



# MOVES2014a: Introduction and New Features

December 2015

Office of Transportation and Air Quality  
US Environmental Protection Agency

# Webinar Logistics

- Webinar slides are available at:  
[www.epa.gov/otaq/models/moves/training.htm](http://www.epa.gov/otaq/models/moves/training.htm)
- This webinar is offered November 18<sup>th</sup> & December 10<sup>th</sup>
- Please use the [Q & A pod](#) within Adobe Connect to send questions. We will try to respond to as many as possible throughout the webinar

**NOTE: Please ensure that your computer's volume is properly adjusted**

# Outline

- Introduction to MOVES2014a
  - What is MOVES2014a?
  - Example Inventory Impacts
  - SIP and Conformity Policy
- A Closer Look at MOVES2014a
  - GUI Changes
  - New Input Options
  - Database Converter

# What is MOVES2014a?

- Motor Vehicle Emissions Simulator
- Released November 4, 2015, minor update on December 1, 2015
- A minor revision to MOVES2014
- Estimates emissions and energy use from all on-road sources at the national, county, and project scales
- Includes some new features and fixes some problems with MOVES2014

# A Brief History of Model Releases

- We have internal and external versions, and minor and major releases
- Official public versions for SIP and conformity analyses
  - Official releases of a new model are much less frequent
    - 2004 – MOBILE6.2 (Included Tier 2 and PM emissions)
    - 2009 – MOVES2010 (First Release of MOVES, a major new approach)
    - 2014 – MOVES2014 (Includes Tier 3, and much more)
  - We have also made minor/interim model updates to the official public versions
    - MOVES2010a, MOVES2010b, **MOVES2014a**

# Why Did We Release MOVES2014a?

- Users need nonroad VOC and toxics for air quality modeling and for next version of NEI
  - Not included in MOVES2014
  - Removes need for NMIM2008, which isn't compatible with newer operating systems
- Provides opportunity to add user-requested features and fix bugs
  - Users have asked for more flexibility regarding how local VMT is handled in MOVES
  - We have discovered a number of bugs since the release of MOVES2014

# What's New in MOVES2014a?

- Nonroad toxics and speciation
  - No longer just “total hydrocarbons”
    - Now also VOC, TOG, NMHC, NMOG
  - About 60 air toxics
    - From data on nonroad engines and analogous onroad vehicles.
- New flexibility for local VMT input
  - Users can now enter VMT either by HPMS class or MOVES Source Type
  - Users can now enter either annual VMT or average daily VMT
- More nonroad output aggregation options
  - Adds output flexibility similar to NONROAD2008
- Updated nonroad gasoline supply to match onroad
- Numerous bug fixes
  - Many have no impact on emissions.
  - Some, most notably brake wear PM, do result in minor changes to MOVES results
- New installation suite reduces installation problems

# Chemical Speciation Changes

- MOVES2014 version released last spring included an option to map total organic gas (TOG) emissions to chemical species used in air quality transport models
- MOVES2014a corrects an error in the CB05 and CB6 outputs for CY 2013-2030
  - Error magnitude varies by chemical species, county, and year
  - December 1, 2015 update fixed one additional problem with CB05 and CB6 output
- If you have already generated CB05 or CB6 output with MOVES2014 for those years, and have questions, contact us at [mobile@epa.gov](mailto:mobile@epa.gov)
- All new work with these outputs should be done with MOVES2014a



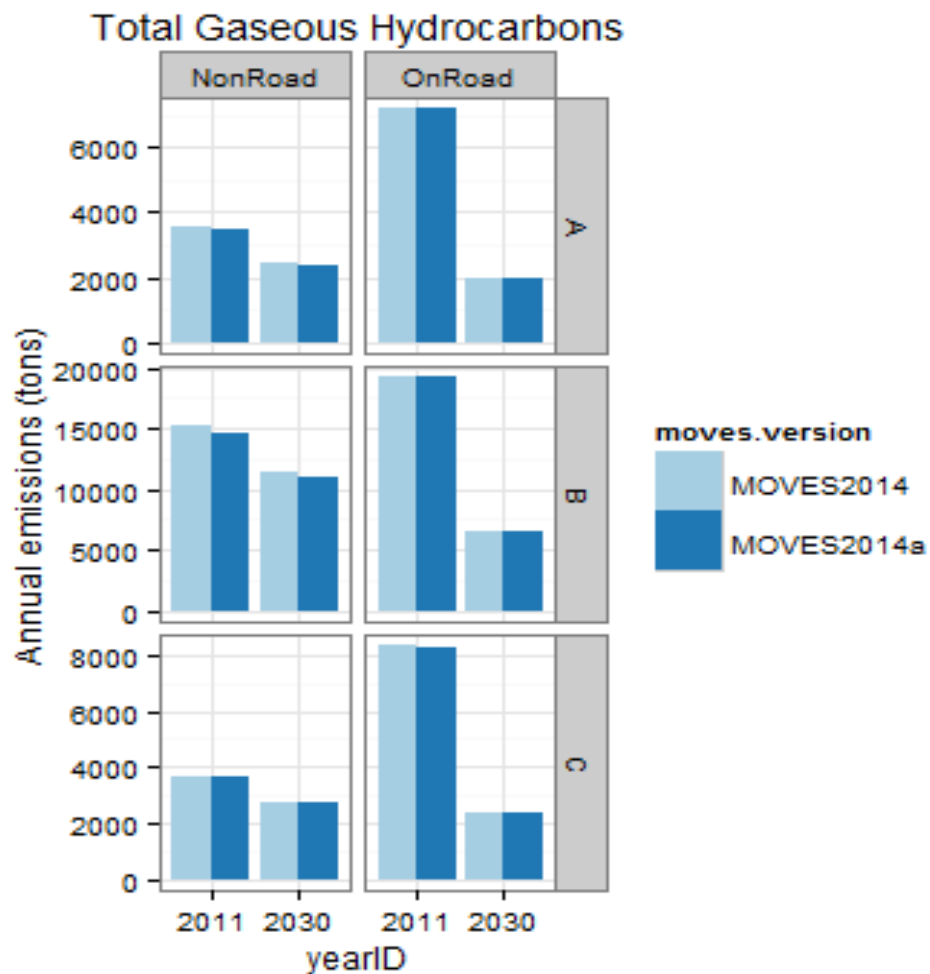
# How Do These Changes Affect MOVES2014a Users?

