

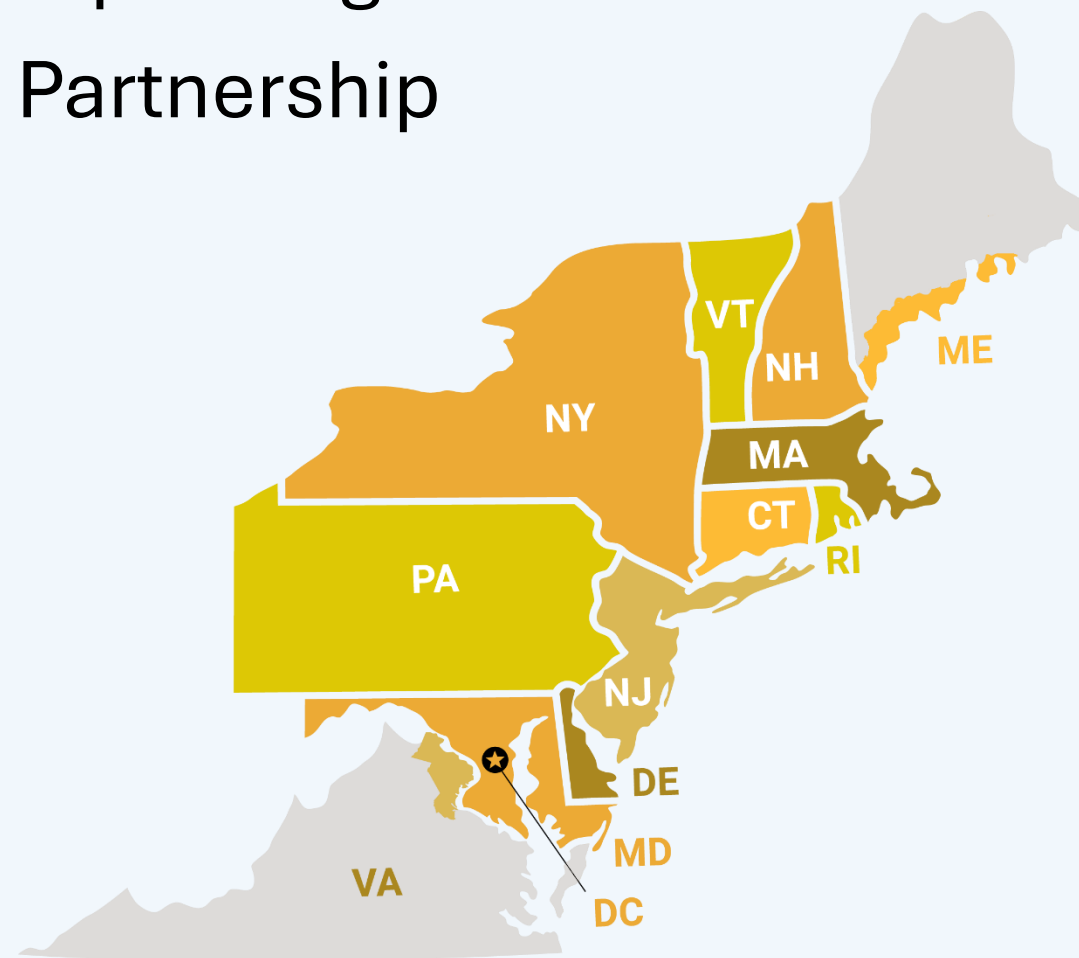
Overview of the Ozone Transport Commission & Mid-Atlantic/Northeast Visibility Union & OTC/MANEVU Spring 2026 Meeting



These slides courtesy of OTC

OTC ED Opening Presentation

- OTC/NESCAUM recent leadership change
- Success of OTC/MAVEVU-EPA Partnership
- Recent Progress
- Outlook
 - On-road vehicles
 - Regional transport
 - Regional haze
- OTC/MANEVU Path Forward

