



June 7, 2019

AIR QUALITY CONFORMITY ANALYSIS: FY2021-2024 TIP AND PLAN AMENDMENT

DRAFT SCOPE OF WORK

I. INTRODUCTION

Projects solicited for the FY2021-2024 Transportation Improvement Program (TIP) and Plan Amendment are scheduled to be finalized at the March 18, 2019 TPB meeting. This work effort addresses requirements associated with attainment of the ozone standard (volatile organic compounds (VOC) and nitrogen oxides (NO_x) as ozone precursor pollutants).

The amended plan must meet air quality conformity regulations: (1) as originally published by the Environmental Protection Agency (EPA) in the November 24, 1993 Federal Register, and (2) as subsequently amended, most recently on March 14, 2012, and (3) as detailed in periodic FHWA / FTA and EPA guidance. These regulations specify both technical criteria and consultation procedures to follow in performing the assessment.

This scope of work provides a context in which to perform the conformity analyses and presents an outline of the work tasks required to address all regulations currently applicable.

II. FEDERAL REQUIREMENTS

As described in the 1990 Clean Air Act Amendments, conformity is demonstrated if transportation plans and programs:

1. Are consistent with most recent estimates of mobile source emissions budgets
2. Provide expeditious implementation of Transportation Control Measures (TCMs)
3. Contribute to annual emissions reductions

The federal requirements governing air quality conformity compliance are contained in §93.110 through §93.119 of the Transportation Conformity Regulations (printed April 2012), as follows:

CONFORMITY CRITERIA & PROCEDURES	
All Actions at all times	
§93.110	Latest Planning Assumptions
§93.111	Latest Emissions Model
§93.112	Consultation
§93.113	TCMs
§93.114	Currently conforming Plan and TIP
§93.115	Project from a conforming Plan and TIP
§93.116	CO, PM10 and PM2.5 hot spots
§93.117	PM10 and PM2.5 Control Measures
§93.118 and/or §93.119	Emissions Budget and/or Interim Emissions

§ 93.110 Criteria and procedures: Latest planning assumptions - The conformity determination must be based upon the most recent planning assumptions in force at the time of the conformity determination.

§ 93.111 Criteria and procedures: Latest emissions model - The conformity determination must be based on the latest emission estimation model available.

§ 93.112 Criteria and procedures: Consultation – The Conformity must be determined according to the consultation procedures in this subpart and in the applicable implementation plan, and according to the public involvement procedures established in compliance with 23 CFR part 450.

§ 93.113 Criteria and procedures: Timely implementation of TCMs - The transportation plan, TIP, or any FHWA/FTA project which is not from a conforming plan and TIP must provide for the timely implementation of TCMs from the applicable implementation plan.

§93.114 Criteria and procedures: Currently conforming transportation plan and TIP - There must be a currently conforming transportation plan and currently conforming TIP at the time of project approval.

§93.115 Criteria and procedures: Projects from a plan and TIP - The project must come from a conforming plan and program.

§93.116 Criteria and procedures: Localized CO, PM10, and PM2.5 violations (hot spots) -The FHWA/FTA project must not cause or contribute to any new localized CO, PM10, and/or PM2.5 violations or increase the frequency or severity of any existing CO, PM10, and /or PM2.5 violations in CO, PM10, and PM2.5 nonattainment and maintenance areas.

§93.117 Criteria and procedures: Compliance with PM10 and PM2.5 control measures -The FHWA/FTA project must comply with PM10 and PM2.5 control measures in the applicable Implementation Plan.

§93.118 Criteria and procedures: Motor vehicle emissions budget - The transportation plan, TIP, and projects must be consistent with the motor vehicle emissions budget(s).

§93.119 Criteria and procedures: Interim emissions in areas without motor vehicle budgets - The FHWA/FTA project must satisfy the interim emissions test(s).

Assessment Criteria:

Ozone season pollutants will be assessed by comparing the forecast year pollutant levels to the mobile budgets in the 2008 Ozone NAAQS Maintenance Plan. In August 2018 EPA found these budgets adequate for use in conformity analyses, and the budgets were used in the Visualize 2045 conformity analysis. The 2008 Ozone NAAQS Maintenance Plan includes mobile budgets for 2014 (attainment year), 2025 (intermediate year), and 2030 (out year). The 2014 budgets will be used for any analysis year between 2014 and 2024, the 2025 budgets will be used for any analysis year between 2025 and 2029, and the 2030 budgets will be used for any analysis year beyond 2029.

