set by state Department of Transportations (DOTs), Metropolitan Planning Organizations (MPOs), and transit agencies under the federally-required framework simply need to be coordinated between agencies, targets for congestion and mode shift are required to be fully consistent between the state DOT and the MPO, and they are required to be set for specifically-identified urbanized areas.

For this first round of target-setting, Caltrans and MTC are responsible for setting targets categorized as related to the Congestion Mitigation and Air Quality (CMAQ) program for year 2020 and year 2022 (both two- and four-year targets); these targets relate to the Congestion Reduction and Environmental Sustainability goals above. While MPO targets for CMAQ are not required to be finalized until November, Caltrans has a late May deadline from FHWA to identify these targets. After that point, MTC will not have any flexibility to modify urbanized area targets. As staff works collaboratively with Caltrans to agree upon targets by the May deadline, we are seeking feedback from partners, stakeholders, and the public on potential target options.

#### **CMAQ Performance Measures Final Rule**

What are the CMAQ performance measures?

The final rule from FHWA established three performance measures to assess performance for congestion reduction and environmental quality, which are required for regions receiving CMAQ funding:

- 1. Annual hours of peak-hour excessive delay per capita by urbanized area [targets 27(a) through 27(e)]
- 2. Percent of non-SOV travel by urbanized area [targets 28(a) through 28(e)]

3. Total emissions reductions from CMAQ-funded projects by pollutant [targets 29(a) through 29(e)]

What are the CMAQ target requirements?

State DOTs and MPOs must set two-year and four-year numerical targets every four years for each CMAQ measure to comply with the regulation. As noted above, unlike most other targets, the state DOT and MPO targets for each urbanized area must be fully consistent. MPOs will report progress on these measures in future Regional Transportation Plans (RTPs) and Transportation Improvement Programs (TIPs), as well as through a new CMAQ Performance Plan requirement. FHWA will review MPO performance as part of the triennial review process.

### **CMAQ Targets – Peak-Hour Excessive Delay (Traffic Congestion)**

While Caltrans has not calculated the baseline 2017 congestion data for the San Francisco-Oakland and San Jose UAs, staff is looking for input on the **directionality** and **magnitude** of changes in peak-hour excessive delay between today and 2020/2022. Given the lack of data, staff has provided a trendline dataset from Vital Signs for a similar indicator as a point of reference (see **Figure 1**). Two options are currently being considered:

- 1. **Aspirational target:** set 2022 target to slightly reduce traffic congestion compared to baseline conditions (*likely to be the preferred approach from Caltrans*)
- 2. **Achievable target:** set 2022 target based on the existing trendline for traffic congestion

### CMAQ Targets - Non-SOV Mode Share (Commuting)

For non-single-occupant vehicle mode share, staff has developed two options and is looking for feedback on which one would be most appropriate to advocate for in the target coordination process with Caltrans. As shown in **Table 1** and **Figure 2**, the two options under consideration are:

- 1. **Base on linear trend:** use data from the last four years specific to each urbanized area to identify 2020 and 2022 non-SOV mode share targets
- 2. **Align with Plan Bay Area 2040 target:** apply a consistent +1 percentage point target for 2020 and +2 percentage points target for 2022 to roughly align with the +10 percentage point mode shift target by year 2040 (board-adopted target from Plan Bay Area 2040)

### **CMAQ Targets – Emissions Reductions from CMAQ-Funded Projects**

For emissions reductions, staff has identified a potential approach, merging three datasets together to develop a realistic future forecast for emissions reductions associated with CMAQ-funded projects. Future performance has been estimated through 2022, incorporating data related to:

- Past CMAQ project delivery & emissions reductions from the CMAQ Public Access System
- Upcoming projects in current Transportation Improvement Program project pipeline
- Expected emissions rates from a cleaner fleet from the EMFAC 2017 emissions model

Refer to **Table 1** for the list of proposed emission reduction targets; staff is looking for feedback on whether any modifications or further considerations should be incorporated into this approach.