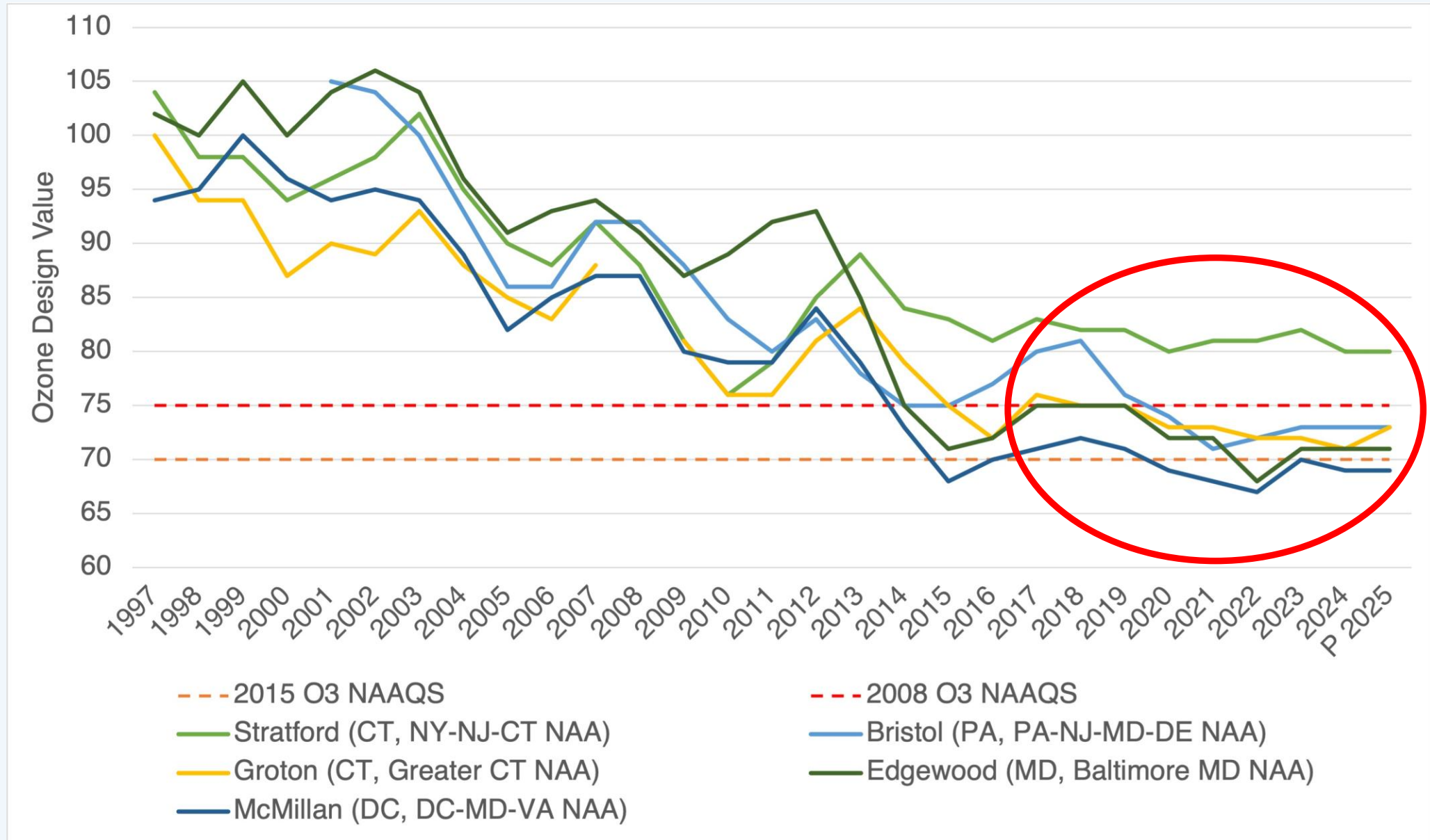


Decades of Effective Federal-OTC Partnership

- Collaboration between states and EPA on science and technical work that underscores regulatory action
- Significant progress across sectors made between states on regulatory measures, such as model rules
 - Ex. NOx Budget (late 1990s)
- After OTC led the way, EPA adopted certain rulemaking approaches nationally

