THE MOVES TRANSITION
MADE EASY...
...THE TDOT WAY
The Transition to & Implementation of MOVES

MOtor Vehicle Emission Simulator

- Estimates emissions for mobile sources
- MOVES 2010 released in December 2009
- March 2, 2012 original deadline for conformity determinations to begin using MOVES
The Transition to & Implementation of MOVES

Introduction

TDOT’s Proposal

Work Completed

In Progress

What’s “HOT”

Questions?

GRACE PERIOD

• Several state and local agencies requested additional time to transition to MOVES for their regional conformity analysis.

• The main reasons cited were the significant software, operational, and technical differences between MOVES and MOBILE 6.

• The final rule was announced February 27, 2012 and signed March 8, 2012 by Administrator Lisa P. Jackson.

• Original Grace Period was extended one year to March 2, 2013.
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**MOVES 2010**

- Incorporates new car and truck greenhouse gas emission standards affecting model years 2012 and newer.

- Includes the effects of corporate average fuel economy standards affecting model years 2008-2011.

- Reduces refueling and sulfur-related emissions associated with the reductions in vehicle fuel consumption.

- Improves algorithm for brakewear and tirewear so emissions are always zero at idle.

- Improved error checking in MOVES importers

- 2010b
REALIZATION OF A DEMANDING TRANSITION

- Increased staff time
- Technical expertise
- Additional financial resources
- Set aside planning funds that are typically allocated to MPOs in non-attainment areas.
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OBTAINING ASSISTANCE

• Acquire and prepare Data
• Transition and Implementation Plan
• Data Collection, analysis, and formatting
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DEVELOPING THE PLAN

- Organization and Exploration
  - Air quality status
  - Policies
  - Procedures

- Inventory and Evaluation
  - Bristol, Chattanooga, Clarksville, Johnson City, Kingsport, Knoxville, Memphis, and Nashville
  - TDEC, UTK, and TDOT

- Develop Strategic Plan

- Implement Strategic Plan
### Travel Demand Model Updates

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<th>Truck Sub-model Needed?</th>
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**IMPLEMENTATION PLAN STATUS**

- Validation of the Bristol and Johnson City travel demand models
- Revision of the Clarksville and Kingsport travel demand models
- The Knoxville prototypical post-processor is 95% complete
- Review of all data collected to date
- Conducted the meetings for the Core and Policy Groups
UTK developed MOVES input activity for each of the 95 counties in the state.

- Source Type Population – 13 vehicle types
- Age Distribution – Older vehicles generally have higher emissions
- Vehicle Type VMT – Monthly and Daily VMT by vehicle class and road type
- Road Type Distribution - Fraction of VMT by the four road types
- Fuel Formulation and Supply – data was developed for 2012
- Meteorology – submitted to the IAC for comments
- Inspection and Maintenance (I/M) Programs – Available for Nashville MPO and Hamilton County
• TDOT will need to develop Hourly VMT data for the non-modeled counties outside of a MPO or TPO.

• FHWA and EPA requirements for vehicle types are not the same. EPA vehicle type classification is based on vehicle use while FHWA based on number of axels.

• TDOT staff resources are stretched. No in-house capabilities for providing technical assistance for MOVES

• County level vehicle mix data collection method needs to be updated.
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NEXT STEPS

• Perform a MOVES model run for the base year and one future year condition using the Knoxville test post-processor.

• The results will be made available to all.

• Research option to obtain post processing license (one for each interested MPO) which would include technical assistance.

• Start SIP Revisions

• Revise Emissions Budgets.
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QUESTIONS