



February 6, 2020

Mr. Cosmo Servidio
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U.S. Environmental Protection Agency
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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 2021-2024 Baltimore Region Transportation Improvement Program (TIP) and *Maximize2045: A Performance-Based Transportation Plan*, the 2019 plan. In light of the importance of review of conformity issues, these proposed tasks and assumptions have been assessed 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

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adequate motor vehicle emission budgets approved by the 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 is designated as a “moderate” nonattainment area for the 2008 8-hour ozone standard and a “marginal” nonattainment area for the 2015 ozone standard. 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 U.S. EPA as adequate for use in conformity determinations, as published in the Federal Register on February 22, 2016. The BRTB is no longer required to conduct conformity for the 1997 annual PM2.5 standard. As of October 24, 2016, the 1997 annual PM2.5 standard is revoked for areas that have attained the standard.

It is the BMC’s understanding that the region is no longer required to address carbon monoxide 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.

For this nonattainment area, conformity analyses of transportation plans and programs are conducted by the Baltimore Regional Transportation Board (BRTB), as the designated MPO for the region. 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. The Baltimore Metropolitan Council (BMC) serves as professional staff to the BRTB and the ICG.

In determining conformity, BMC staff applies 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 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, 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 (TCM) committed to in the SIP. Emissions of volatile organic compounds (VOCs) and nitrogen oxides (NO_x) will be compared to the 2012 Reasonable Further Progress (RFP) budgets. The 2012 RFP budgets were developed for the Baltimore Serious Area Nonattainment SIP for the 1997 8-hour Ozone standard, 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 2021-2024 TIP and *Maximize2045*.

This conformity determination will determine whether the transportation plan and TIP conform to 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

Testing years 2021, 2025, 2035, and 2045

	NO _x (tons/day)	VOC (tons/day)
Budgets determined to be adequate by EPA (2012 RFP)	93.5	40.2



- Horizon Years:**
- 2021 (near term year; no more than 10 years from the base year used to validate the transportation demand planning model)
 - 2025 (no more than ten years between horizon years)
 - 2035 (no more than ten years between horizon years)
 - 2045 (date for full implementation of long-range plan)

- Travel Demand Modeling Method:**
- Methodology developed for a 2012 validation, which includes:
- Incorporation of data from household and transit surveys;
 - An enhanced mode choice model that meets Federal Transit Administration guidance; and,
 - Incorporation of a toll-diversion model.

- Mobile Emission Development:**
- EPA’s Motor Vehicle Emission Simulator (MOVES) Model 2014a
 - Latest available motor vehicle fleet registration data & 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 2021-2024 TIP, with project staging as endorsed by the MPO.

Network Development: Five regional transportation networks developed: 2012 (validation) existing network, and action (build) networks for 2021, 2025, 2035 and 2045 horizon years.

III. Work Tasks

The tasks and subtasks involved in the conformity analysis process of the FY 2021-2024 TIP and amended *Maximize2045* are listed below. Attachment I displays the steps and timeframe for



completing the 2021-2024 TIP. Attachment II displays the 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 2021 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 2025 Plan Action scenario
(Steps as listed in B.)

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

- E. Prepare 2045 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 for horizon years 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 plan between 2025 and 2045

- G. Assess analytical results
 - 1. For emissions of NOX 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. Draft conformity report and secure recommendation of ICG
3. Present to Technical Committee, Public Advisory Committee, BRTB, consultation agencies, and general public
4. Receive comments
5. Address comments and present to BRTB for action/endorsement
6. Finalize report and forward to FHWA, FTA, and EPA

J. Public Review

1. Provide the draft conformity document on the BMC web site for a 30-day public review.

Please contact Sara Tomlinson with any questions or comments, at 410-732-0500 Ext. 1035, or stomlinson@baltometro.org.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Todd R. Lang", written over a horizontal line.

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

2021-2024 TIP PRODUCTION SCHEDULE*

December 3, 2019	TIP coordinators receive schedule at TC meeting. Packet and instructions to follow via e-mail.
January 6, 2020	TIP coordinators can access database to submit new and updated project information. Reminder at TC Tuesday January 7.
January 8	ICG begins review of draft conformity assumptions letter for Federal review.
February 28	Final new and updated project information due to BMC. <i>Critical to be completed by this date.</i>
March 6	Database access closed.
April 1	List of projects and draft conformity categories approved by ICG. Travel demand modeling begins.
April 15	Letters of financial reasonableness due to BMC.
Mid May – June	Draft TIP and Conformity Determination available for public review, including public meetings.
May 26 and June 23	Opportunity for public to comment at BRTB meeting.
Early July	Resolution on TIP and Conformity presented to ICG and TC
July 28	Resolution on Final TIP and Conformity presented to BRTB.

*Dates subject to change.