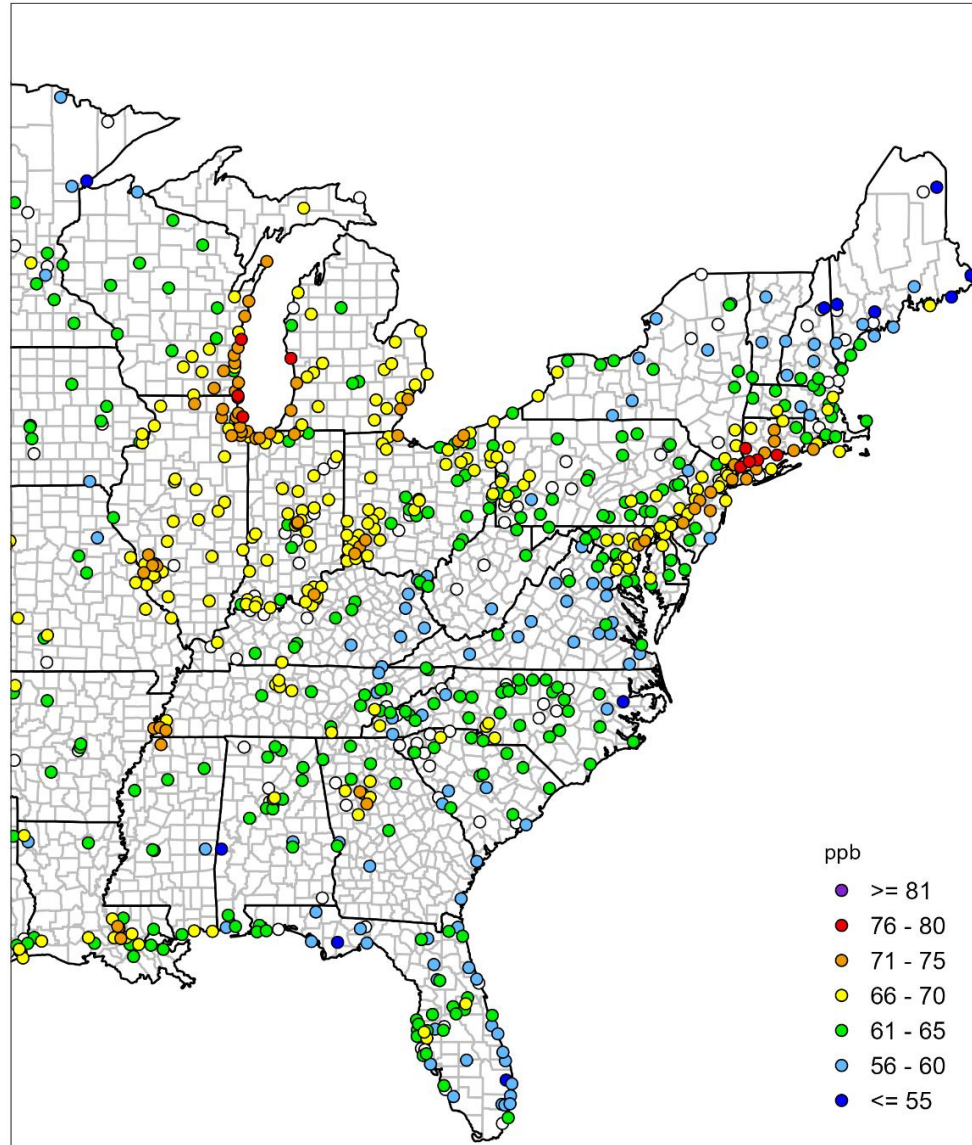
Year	Model Rules Developed
2001	• Consumer Products Phase I • AIM Coatings Phase I • Portable Fuel Containers Phase I • Mobile Equipment Repair & Refinishing Phase I • Solvent Degreasing Phase I • ICI Boilers, Turbines & Engines • Distributed Generation Standards
2006	• Consumer Products Phase II • Portable Fuel Containers Phase II • Asphalt Paving (Cutback & Emulsified) • ICI Adhesives and Sealants • ICI Boilers RACT Resolution • Cement Kilns • Asphalt Production • Glass Production
2009	• Mobile Equipment Repair & Refinishing Phase II
2010	• Consumer Products Phase III • Large Above Ground VOC Storage Tanks • Stationary Generators • EGUs: HEDD Combustion Turbines • EGUs: Oil and Gas Boilers
2011	• AIM Coatings Phase II • New Small Natural Gas Boilers
2012	• Consumer Products Phase IV • Solvent Degreasing Phase II • Idling Restrictions for Nonroad Engines (Mobile)
2014	• Sale of Aftermarket Catalytic Converters (Mobile)
2018	• Consumer Products Phase V (RTG Format)
2019	• Natural Gas Pipeline Compressors (RTG Format)

