

## **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



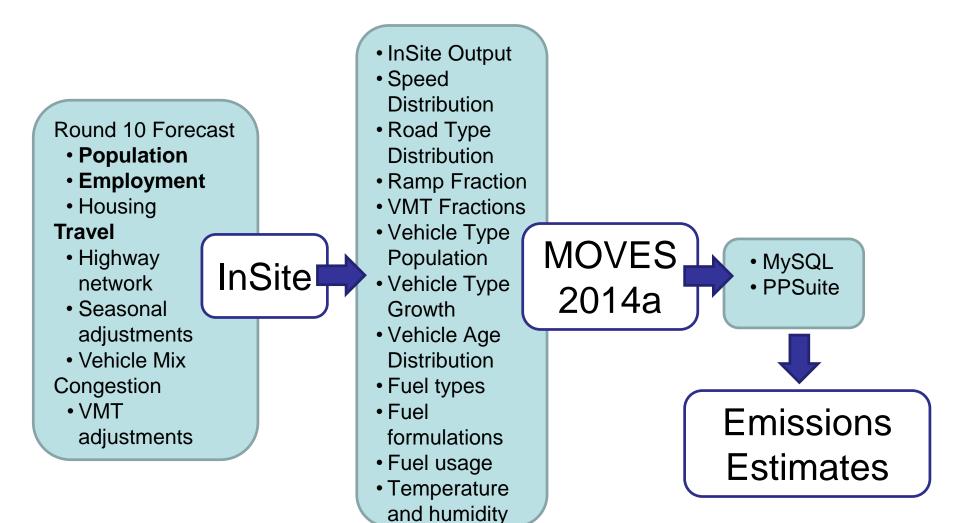
## Latest Planning Assumptions: 2023-2026 TIP and *Maximize 2045*



- 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**





### **Inputs Sourced from BMC**

**InSite** 



#### Round 10 Forecast

- Population
- Employment
- Housing

#### **Travel**

- Highway network
- Seasonal adjustments
- Vehicle Mix

#### Congestion

VMT adjustments

#### 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

## MOVES 2014a

- MySQL
- PPSuite





## **Inputs Sourced from MDE**

**InSite** 



#### Round 10 Forecast

- Population
- Employment
- Housing

#### **Travel**

- Highway network
- Seasonal adjustments
- Vehicle Mix

#### Congestion

VMT adjustments

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

MOVES 2014a

- MySQL
- PPSuite





## **Inputs Sourced from MOVES (EPA)**



#### Round 10 Forecast

- Population
- Employment
- Housing

#### **Travel**

- Highway network
- Seasonal adjustments

**InSite** 

Vehicle Mix

#### Congestion

VMT adjustments

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

MOVES 2014a

- MySQL
- PPSuite





# Inputs Sourced from BRTB – Cooperative Forecasting Group



#### Round 10 Forecast

- Population
- Employment
- Housing

#### **Travel**

- Highway network
- Seasonal adjustments

**InSite** 

Vehicle Mix

#### Congestion

VMT adjustments

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

MOVES 2014a

- MySQL
- PPSuite





# Inputs Sourced from MDOT SHA, MDOT Models, Local Jurisdictions



#### Round 10 Forecast

- Population
- Employment
- Housing

#### **Travel**

- Highway network
- Seasonal adjustments

**InSite** 

Vehicle Mix

#### Congestion

VMT adjustments

InSite Output

- Speed Distribution
- Road Type Distribution
- Ramp Fraction
- VMT Fractions
- Vehicle Type Population
- Vehicle Type Growth
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MOVES 2014a

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## **Questions?**





### **For More Information**

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