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February XX, 2023

Mr. Adam Ortiz
Regional Administrator, Region III
U.S. Environmental Protection Agency
1650 Arch Street
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Mr. Gregory Murrill
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U.S. Federal Highway Administration
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Regional Administrator, Region III
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To the appropriate Federal review agencies:

Please find the following outline of the proposed technical work tasks, consultation procedures, and assumptions to be used for conducting the mandated air quality conformity determination of the FY 2024-2027 Baltimore Region Transportation Improvement Program (TIP) and *Resilience 2050: Adapting to the Challenges of Tomorrow,* the 2023 long-range transportation plan. In light of the importance of review of conformity issues, these proposed tasks and assumptions have been approved through the interagency consultation process for transportation and air quality activities in the Baltimore region, including the Metropolitan Planning Organization (MPO) and state air and transportation agencies, in a forum that is open to interested stakeholders.

I. Introduction

The Clean Air Act, as amended in 1990, requires MPOs for regions in nonattainment or maintenance of National Ambient Air Quality Standards (NAAQSs) to perform technical analyses to demonstrate that regional transportation plans and programs conform to the

most recently approved or adequate motor vehicle emission budgets approved by the U.S. Environmental Protection Agency (EPA). These analyses must be conducted in accordance with the technical requirements and consultation procedures published in the November 24, 1993, Federal Register and as amended.

The Baltimore region, consisting of Anne Arundel County, Baltimore County, Baltimore City, Carroll County, Harford County, and Howard County, is designated as a "moderate" nonattainment area for the 2015 ozone standard as of November 7, 2022. The current conformity process uses the 2012 Reasonable Further Progress (RFP) budgets. These budgets were developed to address the 1997 ozone standard, but will be used for all ozone standards addressed in this conformity determination. The RFP budgets were determined by EPA as adequate for use in conformity determinations, as published in the Federal Register on February 22, 2016.

A new Maryland State Implementation Plan (SIP) has been submitted to the EPA with new mobile budgets. If EPA has not found the new budgets adequate, then the 2012 RFP budgets will continue to be used for this conformity determination.

As of October 24, 2016, the 1997 annual PM2.5 standard is revoked for areas that have attained the standard. The Baltimore region was redesignated to attainment of the standard on December 16, 2014, and is no longer required to conduct conformity for the 1997 annual PM2.5 standard.

It is the Baltimore Metropolitan Council's (BMC's) understanding that the region is no longer required to address carbon monoxide (CO) in the conformity determination as it has been more than twenty years since the EPA determined the Baltimore City Central Business District (CBD) attained the CO NAAQS. This attainment determination occurred on December 15, 1995. The second maintenance plan for CO was in place until December 15, 2015.

Conformity analyses of Baltimore region transportation plans and programs are conducted by the Baltimore Regional Transportation Board (BRTB), the designated MPO. The regional Interagency Consultation Group (ICG), which includes voting membership of the BRTB and the Maryland Departments of the Environment (MDE) and Transportation (MDOT), facilitates regular and continuous communication and coordination of all conformity efforts and activities. BMC serves as professional staff to the BRTB and the ICG.

In determining conformity, BMC staff apply a regional travel demand forecasting model to specified horizon year scenarios to assess the transportation system's travel and speed effects of implementing the region's transportation plans and programs. MDE then applies horizon year specific vehicle emission factors from an emissions estimator model to outputs from the travel demand forecasting analysis to estimate the emission effects of the projected transportation system usage and performance characteristics. This conformity analysis determines whether regional transportation plans and programs are consistent with Maryland State Implementation Plan (SIP) air quality goals.

Section II below outlines the methodology to be used for the upcoming conformity determination. The ICG recognizes that the conformity determination must be based upon the most recent planning assumptions in force at the time the conformity analysis begins. The ICG also recognizes that the "time the conformity analysis begins" is the point at which the MPO begins to model the impact of the proposed transportation plan or TIP on travel and/or emissions. The ICG considers the date of submission of this letter as the "time that the conformity analysis begins."