Progress Towards Ozone Standards is Slowing

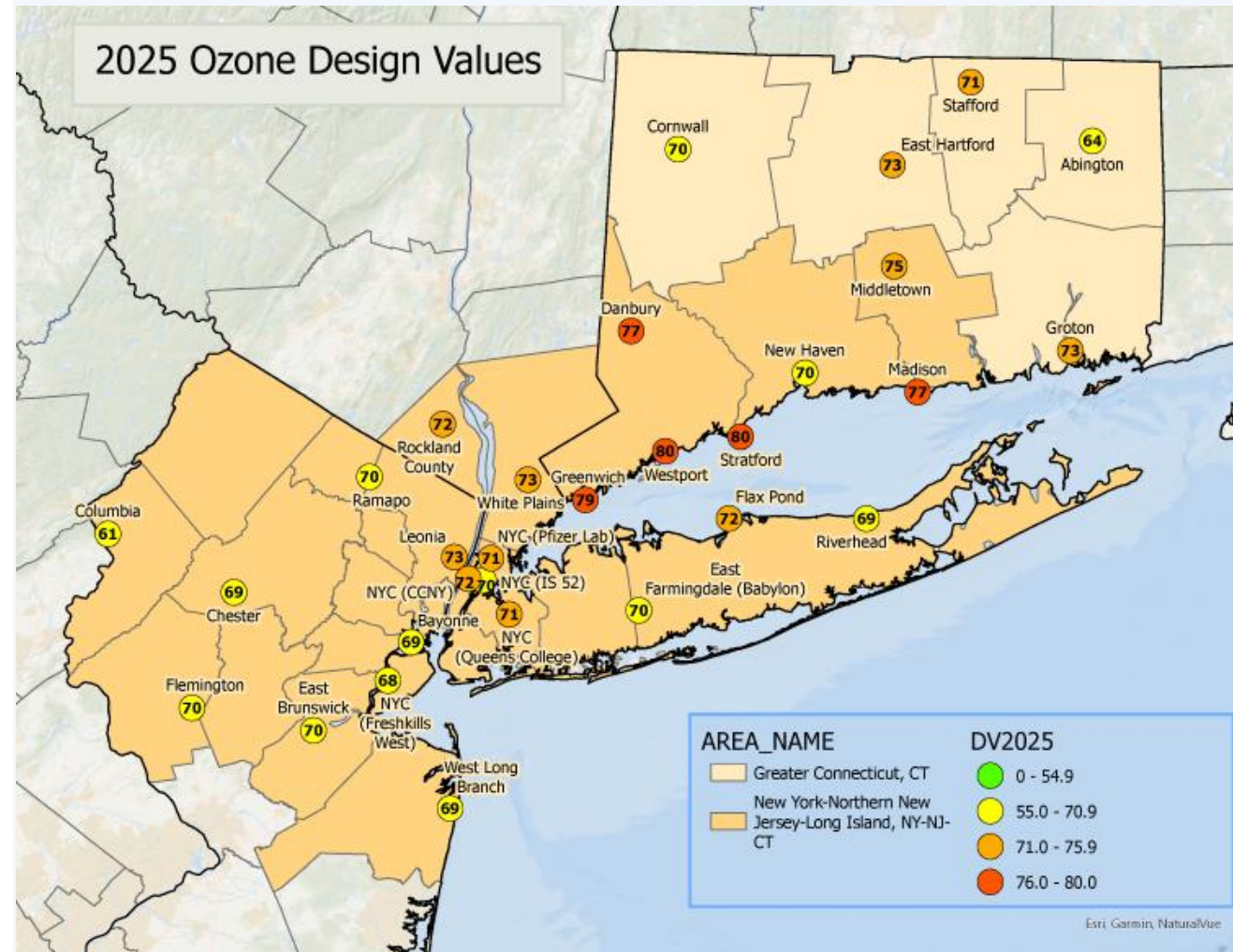


Challenges Remain for Attaining Ozone Standards

2022-2024 Ozone Design Values



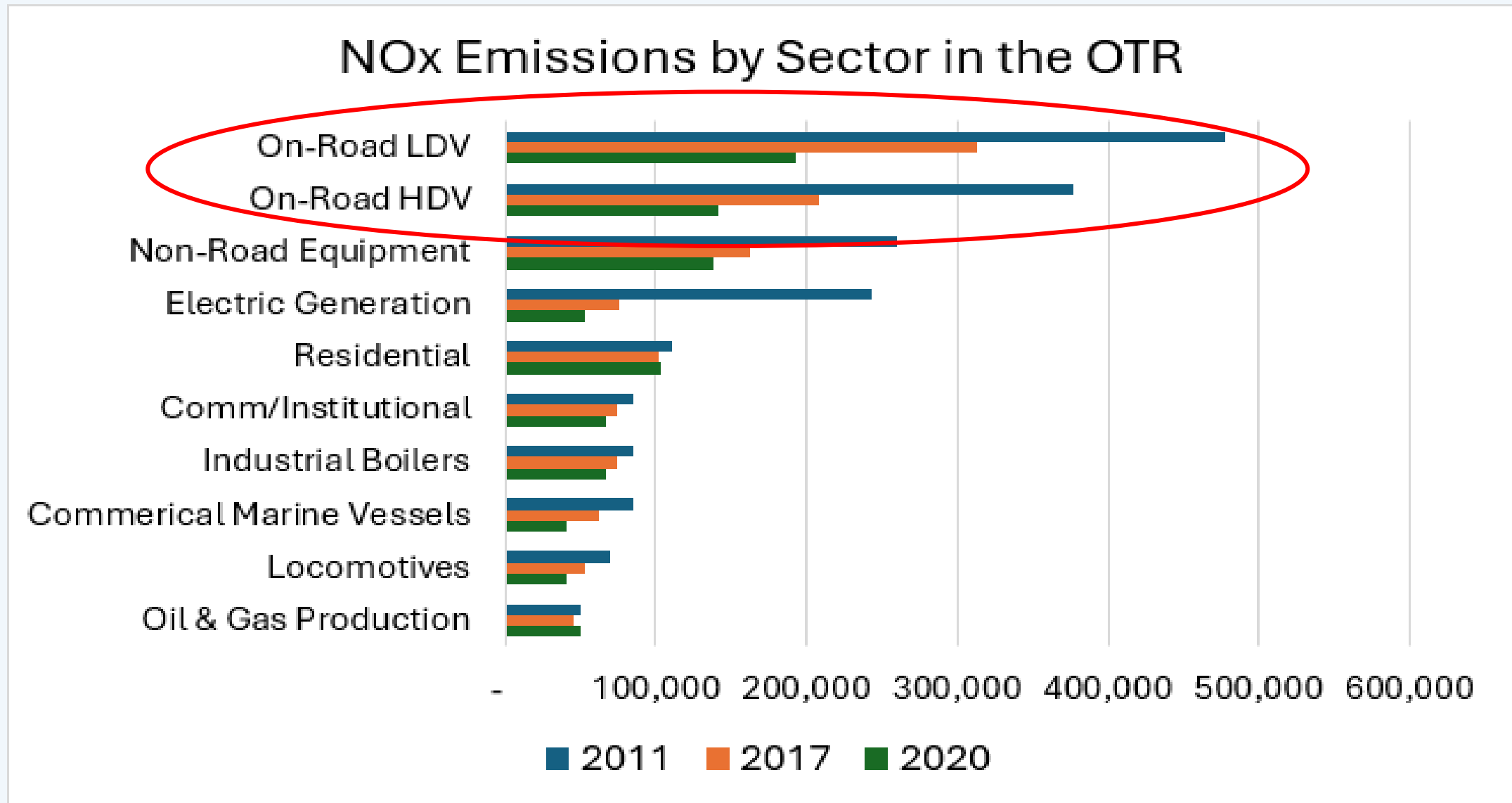
Data source: <https://www.epa.gov/air-trends/air-quality-design-values>, 06/04/2025