III. POLICY AND TECHNICAL APPROACH

The table below summarizes the key elements of the Policy & Technical Approach:

Pollutants	Ozone Season VOC and NOx
Emissions Model	MOVES2014b
Conformity Test	<u>Budget Test</u> : Using mobile budgets most recently approved by EPA: 2008 Ozone NAAQS Maintenance Plan mobile budgets found adequate by EPA in August, 2018.
Vehicle Fleet Data	December 2016 vehicle registration data for all jurisdictions
Geography	8-hour ozone non-attainment area
Network Inputs	Regionally significant projects
Land Activity	Cooperative Forecasts Round 9.1 or latest
HOV/HOT	<u>VA</u> : All HOV 2+/HOT 2+ facilities become HOV 3+/HOT 3+ in 2020 and beyond except I-66 inside the Beltway, which will convert to HOT3+ when I-66 outside the Beltway opens <u>MD</u> : All HOV facilities remain HOV2+ through 2045
Transit Constraint	NO Metrorail “capacity constraint” (removed with March 2018 passage of annual funding for WMATA agreement)
Analysis Years	2019, 2021, 2025, 2030, 2040, 2045
Modeled Area	3,722 TAZ System
Travel Demand Model	Version 2.3.75 or latest

IV. CONSULTATION

The TPB adheres to the specifications of the consultation procedures (as outlined in the consultation procedures report adopted by the TPB on May 20, 1998). The TPB will participate in meetings of MWAQC, its Technical Advisory Committee, and its Conformity Subcommittee to discuss the Scope of Work, project inputs, and other elements as needed.

V. WORK TASKS

The work tasks associated with the air quality conformity analysis are as follows:

1. Receive project inputs from programming agencies and organize into conformity documentation listings by:
 - Project type, limits, etc.
 - Phasing with respect to forecast years
 - Transit operating parameters, e.g., schedules, service
2. Update Travel Model Base Transit Service to reflect:
 - Service current to December 2018
 - Fares current to July 1, 2019
3. Update 2016 Vehicle Registration Data (VIN data)
 - Corrections to DC VIN data as provided by DDOE on June 19, 2018
4. Review and Update Land Activity files to reflect Round 9.1 Cooperative Forecasts (or latest) with respect to:
 - Zonal data files
 - Employment Data Census Adjustment
 - Households by auto ownership, size and income
 - Coordination with agencies outside the MWCOG Cooperative Forecast area (BMC, FAMPO, C-SMMPO etc.)
 - Exogenous Travel (external, through trips etc.)
5. Prepare forecast year highway, HOV, and transit networks including regionally significant projects, as follows:
 - 2019, 2021, 2025, 2030, 2040, and 2045 highway networks
 - 2019, 2021, 2025, 2030, 2040, and 2045 transit network input files
 - Update highway tolls, as necessary
6. Execute travel demand modeling for years 2019, 2021, 2025, 2030, 2040, and 2045

7. Derive Mobile Emissions Estimates for years 2019, 2021, 2025, 2030, 2040, and 2045 using inputs from the 2008 Ozone NAAQS Maintenance Plan mobile budgets
8. Summarize key inputs and outputs (VMT, mode share, emissions, etc.) of the conformity determination
9. Assess conformity and document results in a report
 - Document methods
 - Draft conformity report
 - Forward to technical committees, policy committees
 - Make available for public and interagency consultation
 - Receive comments
 - Respond to comments and present to TPB for action
 - Finalize report and forward to FHWA, FTA, and EPA

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SCHEDULE FOR DEVELOPMENT & ADOPTION OF FY2021-2024 TIP AND PLAN

May 3, 2019	Technical Committee is briefed on request for plan and TIP updates; solicitation opens
May 31, 2019	Solicitation closes; all air quality conformity project inputs are due
June 7, 2019	Technical Committee briefed on draft project inputs and draft air quality conformity Scope of Work
June 19, 2019	TPB briefed on draft project inputs and draft air quality conformity Scope of Work
June 2019	TPB staff briefs Metropolitan Washington Air Quality Committee Technical Advisory Committee (MWAQC TAC) on inputs and Scope of Work
July 17, 2019	TPB is asked to approve inputs and draft Scope of Work
December 20, 2019	Financial updates for the FY 2021-2024 TIP are due
January 9, 2020	Public Forum on the FY 2021-2024 TIP
January 31, 2020	Draft Visualize 2045 update, TIP, and Conformity Analysis are released for 30-day comment period
February 7, 2020	Technical Committee reviews draft Visualize 2045 update, TIP, and Conformity Analysis
February 2020	TPB staff briefs MWAQC TAC on the draft Visualize 2045 update, TIP, and Conformity Analysis
February 19, 2020	TPB is briefed on draft Visualize 2045 update, TIP, and Conformity Analysis
March 1, 2020	Comment period ends
March 18, 2020	TPB reviews comments and responses to comments, and is presented with the draft Visualize 2045 plan update, FY 2021-2024 TIP, and Conformity Analysis for approval