### **Next Steps**

Given that Caltrans is only providing a brief 14-day formal comment period for MPOs during the month of May, staff is looking for feedback and guidance from stakeholders and the public by **April** 17 on the approaches above. This will assist with the coordination process with Caltrans in April, and staff will return to RAWG in May to seek feedback on specific targets for CMAQ following that consultation. Finally, staff will provide a federal performance update to the MTC Planning Committee later this spring addressing both CMAQ and transit asset management targets.

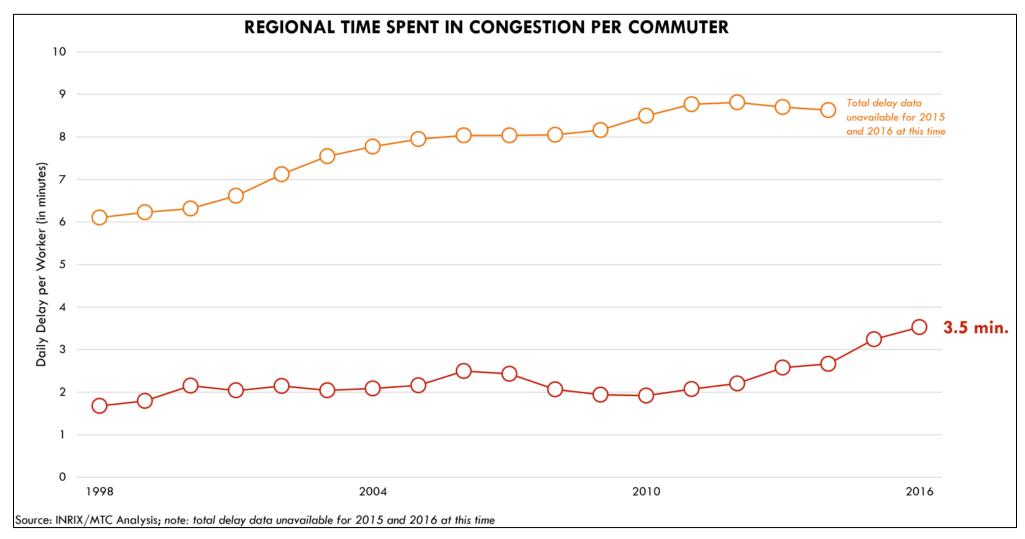
Table 1. Draft CMAQ Target Baselines and Target-Setting Options for 2020 and 2022