ONROAD VEHICLE EMISSIONS

On-Road Vehicle Emissions Remain Biggest Challenge



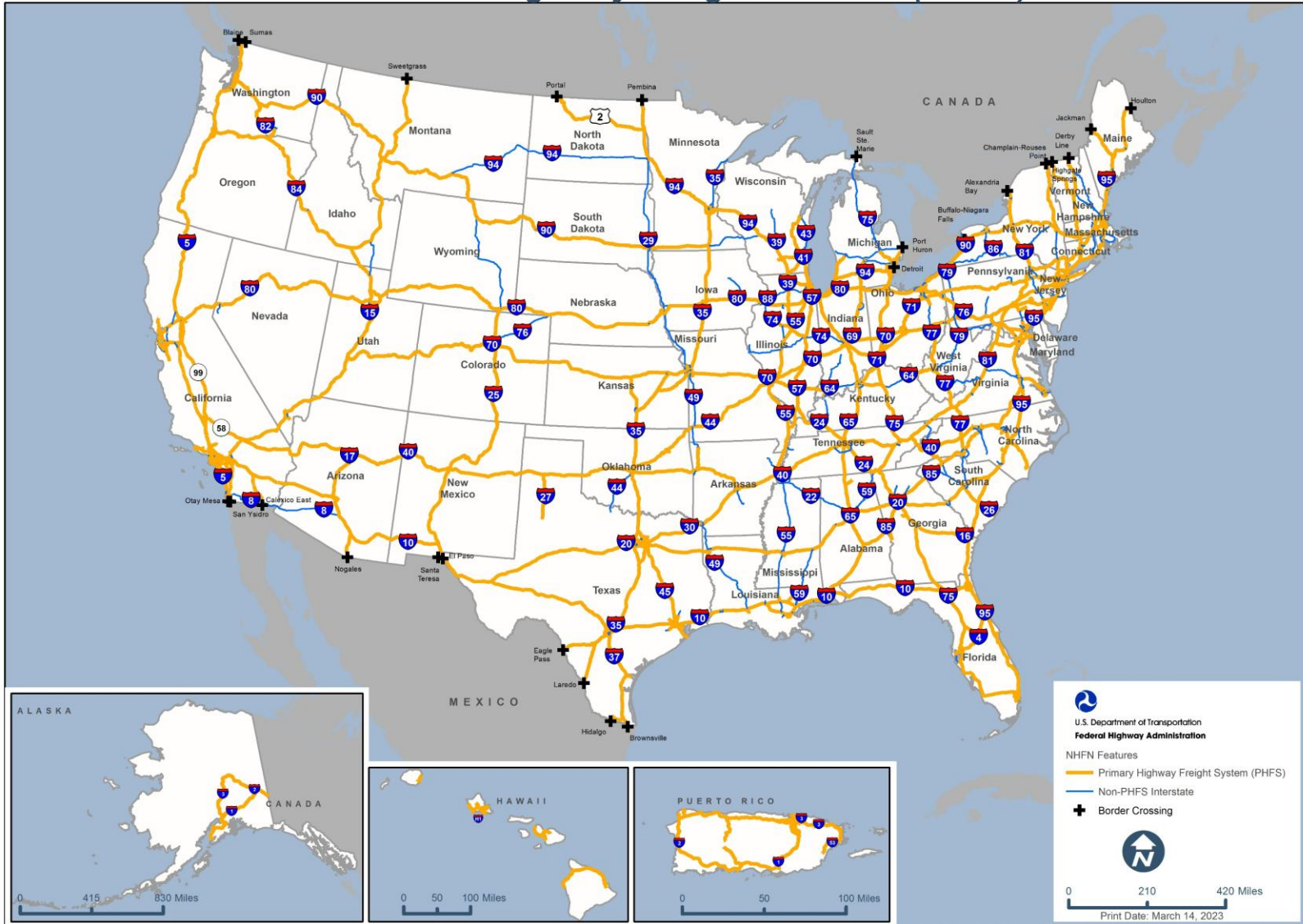
How does rolling back Multi-Pollutant Standards impact the OTR?