- Structure of MOVES2014a is essentially the same as MOVES2014
  - Only new things to learn are new VMT input options and changes in nonroad output options
- There are some changes in input table formats
  - We have provided a tool to convert MOVES2014 input files to MOVES2014a format, in the Tools menu of MOVES2014a
  - You should export, review, and modify, if necessary, default MOVES2014a fuel and I/M tables
  - Use MOVES2014a Fuel Wizard to modify fuels, if necessary
- Output tables have additional columns to handle fields needed for nonroad output
  - Don't use the same output database for both MOVES2014 and MOVES2014a runs

# Example Inventory Impacts

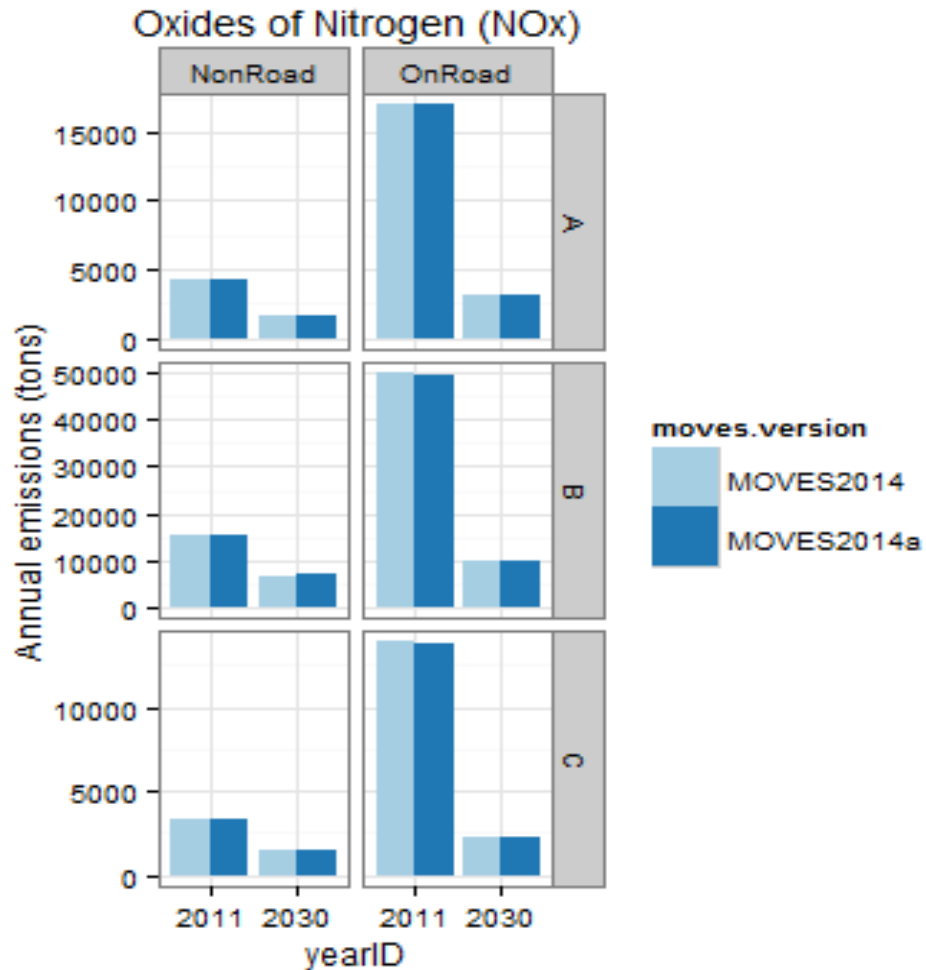
- We have used local data provided by state agencies for 3 urban areas to show differences between model versions
  - Unique fleet mix, I/M program, fuels, temperatures, age distributions
  - Based on a single, core, urban county in each city, which may not completely reflect nonattainment area impacts
  - Nonroad inputs based on national defaults
- Represents what a typical stakeholder might see for their own MOVES2014a modeling, but actual differences between MOVES2014 and MOVES2014a may vary based on other local model inputs
  - We can't reflect the full range of possible outcomes in these examples
- MOVES2014 vs. MOVES2014a trends are consistent with our expectations
  - Changes are the result of updates to fuels and bug fixes