The ICG feels that this letter provides an opportunity for review of assumptions by all interagency consultation agencies, including those responsible for approval (EPA, the Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA)), and for the general public.

II. Criteria and Approach

II.A. Criteria

Conformity is demonstrated if emissions levels from approved transportation plans and programs are less than emissions budgets established in the SIP and also provide expeditious implementation of Transportation Control Measures (TCMs) committed to in the SIP. Emissions of volatile organic compounds (VOCs) and nitrogen oxides (NO_X) will be compared to the 2012 RFP budgets, which were developed for the Baltimore Serious Area Nonattainment SIP for the 1997 8-hour Ozone standard and submitted to EPA in 2013.

II.B. Approach

The following approach, approved by the ICG members, will be used to demonstrate conformity for the FY 2024-2027 TIP and *Resilience 2050*.

This conformity determination will assess whether the transportation plan and TIP conform to the 2012 8-hour ozone RFP SIP budgets.

Emissions Budgets: The Baltimore region will perform conformity testing using the following budgets deemed adequate or approved by EPA. Conformity testing will be performed in accordance with the Transportation Conformity Rule.

Ozone Budgets Approved by the EPA for the 1997 Standard and Deemed Adequate for Use in Conformity Determinations

	NO_X (tons/day)	VOC (tons/day)
Budgets determined to be adequate by EPA (2012 RFP)	93.5	40.2

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Testing Horizon Years:	• 2025? (near term year; no more than 10 years from the base year used to validate the transportation demand planning model- 2019) • 2035? (no more than ten years between horizon years) • 2045? (no more than ten years between horizon years) • 2050? (date for full implementation of long-range transportation plan)
Travel Demand Modeling Method:	Methodology developed for the 2019 validation, which includes: • An Activity Based Model estimated from the region's 2008 household travel survey; • An Activity Based Model calibrated from the region's 2019 household travel survey; • An Activity Based Model validated to observed (household travel survey, traffic counts (AAWDT), and transit ridership (APC)); • Simulated household (transit/toll pass and vehicle availability) and person (usual place of work) long term choices; • An average weekday person trip roster containing each synthetic person's travel sequence by time of day (1/2 hour resolution), mode, destination, and purpose; • A disaggregate freight modeling system simulating long distance freight and a truck/commercial vehicle touring model; and, • An equilibrium multiclass highway assignment for eight time periods.
Mobile Emission Development:	• EPA's Motor Vehicle Emission Simulator (MOVES) Model 3. • Latest available motor vehicle fleet registration data and vehicle miles traveled (VMT) mix.
Socioeconomic Assumptions:	Based on latest available cooperative regional forecasts for employment, households and population.
Planning Assumptions:	There are three categories of projects: exempt, non-exempt/regionally significant, and non-exempt/not regionally significant. All non-exempt/regionally significant projects will be included in the modeled network. Projects must meet federal regulatory criteria that they come from the financially constrained regional transportation plan and the FY 2024-2027 TIP, with project staging as endorsed by the MPO.

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III. Work Tasks

The tasks and subtasks involved in the conformity analysis process of the FY 2024-2027 TIP and *Resilience 2050* are listed below. Attachment I displays the steps and proposed timeframe for completing the 2024-2027 TIP. Attachment II displays the proposed timeframe for completing the work tasks associated with the conformity analysis of the TIP and Plan.

A. Receive project inputs from programming jurisdictions/agencies and organize into conformity documentation listings
   1. Project type, limits, etc.
   2. Phasing with respect to horizon years
   3. Action scenarios

B. Prepare 2025 TIP action scenario travel and emissions estimates
   1. Code, edit, and build highway and transit networks
   2. Execute travel demand modeling
   3. Estimate emissions

C. Prepare 2035 Plan Action scenario
   (Steps as listed in B.)

D. Prepare 2045 Plan Action scenario
   (Steps as listed in B.)

E. Prepare 2050 Plan Action scenario
   (Steps as listed in B.)

F. Identify and assess emission effects associated with non-modelable activities
   1. Implemented strategies – extent of continued benefits from previously implemented strategies
   2. Programmed – CMAQ-funded TIP projects, non-CMAQ federally-funded TIP projects, and non-federally funded TIP projects
   3. Planned – Projects included in the region's long-range transportation plan between 2028 and 2050

G. Assess analytical results
   1. For emissions of NO_X and VOCs, compare emissions results with the 2012 RFP budgets from the Serious Area SIP.