- An estimated ~22% (based on vehicle registrations) of all national emissions reductions from EPA's Multi-Pollutant rule would have occurred in the OTR.
- In the year 2055 the region was expected to see approximately:
 - 21,000 tons/year NOx emission reductions
 - 43,000 tons/year VOC emission reductions
- Without the multi-pollutant rule, these lost reductions are equivalent to **adding millions more passenger cars or tens of thousands more heavy-duty trucks** to our roads.
- These are conservative, lower-bound estimates due to prevalent **adoption of Advanced Clean Cars II in OTR** where fleet was expected to be cleaner than the national average, leading to additional emission reductions.

Source: U.S. EPA, Multi-Pollutant Standards for Light-Duty and Medium-Duty Vehicles, Regulatory Impact Analysis, Table 7-11 (March 2024)

How does repeal of Phase 3 HDV Standards impact the OTC?

National Highway Freight Network (NHFN)

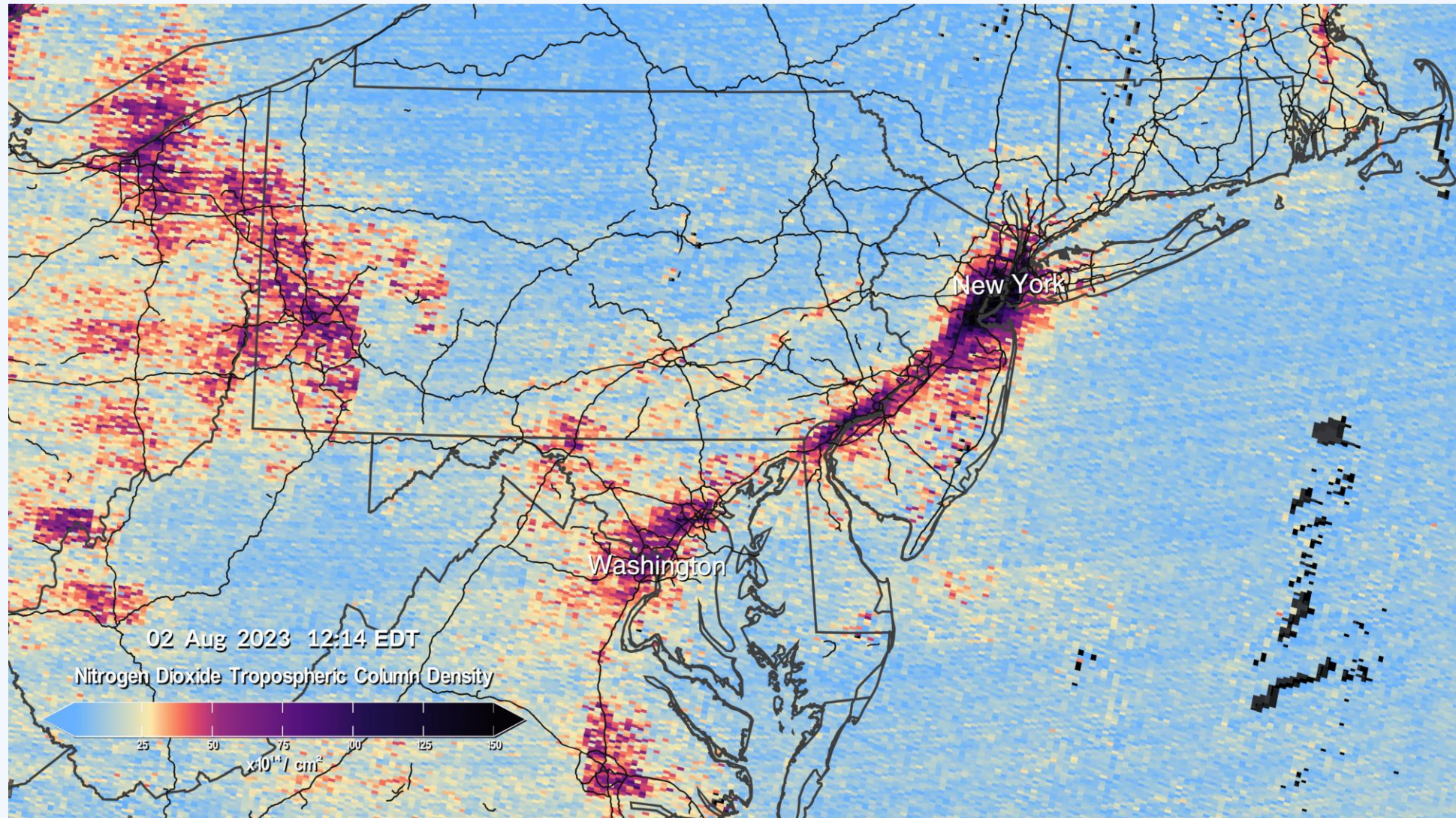


More ozone pollution from trucks, and associated health impacts, along major freight routes.

Disproportionate impacts likely in the OTR due to concentration of freight routes in heavily populated areas.