ID	Measure	Baseline (draft)	Option 1 2020	Option 1 2022	Option 2 2020	Option 2 2022
27(a)	Annual hours of peak-hour excessive delay per capita (San Francisco-Oakland UA)	TBD*	Not required to set 2-year target this cycle	Aspirational target TBD (small reduction in delay)	Not required to set 2-year target this cycle	Achievable target TBD (continued growth in delay)
27(b)	Annual hours of peak-hour excessive delay per capita (San Jose UA)	TBD*	Not required to set 2-year target this cycle	Aspirational target TBD (small reduction in delay)	Not required to set 2-year target this cycle	Achievable target TBD (continued growth in delay)
27(c) 27(d) 27(e)	Annual hours of peak-hour excessive delay per capita (Concord UA, Santa Rosa UA, and Antioch UA)	quired to set 2-year	or 4-year targets th	is cycle		
28(a)	Percent of non-single-occupant vehicle (SOV) travel (San Francisco-Oakland UA)	44.3% (2018 metric) (2012-16)	<b>45.5%</b> (+1.2%)	<b>46.7%</b> (+2.4%)	<b>45.3%</b> (+1.0%)	<b>46.3%</b> (+2.0%)
28(b)	Percent of non-single-occupant vehicle (SOV) travel (San Jose UA)	24.5% (2018 metric) (2012-16)	<b>25.1%</b> (+0.6%)	<b>25.7%</b> (+1.2%)	<b>25.5%</b> (+1.0%)	<b>26.5%</b> (+2.0%)
28(c) 28(d) 28(e)	Percent of non-single-occupant vehicle (SOV) travel (Concord UA, Santa Rosa UA, and Antioch UA)	$\sim$ 1 $n/a$   $Nat required to set /-vear or //-vear$				
29(a)	Total emissions reductions from CMAQ-funded projects (Fine particulate matter – PM2.5)	<b>95.2 kg/day</b> (FFY 2014-17)	56.1 kg/day (2-yr. period)	<b>112.7 kg/day</b> (4-yr. period)	n/a	n/a
29(b)	Total emissions reductions from CMAQ-funded projects (Particulate matter – PM10)	135.4 kg/day (FFY 2014-17)	<b>80.0 kg/day</b> (2-yr. period)	<b>160.5 kg/day</b> (4-yr. period)	n/a	n/a
29(c)	Total emissions reductions from CMAQ-funded projects (Carbon monoxide – CO**)	<b>15,501.4 kg/day</b> (FFY 2014-17)	<b>6,442.9 kg/day</b> (2-yr. period**)	11,885.5 kg/day (4-yr. period**)	n/a	n/a
29(d)	Total emissions reductions from CMAQ-funded projects (Volatile organic compounds – VOCs)	<b>2,248.9 kg/day</b> (FFY 2014-17)	<b>771.4 kg/day</b> (2-yr. period)	<b>1,344.7 kg/day</b> (4-yr. period)	n/a	n/a
29(e)	Total emissions reductions from CMAQ-funded projects (Nitrogen oxide - NOx)	<b>2,179.7 kg/day</b> (FFY 2014-17)	<b>814.2 kg/day</b> (2-yr. period)	<b>1,441.83 kg/day</b> (4-yr. period)	n/a	n/a

<sup>\* =</sup> Awaiting baseline data from Caltrans related to targets 27(a) and 27(b); expected sometime in mid-April.

<sup>\*\* =</sup> Target 29(c) may not be required once the San Francisco Bay Area's maintenance period for carbon monoxide ends later this year.

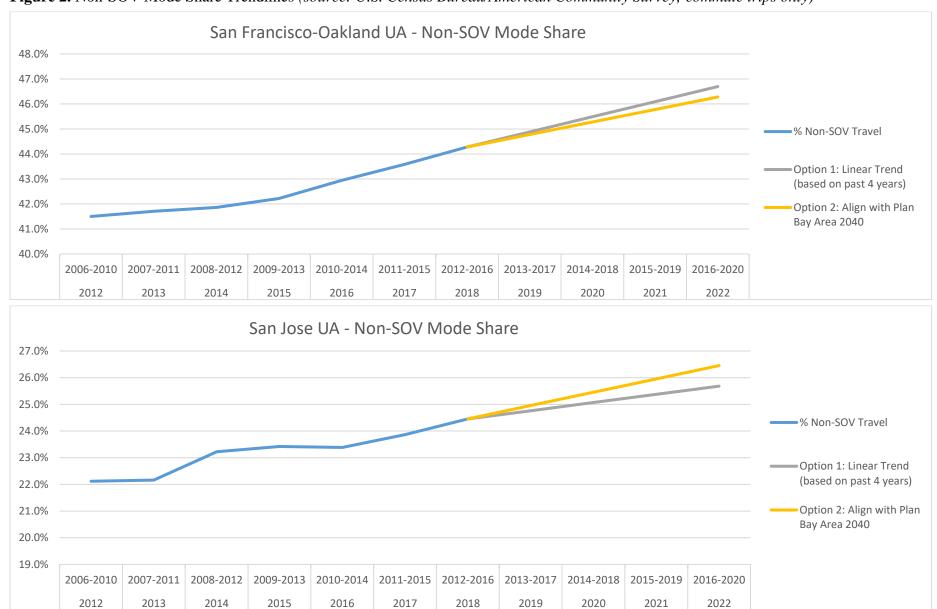
**Figure 1.** Congested Delay Trendline from Vital Signs (for reference purposes only; source: INRIX/MTC)



**Note:** While the peak-hour excessive delay (PHED) measure selected by FHWA is similar in some respects to the per-commuter congested delay used in Vital Signs, there are some key differences. PHED includes congestion on all NHS facilities, including arterials, while the current Vital Signs dataset only captures freeway delay. Furthermore, PHED focuses solely on delay during the peak hour and it uses a variable threshold for delay to account for lower speed limits on arterials.