H. Identify TIP contribution to SIP goals and previous TIP and Plan commitments
   1. Identify previous emission reduction commitments (emission reduction strategies and/or transportation control measures). Update status reports as necessary from implementing agencies.

I. Assess and document conformity results
   1. Document approach and methodology
   2. Prepare conformity report and secure recommendation of ICG
   3. Present draft conformity report to Technical Committee, BRTB, consultation agencies, and federal partners

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J. Public Review

1. Provide the draft conformity document on the BMC web site for a 30-day public review and comment.
2. Address comments and present to BRTB for action/endorsement
3. Finalize report and forward to FHWA, FTA, and EPA

Please contact Ms. Anna Marshall with any questions or comments, at 410-732-0500 Ext. 1050, or amarshall@baltometro.org.

Thank you for your attention to this matter. We look forward to your response.

Sincerely,

Todd R. Lang, Director
Transportation Planning

Attachments

cc: Cristina Fernandez, Director EPA Region III Air Protection Division
Gregory Becoat, EPA Region III
~~Kwame Arhin, FHWA Maryland Division~~
~~Ryan Long, FTA Region III~~

Attachment I

2024-2027 TIP PRODUCTION SCHEDULE*

December 7, 2022	Draft TIP schedule distributed via email to TC members and TIP coordinators. Packet and instructions to follow via e-mail.
January 3, 2023	TIP coordinators can access database to submit new and updated project information. Reminder at TC Tuesday January 3 and via email.
March 1	Final new and updated TIP project information due to BMC. ***Critical to be completed by this date***
March 8	Database access closed to jurisdictions. ***Any changes now must be done by BMC***
March 1-24	BMC staff reviews submitted projects and works with local/state agencies to resolve any questions (local/state agencies can submit prior to March 1 and therefore reviews can begin upon receipt).
March 24	List of projects and draft conformity categories distributed to ICG.
March/April	BMC staff update introductory text for the TIP, work with GIS staff to produce mapping materials, and work with MDOT on the annual element.
April 5	List of projects and draft conformity categories approved by ICG. Travel demand modeling begins.
April 7	Letters of financial reasonableness due to BMC.
May 17-June 16	Draft TIP, Resilience 2050 and associated Conformity Determination available for public review, including public meetings.
May 23 and June 27	Opportunity for public to comment at BRTB meeting.
July 5	Resolution on TIP and Conformity presented to ICG and TC.
July 25	Resolution on final TIP, Resilience 2050 and Conformity presented to BRTB.
July 26	Complete appendices to include resolutions.
July 26-27	Prepare final document for printing. Breakout sections and reduced size files.

*Dates subject to change

Attachment II

CONFORMITY ANALYSIS SCHEDULE

Work Task		Timeframe For Completion
	Review methodology for completing conformity with the ICG	Jan 4, 2023
	ICG approves methodology letter to send to federal partners	February 8
	Methodology letter submitted by BMC to federal partners	February
A.	Receive project inputs from programming agencies and organize into conformity documentation listings.	March
B-E	Prepare 2025, 2035, 2045, and 2050 TIP and Plan Action scenario travel and emissions estimates.	April
F.	Identify and assess emission effects associated with non-modelable activities.	March/ April
G.	Assess analytical results and present to ICG.	May 3
H.	Identify TIP contribution to SIP goals and previous TIP and Plan commitments.	May
I.	Assess and document conformity results.	May
J.	Public Review	May 17-June 16
	BRTB Approval	July 25
	BMC submits conformity documentation to federal partners	July 28, 2023