Note: PHFS and the Non-PHFS Interstate mileage is based on the U.S. Department of Transportation, Federal Highway Administration, All Roads Network of Linear Referenced Data (ARNOLD) - 2019 geospatial database. Non-PHFS Interstate mileage can fluctuate based on changes made to the Interstate System. The mileage for Non-PHFS Interstate is based on the Interstate Mileage reported in the National Highway System (NHS) as of October 17, 2019. The mileage for CRFCs and CUFCs is based on the State reported data as of January 27, 2023.

High NO_x Emissions in the OTR (Aug. 2, 2023)



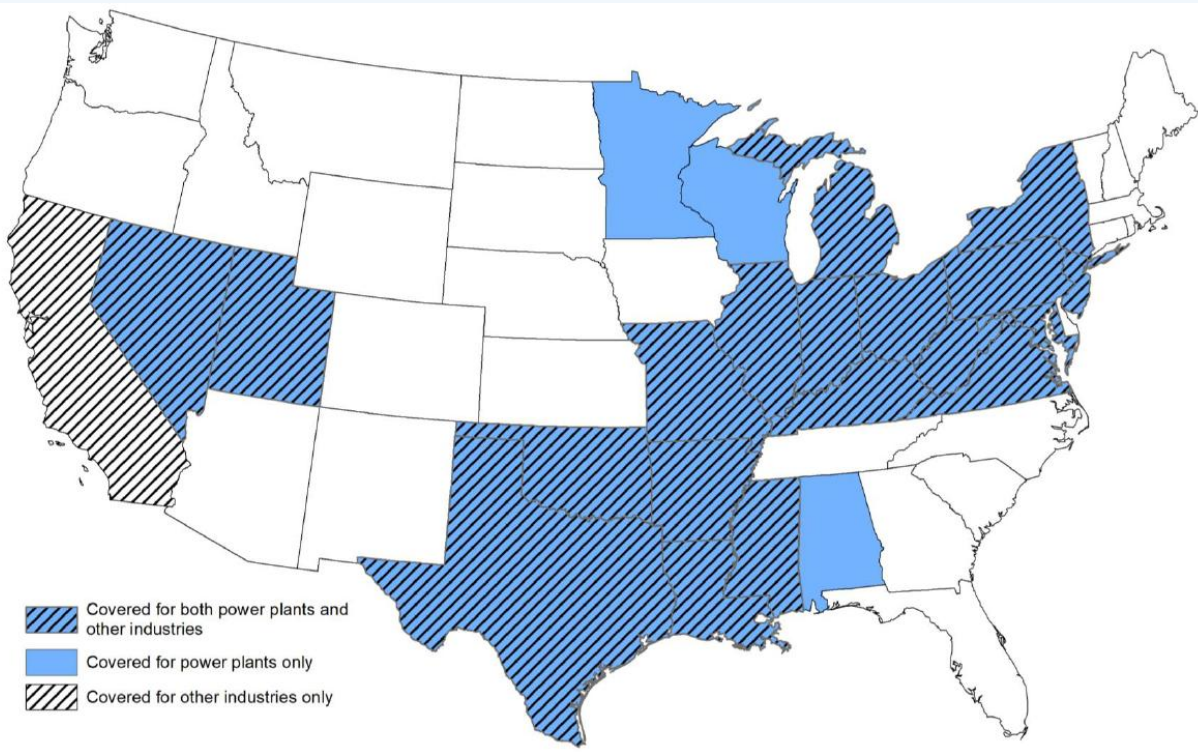
Credits: Kel Elkins, Trent Schindler, and Cindy Starr/NASA's Scientific Visualization Studio