# THC



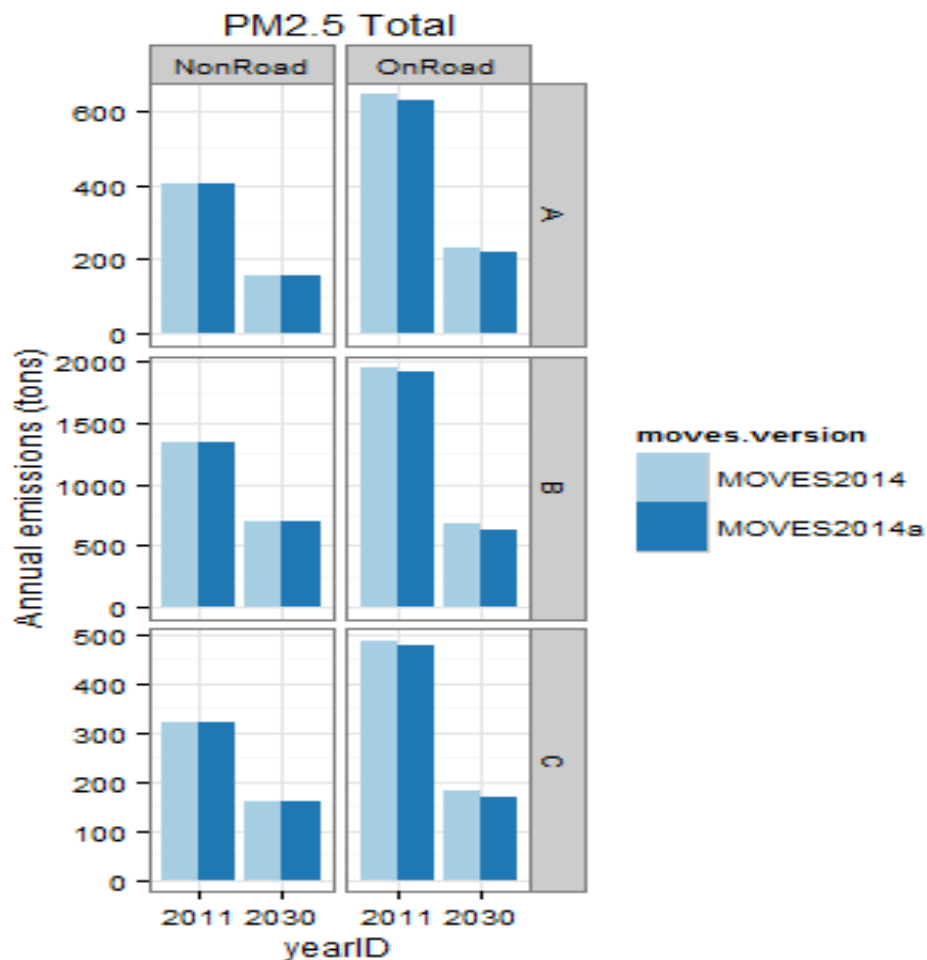
- Nonroad decreases due to updated fuel supply

# NOx



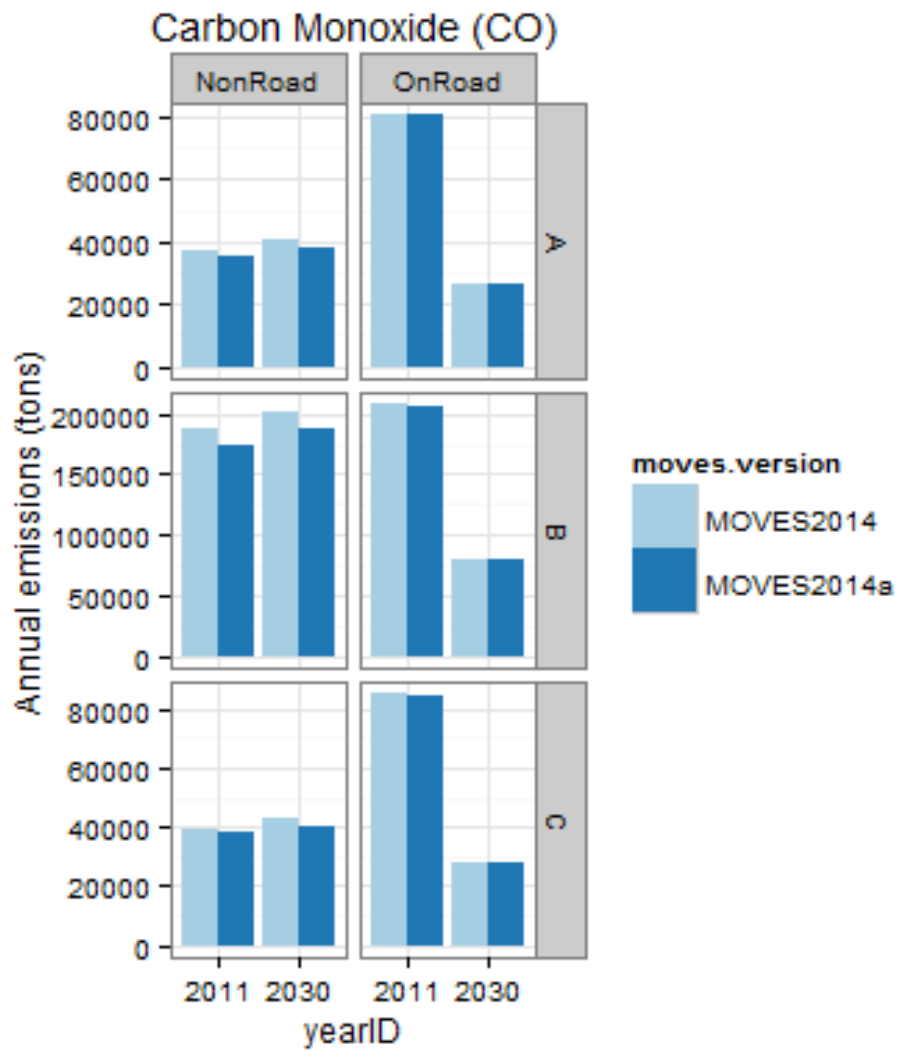
- Nonroad increases due to updated fuel supply

