Conformity Assumptions and Inputs

2023-2026 TIP and Maximize 2045

February 1, 2022
Transportation Conformity

• Requirement under Clean Air Act Section 176(c) that Federally supported transportation activities are consistent with the State Implementation Plan (SIP)
  – SIP: plan for meeting Federal air quality standards

• Conformity to the SIP means highway and transit activities will NOT
  – Cause new air quality violations
  – Worsen existing violations
  – Delay timely attainment of standards
Conformity Determination

- Analysis which displays whether TIP and LRTP implementation will conform to the SIP
- Considers total anticipated on-road emissions
- Projected emissions must be based on the current planning assumptions and the latest EPA-approved emissions estimation model
Latest Planning Assumptions: Overview

• Most recent population, employment, travel, and congestion estimates
• Applied at the “time the conformity analysis begins as determined through the interagency consultation process”
• BMC, on behalf of ICG, documents the time the conformity analysis begins through submission of a letter to Federal partners
  – EPA
  – FHWA
  – FTA
Latest Planning Assumptions: 2023-2026 TIP and Maximize 2045

- Letter presents criteria, approach, and proposed schedule for 2023-2026 TIP and *Maximize 2045* conformity determination

- Aiming to submit February 7
  - after ICG approval February 2
Conformity Analysis Inputs & Processing

Round 10 Forecast
- Population
- Employment
- Housing

Travel
- Highway network
- Seasonal adjustments
- Vehicle Mix
- Congestion
- VMT adjustments

InSite

MOVES 2014a
- InSite Output
- Speed Distribution
- Road Type Distribution
- Ramp Fraction
- VMT Fractions
- Vehicle Type Population
- Vehicle Type Growth
- Vehicle Age Distribution
- Fuel types
- Fuel formulations
- Fuel usage
- Temperature and humidity

MySQL
- PPSuite

Emissions Estimates
Inputs Sourced from BMC

Round 10 Forecast
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- Employment
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Travel
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MOVES 2014a
- MySQL
- PPSuite

Emissions Estimates
Inputs Sourced from MDE

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InSite

MOVES 2014a
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Emissions Estimates
- MySQL
- PPSuite
Inputs Sourced from MOVES (EPA)

Round 10 Forecast
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Congestion
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MOVES 2014a

Emissions Estimates
- MySQL
- PPSuite
Inputs Sourced from BRTB – Cooperative Forecasting Group

Round 10 Forecast
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InSite

MOVES 2014a
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- MySQL
- PPSuite

Emissions Estimates
Inputs Sourced from MDOT SHA, MDOT Models, Local Jurisdictions

- Round 10 Forecast
  - Population
  - Employment
  - Housing
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  - Highway network
  - Seasonal adjustments
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  - VMT adjustments

InSite

- InSite Output
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MOVES 2014a

- MySQL
- PPSuite

Emissions Estimates
Questions?
For More Information

Nicole Hebert | Air Quality Planner
410-732-0500 x1050 | nhebert@baltometro.org | www.baltometro.org