**Note:** In the trendline graph above, congested delay reflects per-commuter delays when speeds drop below 35 mph on freeways, whereas total delay reflects per-commuter delays for any slowdowns below the posted speed limit.

Figure 2. Non-SOV Mode Share Trendlines (source: U.S. Census Bureau/American Community Survey; commute trips only)



### Air Quality Conformity Task Force Summary Meeting Notes March 22, 2018

### **Participants:**

Rodney Tavitas – Caltrans Lucas Sanchez – Caltrans Ginger Vagenas – EPA Dick Fahey – Caltrans Shalanda Christian – Caltrans Dominique Kraft – FTA Gail Payne – City of Alameda Stew Sonnenberg – FHWA Scott Carson – FHWA Joseph Vaughn – FHWA Ken Born – FHWA Adam Crenshaw – MTC Harold Brazil – MTC

- **1. Welcome and Self Introductions**: Harold Brazil (MTC) called the meeting to order at 9:38 am.
- 2. PM<sub>2.5</sub> 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 her presentation of the Central Avenue Safety Improvements project by noting that the total grant funding, including both federal and local match, is \$12.2 M.

Ms. Payne went onto identifying the issues to balance with the Central Avenue Safety Improvements project:

- Land Use 1.7 mile study area / residential area.
- Vehicle types using facility AC Transit, truck, commercial, jobs and ferry access
- Roadway Jurisdiction Partial SF Bay Trail / Partial Caltrans facility SR 61
- Multiple schools (over 5,000 students/12 schools)

Ms. Payne discussed how currently there are no bikeways along Central Avenue in the project area and bicyclists ride on both the road and sidewalks. In addition, Ms. Payne mentioned there are a disproportionate amount of bicycling/walking injuries occurring in the Central Avenue Safety Improvements project area and this demonstrates the safety need to be addressed by the City of Alameda.

Ms. Payne listed the alternatives considered for the Central Avenue Safety Improvements project:

- Do nothing different leave as is status quo
- Santa Clara Avenue (Improvements on this facility)
- Sharrows
- East End Section:
  - Buffered Bike Lanes
  - Separated Bikeways
- Education/Enforcement
- Washington Park Bike Lane

Ms. Payne described the Recommended Concept:

- East End Section
  - o Three Lane Street with Bike Lanes East End Section
    - o Two-way Separated Bikeway
    - Westbound Bike Lane

Ms. Payne stated that the schools on the western end section of the Central Avenue project preferred the Recommended Concept because of the location of the bikeway on the southside (schools side) of the street.

Ms. Payne also mentioned the point that the Central Avenue study area is under the 20,000 vehicle per day threshold that FHWA uses as an upper limit for feasible motor vehicle travel lane reduction projects even when considering buildout of the City and Alameda Point at a maximum of 16,000 vehicles per day.

Rodney Tavitas (Caltrans) stated that currently the Central Avenue Safety Improvements project is listed as NEPA delegation/project type, Section 326 – Categorical Exclusion. But Mr. Tavitas went on to say that as the project develops and any phase of the project becomes a Section 327 – Non-Categorical Exclusion NEPA delegation/project type, then the project would need to come back to the Task Force for additional consultation with Caltrans deferring to FHWA to make the project-level conformity determination.

**Final Determination:** With input from FHWA (deferring their determination to Caltrans), EPA, Caltrans and FTA, the Task Force concluded that the Central Avenue Safety Improvements project was not of air quality concern.