# PM2.5- Exhaust + Brake and Tire Wear



- Onroad decreases primarily due to correction to brakewear emissions

# CO



- Nonroad decreases due to updated fuel supply

# Emission Impact Summary

- For onroad emissions
  - NO<sub>x</sub>, VOC and CO emissions decrease 0-0.1%
  - Total PM<sub>2.5</sub> emissions decrease (2-7%) due to brake wear fix
- For nonroad emissions
  - Increased NO<sub>x</sub> (0.6-2.2% in 3 cities; 1.5% increase in national runs) due to updated fuels
  - PM unchanged
  - Small CO and VOC emissions decreases

# Onroad SIP and Conformity Policy

- We encourage states to use MOVES2014a for new work, but can complete existing work with MOVES2014
- No new conformity grace period; we encourage use of MOVES2014a instead of MOVES2014 at end of current grace period
- More details in Q&A document released with MOVES2014a
  - No FR Notice, no new SIP and Conformity Policy Guidance document
  - Consistent with past minor updates



# Nonroad SIP Policy

- Current policy is that either MOVES2014, NONROAD2008, or NMIM2008 can be used for SIPs
  - All three models give roughly same answers
  - New fuels in MOVES2014a result in larger differences
- Can't continue to provide technical support for NONROAD and NMIM due to incompatibility with current operating systems
- We encourage the use of MOVES2014a for future SIP development

# What is Available Now?

- MOVES2014a Installer
  - MOVES2014a code, installer, user guide, user interface reference manual
- MOVES2014a Questions and Answers
- MOVES2014 and MOVES2014a Technical Guidance
  - Updates MOVES2014 Technical Guidance to include changes in MOVES2014a
- Updated PM Hot-spot Guidance

# A Closer Look at MOVES2014a



# Changes in MOVES2014a Interface

- Graphical User Interface (GUI) changes include:
  - On Road Vehicle Equipment Panel automatically excludes vehicle/fuel combinations not in MOVES database (e.g. diesel motorcycles)
  - Pollutants and Processes (onroad) adds CB05 and CB6 Chemical Mechanisms
  - Pollutants and Processes (nonroad) adds more HC species and toxics
  - Output Emission Detail (nonroad) adds aggregation options to reduce output file size

# GUI Changes – Onroad Vehicles

MOVES - ID 5431240511497722161

File Edit Pre Processing Action Post Processing Tools Settings Help

<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Description</li> <li><input checked="" type="checkbox"/> Scale</li> <li><input checked="" type="checkbox"/> Time Spans</li> <li><input checked="" type="checkbox"/> Geographic Bounds</li> <li><input type="checkbox"/> <b>Vehicles/Equipment</b> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> On Road Vehicle Equipment</li> <li><input type="checkbox"/> Road Type</li> <li><input type="checkbox"/> Pollutants And Processes</li> <li><input type="checkbox"/> Manage Input Data Sets</li> <li><input type="checkbox"/> Strategies</li> <li><input type="checkbox"/> Output</li> <li><input checked="" type="checkbox"/> Advanced Performance Features</li> </ul> </li> </ul>	<p><b>Fuels:</b></p> <ul style="list-style-type: none"> <li>Compressed Natural Gas (CNG)</li> <li>Diesel Fuel</li> <li>Electricity</li> <li>Ethanol (E-85)</li> <li>Gasoline</li> </ul>	<p><b>Source Use Types:</b></p> <ul style="list-style-type: none"> <li>Combination Long-haul Truck</li> <li>Combination Short-haul Truck</li> <li>Intercity Bus</li> <li>Light Commercial Truck</li> <li>Motor Home</li> <li>Motorcycle</li> <li>Passenger Car</li> <li>Passenger Truck</li> <li>Refuse Truck</li> <li>School Bus</li> <li>Single Unit Long-haul Truck</li> <li>Single Unit Short-haul Truck</li> <li>Transit Bus</li> </ul>	<p><b>Selections:</b></p> <ul style="list-style-type: none"> <li>Compressed Natural Gas (CNG) - Transit Bus</li> <li>Diesel Fuel - Combination Long-haul Truck</li> <li>Diesel Fuel - Combination Short-haul Truck</li> <li>Diesel Fuel - Intercity Bus</li> <li>Diesel Fuel - Light Commercial Truck</li> <li>Diesel Fuel - Motor Home</li> <li>Diesel Fuel - Passenger Car</li> <li>Diesel Fuel - Passenger Truck</li> <li>Diesel Fuel - Refuse Truck</li> <li>Diesel Fuel - School Bus</li> <li>Diesel Fuel - Single Unit Long-haul Truck</li> <li>Diesel Fuel - Single Unit Short-haul Truck</li> <li>Diesel Fuel - Transit Bus</li> <li>Ethanol (E-85) - Light Commercial Truck</li> <li>Ethanol (E-85) - Passenger Car</li> <li>Ethanol (E-85) - Passenger Truck</li> <li>Gasoline - Combination Short-haul Truck</li> <li>Gasoline - Light Commercial Truck</li> <li>Gasoline - Motor Home</li> <li>Gasoline - Motorcycle</li> <li>Gasoline - Passenger Car</li> <li>Gasoline - Passenger Truck</li> <li>Gasoline - Refuse Truck</li> <li>Gasoline - School Bus</li> <li>Gasoline - Single Unit Long-haul Truck</li> <li>Gasoline - Single Unit Short-haul Truck</li> <li>Gasoline - Transit Bus</li> </ul>
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View MOVES web page for help.

