OTC Fall Meeting

November 19th, 2014 Arlington, VA

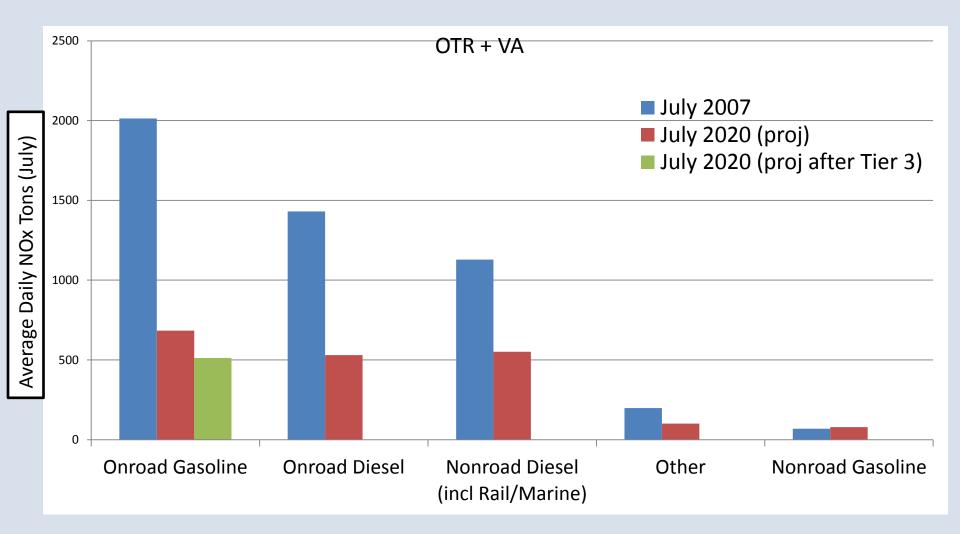
Mobile Source Committee Update



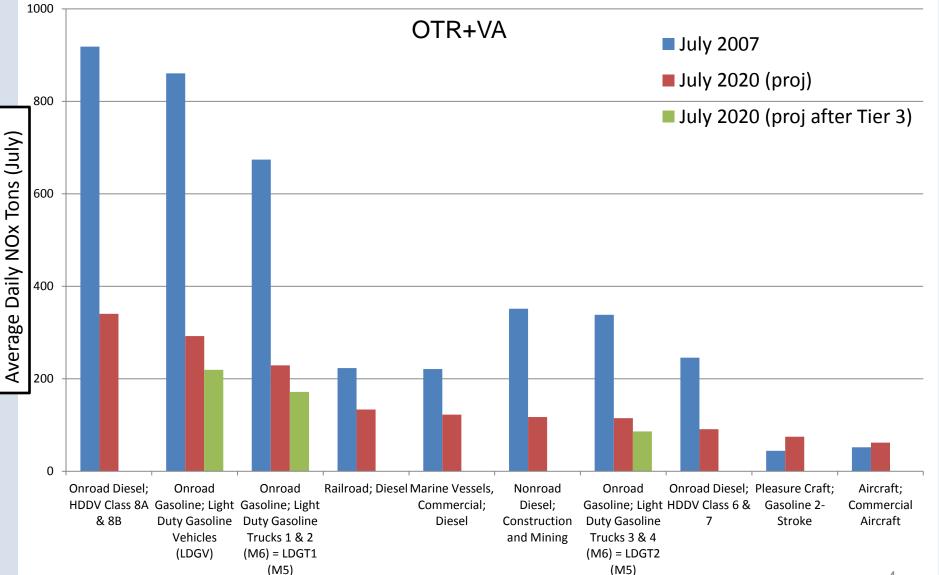
Committee Charge

- Goal: To identify potential strategies for consideration at the 2014 Fall Meeting
- Strategies Include:
 - Sectors of High Emission Reduction Potential
 - Heavy Duty Diesel Trucks
 - Passenger Vehicles
 - Movement of Goods
 - Construction Equipment
 - Pleasure craft
 - Ports
 - Diesel I/M & SIP Credit
 - Compendium of State Actions and Programs
 - Evaluation of Projections
 - Additional Transportation Strategies