- b. Projects Under 40 CFR 93.128 Project-level Conformity Determination Needed
  - i. AC Transit: San Pablo and Telegraph Ave Rapid Bus Upgrades Project

*Final Determination:* With input from FHWA, EPA, Caltrans and FTA, the Task Force concluded that the San Pablo and Telegraph Ave Rapid Bus Upgrades project was not of air quality concern.

- c. Confirm Projects Are Exempt from PM<sub>2.5</sub> Conformity
  - i. Projects Exempt Under 40 CFR 93.126 Not of Air Quality Concern

The AC Transit: Purchase (59) 40ft Diesel Buses project **(TIP ID # ALA170082)** was still in need of additional clarification (at the time this meeting) and was removed from the **2b\_Exempt List 032218.pdf** list of exempt projects.

*Final Determination:* With input from FTA, EPA, Caltrans and FHWA, the Task Force agreed the projects on the exempt list (2b\_Exempt List 032218.pdf), except for the AC

Transit: Purchase (59) 40ft Diesel Buses project (ALA170082), were exempt from PM<sub>2.5</sub> project level analysis.

### 3. Projects with Regional Air Quality Conformity Concerns

### a. Review of the Regional Conformity Status for New and Revised Projects

### Projects Staff Proposing to Include in the 2017 TIP

Adam Crenshaw (MTC) stated that MTC staff had received requests from sponsors to add one new individually listed project and 77 new grouped listed projects to the 2017 TIP. Attachment A includes a list of the projects along with the regional air quality category that staff believes best describes the projects. Ginger Vagenas' (EPA) had an "hybrid beacon" description question for one of the projects on Ms. Crenshaw's list and Dick Fahey (Caltrans) offered to provide more information Task Force members had no other comments on this agenda item and concurred with Mr. Crenshaw's recommendations.

### 4. Streamlined Project-Level Conformity Consultation Process Approach for Ramp-Metering Corridor Projects (Discussion)

Rodney Tavitas (Caltrans) discussed the potential option to streamline the project-level conformity consultation process for ramp-metering corridor projects stating that Caltrans will be installing 43 ramp metering elements with HOV bypass lanes to lessen congestion along I-580 corridor in District 4. Ginger Vagenas (EPA) added by indicating that in order for EPA to make a streamlined project-level conformity determination, a project description would need to be provided and a key factor being that this process could apply to ramp metering where any additional ramp lanes would be for HOV bypasses. The Task Force discussion continued to identify recommended pieces of information to be included in the project description (i.e., ramp lane lengths) to assist the streamline approach. T

### 5. South Coast Court Ruling - Vacates 1997 revocation (Info)

Ginger Vagenas (EPA) mentioned EPA staff are very aware of potential consequences and impacts from the South Coast Court Ruling and EPA is tracking this issue. Ms. Vagenas followed by saying EPA will and will notify the Task Force when they have something to say – EPA attorneys are still working through the material. Ms. Vagenas concluded by saying that she had no new information to share and the issue is very much on the EPA radar. Ken Born (FHWA) added that FHWA's comments echo the ones given by Ms. Vagenas and that FHWA has reached out MPO's who have conformity determination processes currently in the pipeline so FHWA can facilitate these actions.

#### 6. Consent Calendar

### a. March 22, 2018 Air Quality Conformity Task Force Meeting Summary

Harold Brazil (MTC) noted Ginger Vagenas was incorrectly quoted in the meeting summary and the remove the statement about EPA would doing internal follow-up to clarify the wording used with AC Transit: Purchase (59) 40ft Diesel Buses project (TIP ID # ALA170082). With input from all members, the Task Force concluded that the consent calendar was approved.

### 6. Other Items

Rodney Tavitas (Caltrans) mentioned emaling to the Task Force the EPA letter noting the end of the 20-year maintenance planning period for the Carbon Monoxide maintenance areas in California. Mr. Tavitas also briefly mentioned that transportation conformity will no longer apply in these areas as of June 1, 2018 and reductions CMAQ funding will occur (in these areas).