# GUI Changes – Onroad Pollutants and Processes

MOVES - ID 543124051149722161

File Edit Pre Processing Action Post Processing Tools Settings Help

	Running Exhaust	Start Exhaust	Brakewear	Tirewear	Evap Permeation	Evap Fuel Vapor Ventili
<input type="checkbox"/> Nitrous Oxide (N2O)	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> Primary Exhaust PM2.5 - Total	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> [+] Primary Exhaust PM2.5 - Species	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> Primary PM2.5 - Brakewear Particulate			<input type="checkbox"/>			
<input type="checkbox"/> Primary PM2.5 - Tirewear Particulate				<input type="checkbox"/>		
<input type="checkbox"/> Primary Exhaust PM10 - Total	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> Primary PM10 - Brakewear Particulate			<input type="checkbox"/>			
<input type="checkbox"/> Primary PM10 - Tirewear Particulate				<input type="checkbox"/>		
<input type="checkbox"/> Sulfur Dioxide (SO2)	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> Total Energy Consumption	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> Petroleum Energy Consumption	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> Fossil Fuel Energy Consumption	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> Atmospheric CO2	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> CO2 Equivalent	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> Benzene	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Ethanol	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> MTBE	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 1,3-Butadiene	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> Formaldehyde	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> Acetaldehyde	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> Acrolein	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> [+] Additional Air Toxics	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> [+] Polycyclic Aromatic Hydrocarbons (PAH)	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> [+] Metals	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> [+] Dioxins and Furans	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/> CB05 Mechanism	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> CB6 Mechanism	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

Select Prerequisites  
Clear All

View MOVES web page for help.

# GUI Changes – Nonroad Pollutants and Processes

MOVES - ID 5431240511497722161

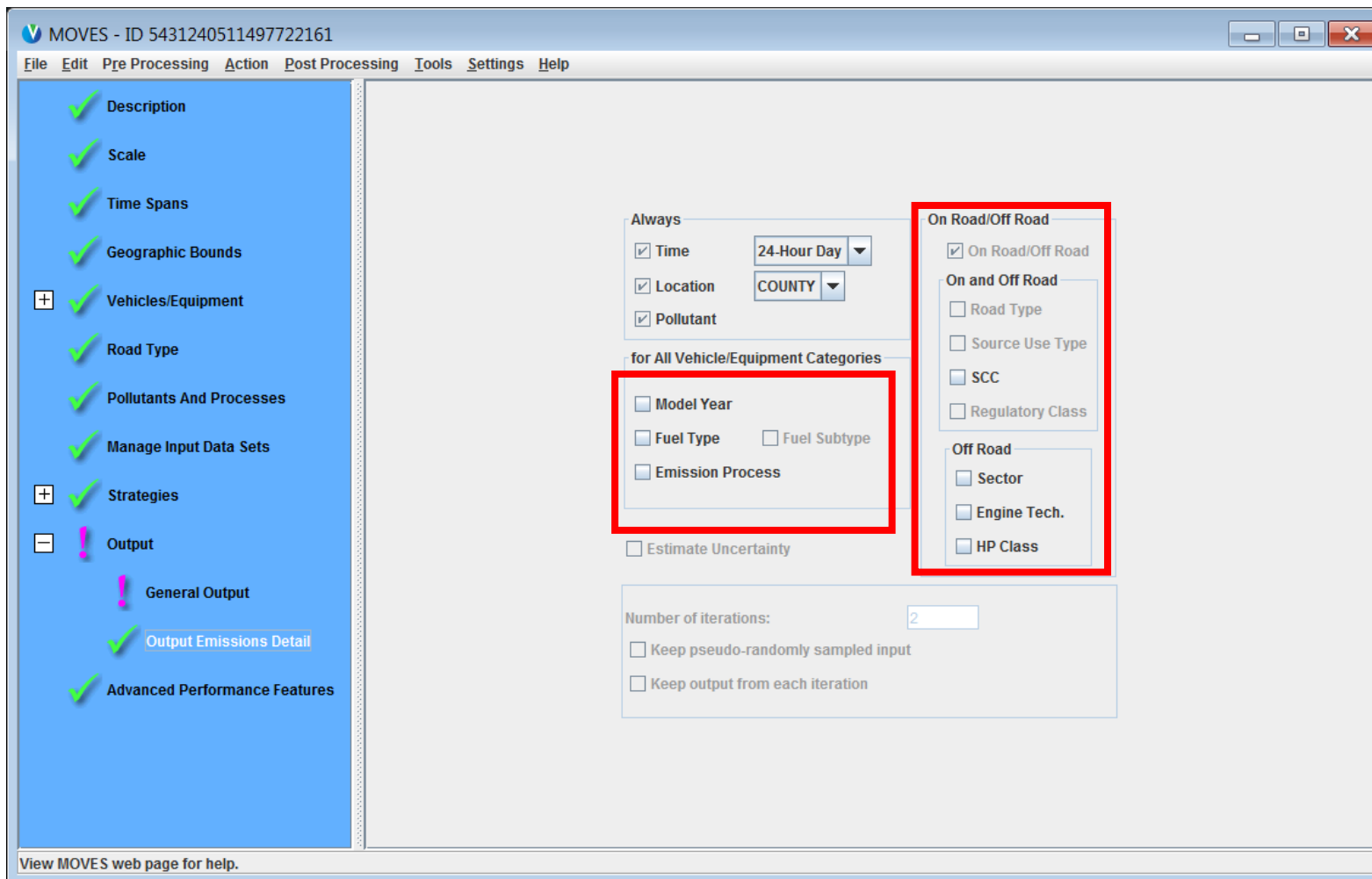
File Edit Pre Processing Action Post Processing Tools Settings Help