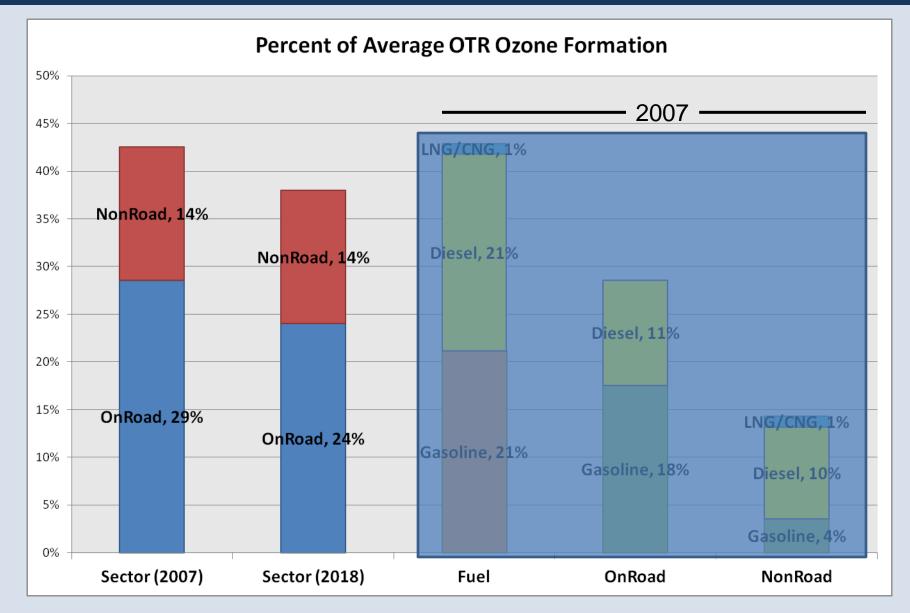
Average Daily July NOx Emissions



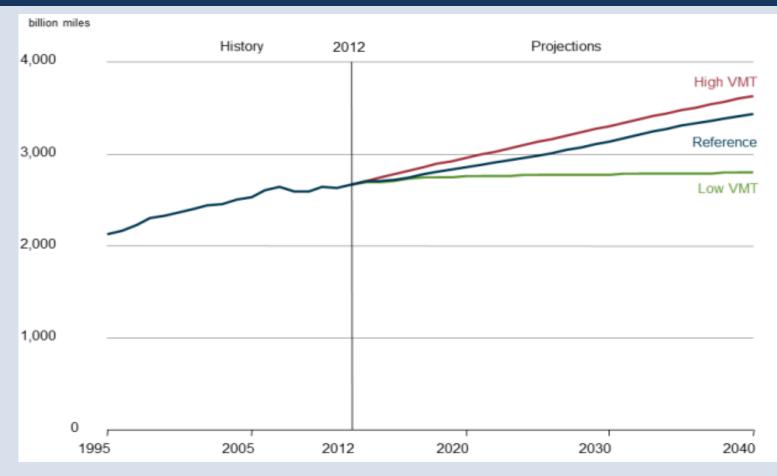
Average Daily July NOx Emissions



Average Mobile Source Contribution to Ozone Levels in the Ozone Transport Region (OTC Analysis)

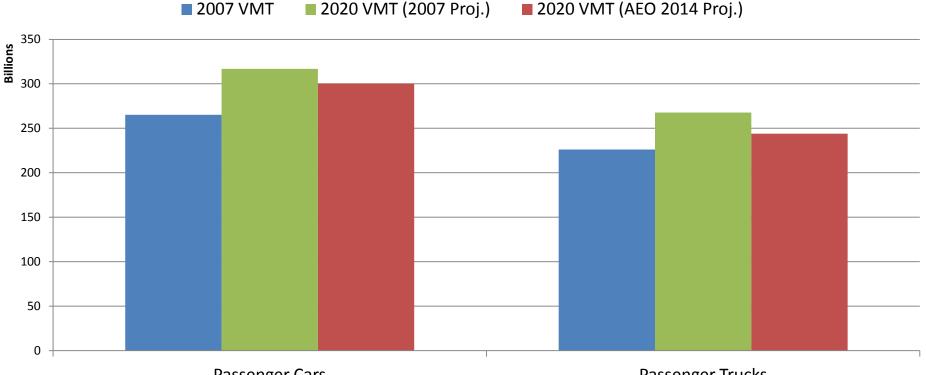


EIA VMT 1995-2040



- Flat VMT Growth in recent past (2005-12)
- Reference case projects VMT growth of 0.9% annually
- Is the VMT growth temporary (due to recession) or structural (Millennial demographics)?