	Exhaust	Crankcase	Running Exhaust	Refueling Displacement Vapor Loss	Refueling Spillage Loss
<input type="checkbox"/> MTBE				<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 1,3-Butadiene					
<input type="checkbox"/> Formaldehyde					
<input type="checkbox"/> Acetaldehyde					
<input type="checkbox"/> Acrolein					
<input type="checkbox"/> [-] Additional Air Toxics				<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 2,2,4-Trimethylpentane				<input type="checkbox"/>	
<input type="checkbox"/> Ethyl Benzene				<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Hexane				<input type="checkbox"/>	
<input type="checkbox"/> Propionaldehyde					
<input type="checkbox"/> Styrene					
<input type="checkbox"/> Toluene				<input type="checkbox"/>	
<input type="checkbox"/> Xylene				<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> [-] Polycyclic Aromatic Hydrocarbons (PAH)				<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Acenaphthene gas					
<input type="checkbox"/> Acenaphthene particle					
<input type="checkbox"/> Acenaphthylene gas					
<input type="checkbox"/> Acenaphthylene particle					
<input type="checkbox"/> Anthracene gas					
<input type="checkbox"/> Anthracene particle					
<input type="checkbox"/> Benz(a)anthracene gas					
<input type="checkbox"/> Benz(a)anthracene particle					
<input type="checkbox"/> Benzo(a)pyrene gas					
<input type="checkbox"/> Benzo(a)pyrene particle					
<input type="checkbox"/> Benzo(b)fluoranthene gas					
<input type="checkbox"/> Benzo(b)fluoranthene particle					
<input type="checkbox"/> Benzo(g,h,i)perylene gas					

Select Prerequisites  
Clear All

View MOVES web page for help.

# GUI Changes – Nonroad Output Emissions Detail





# Vehicle Type VMT IN MOVES2014a

- MOVES uses VMT to calculate emissions for running processes
- VMT input is also used to allocate emissions by month, day type (weekday or weekend), and hour
- MOVES2014a allows VMT to be entered in different forms:
  - VMT by HPMS class or VMT by MOVES source type
  - Annual VMT or daily VMT

# Vehicle Type VMT: Source Types vs. HPMS Class

- HPMS class
  - Enter VMT by 5 HPMS classes
    - The more likely form for local data
    - Relies on default data in MOVES to allocate VMT from HPMS class to source type
- MOVES Source Type
  - Enter VMT by 13 MOVES source types
    - Allows more control over how VMT is allocated, e.g., between passenger cars and light trucks
    - Requires more pre-processing if raw data are by HPMS class

# Vehicle Type VMT: Source Types vs. HPMS Class

Source Type ID	Source Types	HPMS Class ID	HPMS Vehicle Class
11	Motorcycle	10	Motorcycles
21	Passenger Car	25	Light Duty Vehicles – Short and Long Wheelbase
31	Passenger Truck		
32	Light Commercial Truck		
41	Intercity Bus	40	Buses
42	Transit Bus		
43	School Bus		
51	Refuse Truck	50	Single Unit Trucks
52	Single Unit Short-haul Truck		
53	Single Unit Long-haul Truck		
54	Motor Home		
61	Combination Short-haul Truck	60	Combination Trucks
62	Combination Long-haul Truck		

# Vehicle Type VMT: Annual vs. Daily

- Annual VMT
  - MOVES designed to accept annual VMT, along with VMT fractions by month, day type, and hour
  - Entering annual VMT and the correct month and daily VMT fractions for the entire year allows the same files to be used to model any month or day
- Daily VMT
  - Daily VMT may be the more likely form for your local data
  - MOVES applies same VMT to each month if running multiple months
  - MOVES applies same VMT to weekdays and weekend days if running both day types
    - However, you can enter different hourly fractions for weekdays and weekend days
- Annual VMT may be a better choice to model multiple months and day types in a single run
  - Can still use AADVMT tool to convert daily VMT to annual VMT, but VMT must be by HPMS class

# Vehicle Type VMT: Allocation Fractions by Time Period

- Month VMT fractions - Fraction of annual VMT (per source type) occurring per month.
  - Required input for Annual VMT input only
- Day VMT fractions - Fraction of annual VMT (per source type) occurring on one of two day types (weekday or weekend)
  - Required input for Annual VMT input only
- Hour VMT fractions - Fraction of daily VMT (per source type) occurring per hour
  - Required input for both Annual and Daily VMT inputs