OTR+VA VMT for Passenger Vehicles



Passenger Cars

Passenger Trucks

- OTC 2020 projections (2007 base) differ from EIA (AEO 2014) by:
 - 5% for Passenger Cars
 - 10% for Passenger Trucks
- If VMT was only factor effecting vehicle emissions 2020 NOx emissions projections ~20 tpd higher in OTR
- Factors that led to flat VMT from 2005-2012 also led to older fleet than projected, so emission projection overestimates due to VMT could be offset

Compendium of State Actions & Programs

- OTC Actions
- State Actions
 - Vehicle Emission Standards
 - Fuels
 - Inspection & Maintenance
 - Limit Idling of Vehicles and Equipment
 - Ports/Goods Movement
 - Construction Strategies
 - Reducing VMT
 - Other Actions

OTC Past Success

The states in the OTC have a long history of:

- Developing strategies to reduce emissions from mobile sources
- Calling for federal action to reduce emissions when states are preempted from doing so by the Clean Air Act and/or where federal action is appropriate

OTC History of Federal Recommendations

Action	Date
Resolution on Enhanced Vehicle Inspections and Maintenance	Jul. 16, 1991
Resolution on Reformulated Gasoline Throughout the OTR	Oct. 29, 1991
Resolution on Expedited Guidance for Enhanced Vehicle Inspections and Maintenance	Mar. 10, 1992
Resolution on Assisting Motor Vehicle Service Technicians in Performing Proper Emission	Jan. 8, 1993
Control Maintenance in Support of Enhanced I/M Programs	
Resolution Supporting EPA in its Development of Regulations Controlling Emissions of Ozone	Jan. 8, 1993
Precursors from Nonroad Engines	
Recommendation to EPA on OTC LEV Program	Sep. 27, 1994
Resolution Requesting EPA to Accelerate Regulations Controlling Emissions of Ozone	Feb. 1 <i>,</i> 1994
Precursors from Nonroad Engines	
Resolution Supporting the EPA's Efforts to Control Emissions from Diesel Engines	Jun. 13, 1995
Resolution Supporting the Concept of a 49-State Clean Car and the Right of States to Choose	Feb. 28, 1995
to Implement Additional Motor Vehicle Emission Control Programs	
Resolution Calling on EPA to Establish Standards for Continued Pollution Reduction from	May 22, 1998
Motor Vehicles After the National LEV Program	
Resolution Regarding EPA's Proposed Vehicle Emission and Fuel Sulfur Standards	Jun. 16, 1999
Resolution Regarding Interstate Cooperation on the Testing of Diesel Trucks and Buses	Jun. 16, 1999
Resolution Supporting the U.S. EPA's Proposed Diesel Engine and Fuel Rule	Jun. 1, 2000
Statement of Principals Regarding Emissions From Airports and Aviation Activities	Jul. 24, 2001
Resolution Regarding Emissions from Airports and Aviation Activities	Jul. 9, 2004
Statement Calling on the EPA to Update its Policy on Motor Vehicle Aftermarket Converters	Jun. 10, 2009
Statement Calling to Establish Tier 3 Fuel & Emissions Standards	Nov. 10, 2010
Comments on the Retention of NOx Emission Standards in Emission Control Areas	Jan. 31, 2014
	10

Success Stories

Goal: Update this source for OTC states of successful projects to reduce emissions from mobile sources

Projects involve Marine, Rail, Bus, and Truck categories

Though PM focused, some projects provide NOx benefits

- Projects with biggest NOx benefits:
 - Tugboat repowering,
 - Locomotive repowering and Idling reduction
 - Vehicle Idling

Success Stories: Background

Funding Sources:

- DERA (Diesel Emissions Reduction Act)
- ARRA (American Recovery & Reinvestment Act)
- Voluntary or Required Actions
 - General Conformity
 - VALE (Voluntary Airport Low Emissions)
 - Port Plans



EPA SmartWay Transport Partnership

Collaboration between government & business

- SmartWay® Transport Partner
- Freight Shippers
- Pro su • Carriers

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SmartWay Approach

- EPA provides consistent objective, market-driven tools, approaches and incentives to help businesses to benchmark, track and reduce fuel consumption from supply chain
- Partners save money, cut emissions and achieve recognition

Win for business - Win for the environment



SmartWay[®] Components

- **SmartWay Transport Partnership:** A partnership in which freight carriers and shippers commit to benchmark operations, track fuel consumption and improve performance annually.
- **SmartWay Technology Program:** A testing, verification, and designation program to help freight companies identify equipment, technologies and strategies that save fuel and lower emissions.
- **SmartWay Vehicles:** A <u>program</u> that ranks light-duty cars and small trucks and identifies superior environmental performers with the SmartWay logo.
- **SmartWay International Interests**: Guidance and resources for countries seeking to develop freight sustainability programs modeled after SmartWay.

OTR SmartWay®

- SmartWay [®] has resulted in ~15,000 tons/year NOx emission reductions in the OTR & VA
- The Mobile Source Committee will establish a new workgroup for this issue





Stay Tuned

- Diesel Inspection/Maintenance SIP Credit
 - Evaluating EPA Policy / Guidance on Voluntary Credit
- Emission Reduction Strategies at Ports
- Evaluation of Vehicle Miles of Travel Projections
- Exploring the EPA SmartWay Program

Questions?