# Entering Vehicle Type VMT Data – Input Tables

		Input VMT by:	
		HPMS	Source Type
VMT Values are:	Annual	HPMSVtypeYear monthVMTFraction dayVMTFraction hourVMTFraction	SourceTypeYearVMT monthVMTFraction dayVMTFraction hourVMTFraction
	Daily	HPMSVtypeDay hourVMTFraction	SourceTypeDayVMT hourVMTFraction

# Annual VMT & VMT Fractions: Guidance

- Section 4.5 of MOVES Technical Guidance
- Total local VMT data are necessary
- Local VMT, month, day, and hour fractions should be used if available; otherwise, defaults are acceptable
  - If using daily VMT, make sure it is appropriate for the month and day type you are modeling
- Entering annual VMT and the correct month and daily VMT fractions for the entire year allows the same files to be used to model any month or day
- Recommend using the same approach (HPMS or source type, annual or daily VMT) for any analysis that compares two or more cases
  - Avoid causing differences in results due to differences in the way VMT is allocated
  - Use interagency consultation process to agree on a common approach or to minimize differences caused by different approaches

# Entering Vehicle Type VMT Data

MOVES County Data Manager

Vehicle Type VMT | Hotelling | I/M Programs | Retrofit Data | Generic | Tools

Ramp Fraction | Road Type Distribution | Source Type Population | Starts

Run Spec Summary | Database | Age Distribution | Average Speed Distribution | Fuel | Meteorology Data

Description of Imported Data:

Input VMT by:  HPMS  Source Type

VMT values are:  Annual  Daily

Clear All

HPMSVtypeYear Data Source:

File: (please select a file)

Messages:

Unable to import data into HPMSVtypeDay: File 'C:\Users\BVanGess\MOVESGHGSource2015

Export Default Data | Export Imported Data

Vehicle Type VMT

Done

VMT and month, day, and hour VMT fractions are all imported in this tab

You will have to browse/import up to 4 separate worksheets to complete this tab



# Database Converter

- Converts MOVES2014 project/county database into MOVES2014a compatible database
  - MOVES2010b input databases must first be converted to MOVES2014, then to MOVES2014a
    - See MOVES2014 webinar for more detail on conversion from MOVES2010b to MOVES2014 ([www.epa.gov/otaq/models/moves/documents/moves2014-webinar-140916.pdf](http://www.epa.gov/otaq/models/moves/documents/moves2014-webinar-140916.pdf))
- Additional steps needed when converting databases used for SIPs and conformity due to updates in fuel and I/M data tables
  - Update the fuel tables by exporting default fuel tables in MOVES2014a, review, and re-import
  - If you used the MOVES2014 fuel wizard to modify your local fuel, you should re-do this with the MOVES2014a fuel wizard
  - Some counties have updated default I/M tables in MOVES2014a – may want to review if using defaults

# Database Converter

MOVES - ID 5431240511497722161

File Edit Pre Processing Action Post Processing Tools Settings Help

- Description
- Scale
- Time Spans
- Geographic Bounds
- Vehicles/Equipment
- Road Type
- Pollutants And Processes
- Manage Input Data Sets
- Strategies
- Output
  - General Output
- Output Emissions Detail
- Advanced Performance Features

**Multiple RunSpec Creator**

	Exhaust	Brakewear	Tirewear	Evap Permeation	E
<input checked="" type="checkbox"/> Process DONE Files				<input type="checkbox"/>	
<input type="checkbox"/> Convert MOVES2014 County or Project input to MOVES2014A				<input type="checkbox"/>	
<input type="checkbox"/> Convert MOVES2010B County or Project input to MOVES2014				<input type="checkbox"/>	
<input type="checkbox"/> Convert MOVES2010A County or Project input to MOVES2010B				<input type="checkbox"/>	
<input type="checkbox"/> Methane (CH4)					
<input type="checkbox"/> Carbon Monoxide (CO)					
<input type="checkbox"/> Oxides of Nitrogen (NOx)					
<input type="checkbox"/> Nitrogen Oxide (NO)					
<input type="checkbox"/> Nitrogen Dioxide (NO2)					
<input type="checkbox"/> Nitrous Acid (HONO)					
<input type="checkbox"/> Ammonia (NH3)					
<input type="checkbox"/> Nitrous Oxide (N2O)					
<input type="checkbox"/> Primary Exhaust PM2.5 - Total					
<input type="checkbox"/> [+] Primary Exhaust PM2.5 - Species					
<input type="checkbox"/> Primary PM2.5 - Brakewear Particulate		<input type="checkbox"/>			
<input type="checkbox"/> Primary PM2.5 - Tirewear Particulate			<input type="checkbox"/>		
<input type="checkbox"/> Primary Exhaust PM10 - Total					
<input type="checkbox"/> Primary PM10 - Brakewear Particulate		<input type="checkbox"/>			
<input type="checkbox"/> Primary PM10 - Tirewear Particulate			<input type="checkbox"/>		
<input type="checkbox"/> Sulfur Dioxide (SO2)					
<input type="checkbox"/> Total Energy Consumption					
<input type="checkbox"/> Petroleum Energy Consumption					
<input type="checkbox"/> Fossil Fuel Energy Consumption					
<input type="checkbox"/> Atmospheric CO2					
<input type="checkbox"/> CO2 Equivalent					

Select Prerequisites

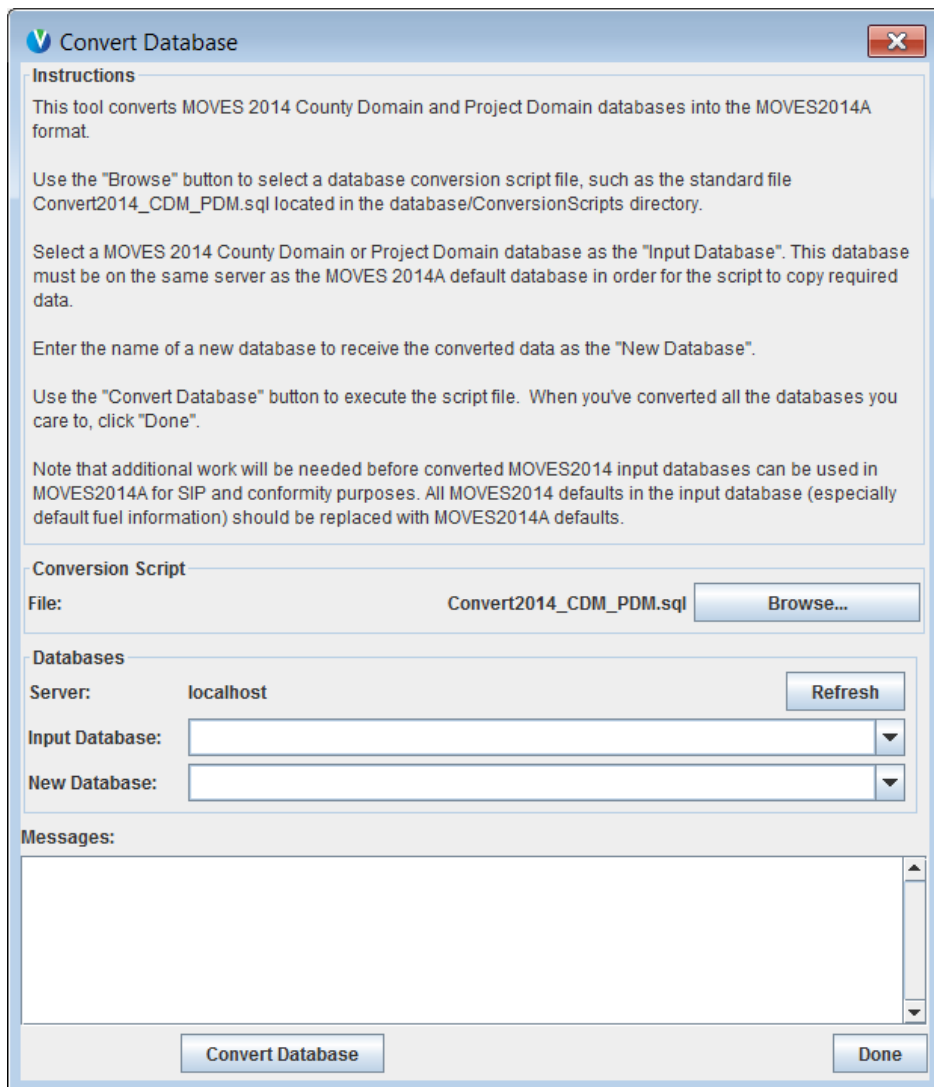
Clear All

Use scripts to convert 2010B CDM and PDM databases

# Database Converter

## Steps:

- Select the existing 2014 database from dropdown menu
- Give the new converted database a unique name
- See the MOVES2014a User Interface Manual for instruction on batch conversion



**Convert Database**

**Instructions**

This tool converts MOVES 2014 County Domain and Project Domain databases into the MOVES2014A format.

Use the "Browse" button to select a database conversion script file, such as the standard file Convert2014\_CDM\_PDM.sql located in the database/ConversionScripts directory.

Select a MOVES 2014 County Domain or Project Domain database as the "Input Database". This database must be on the same server as the MOVES 2014A default database in order for the script to copy required data.

Enter the name of a new database to receive the converted data as the "New Database".

Use the "Convert Database" button to execute the script file. When you've converted all the databases you care to, click "Done".

Note that additional work will be needed before converted MOVES2014 input databases can be used in MOVES2014A for SIP and conformity purposes. All MOVES2014 defaults in the input database (especially default fuel information) should be replaced with MOVES2014A defaults.

**Conversion Script**

File: Convert2014\_CDM\_PDM.sql

**Databases**

Server: localhost

Input Database:

New Database:

**Messages:**

# Summary

- MOVES2014a is a minor update to MOVES2014
  - Emission changes very small
  - No new conformity grace period
  - Contact us if you did work with CB05 or CB6 output in MOVES2014
- Changes to the Graphical User Interface (GUI)
- New Input Options
  - Annual or daily VMT
  - VMT by HPMS class or source type
- Database Converter
  - Helps convert older databases to MOVES2014a format

# Additional Support

- Model, guidance, Q&A document, links to technical documentation, presentations, and training page are all at:
  - [www.epa.gov/otaq/models/moves/index.htm](http://www.epa.gov/otaq/models/moves/index.htm)
- For questions about using MOVES in a particular area, please start by contacting your EPA Regional Office
  - [www.epa.gov/otaq/stateresources/transconf/contacts.htm](http://www.epa.gov/otaq/stateresources/transconf/contacts.htm)
- For general technical questions, including installation issues, or feedback about this webinar, send an e-mail to:
  - [mobile@epa.gov](mailto:mobile@epa.gov)