REGIONAL TRANSPORT

National and Regional Ozone Transport

EPA's Good Neighbor Plan 2023 Final Rule Covered Geography

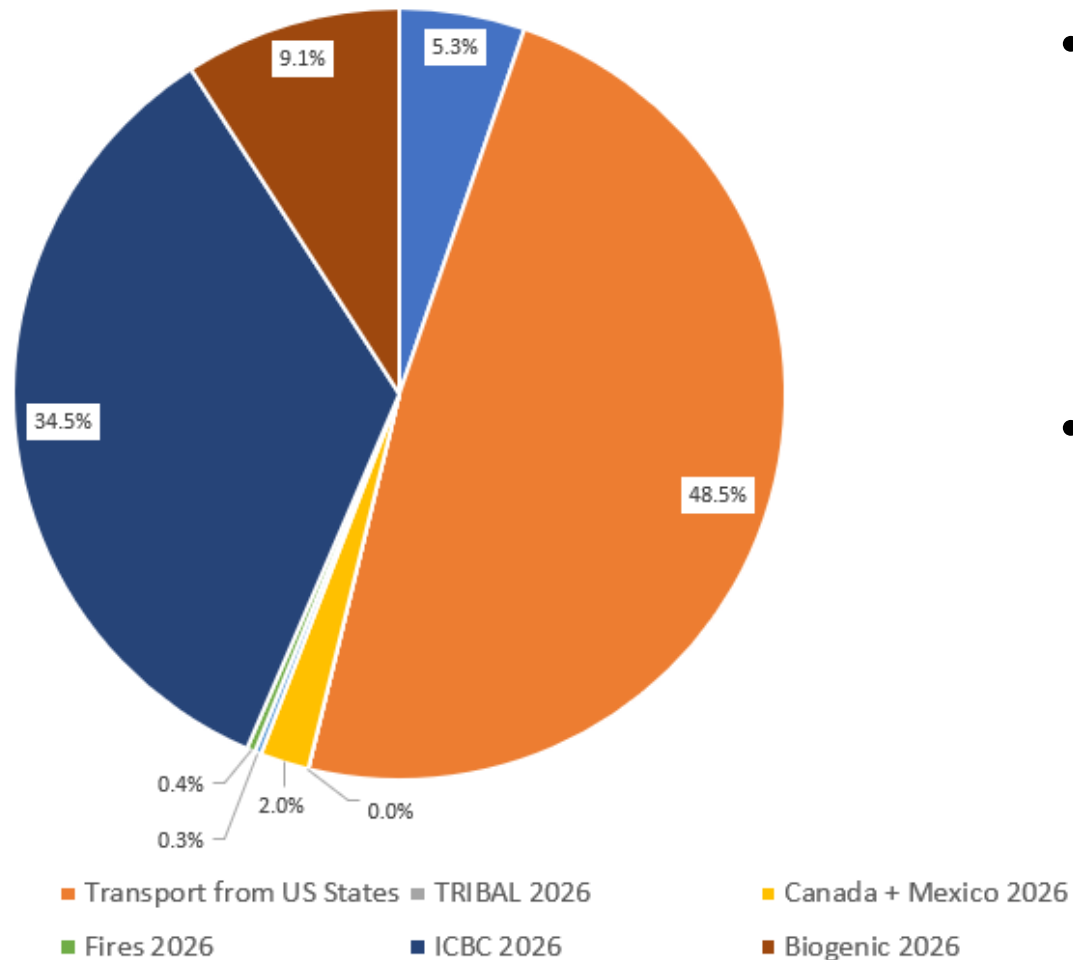


Source: U.S. Informational Webinar on the Federal “Good Neighbor Plan” EPA for 2015 Ozone NAAQS. March 2023.

- Primary sources of ozone are from sources within the Ozone Transport Region and OTC has provided a forum to address issues between our member states
- States and EPA have worked together regionally and nationally to address transport of ozone pollution
- Worked beyond the OTR for example with the 2009 MOU signed by 17 states

Delaware: Case Study

Impacts to Ozone in Delaware



- Delaware provides an example of how pollution transported from other regions impacts an OTC member state
- For modeled sources of ozone in the 2026 ozone season, nearly half the sources come from other states

Source: Delaware Department of Natural Resources and Environmental Control (2025).



MANEVU

Mid-Atlantic/Northeast Visibility Union

Visibility Goals on Federal Lands



Class I Areas in the MANEVU Region

Acadia National Park, **Maine**

Moosehorn Wilderness, **Maine**

Roosevelt-Campobello International, **Maine/New Brunswick**

Presidential Range-Dry River Wilderness Area, **New Hampshire**

Great Gulf Wilderness Area, **New Hampshire**

Lye Brook Wilderness Area, **Vermont**

Brigantine Wilderness Area, **New Jersey**

Focus of OTC and Committee Work

- OTC and MANEVU Committees continue to focus on robust data, tools, and methods to measure and evaluate program effectiveness:
 - Emissions inventories
 - Inclusion of monetized health benefits
 - Monitoring sites
 - Role of grid reliability
- OTC and NESCAUM will conduct modeling this year to generate robust estimates of EPA's proposed changes to vehicle regulations
- OTC and states remain committed to our partnership with EPA to reduce ozone, improve public health, and achieve visibility goals on Federal lands

OTC & MANEVU

Spring 2026 Meeting Overview



These slides courtesy of OTC

MSC and SAS 2026-27 Charges

Mobile Source Committee (MSC) 2026-27 Charge

- ✓ Light, Medium- and Heavy-duty Vehicle Emissions Standards.
- ✓ In-Use Vehicle Emissions Programs.
- ✓ Cross-committee coordination.
- ✓ Provide technical and policy support as resources allow (non-road focus).

Stationary and Area Sources Committee (SAS) 2026-27 Charge

- ✓ Assessing Source Emissions Inventory
- ✓ Provide Technical Support for Individual Sectors (e.g., heat pumps <50MMbtu/hr; ICI wood boilers, MWC NSPS).
- ✓ Engage with EPA's Office of State Air Partnerships (OSAP).
- ✓ Cross-Committee Collaboration.
- ✓ Provide technical and policy support where needed and as resources allow.

Modeling Committee and Tech Support Committee

Modeling Comm (MSC) Accomplishments

- ✓ Tracked 2025 OTR O3 levels and attainment status.
- ✓ Completed expanded retrospective O3 analysis (2016 platform).
- ✓ Boundary condition/dry deposition testing.
- ✓ Cross Committee coordination.

MANEVU TSC Accomplishments and Multi-Year Workplan

- ✓ Most MV agencies have approved 2nd Round RH SIPs and Progress Reports.
- ✓ 2024 Metrics report shows visibility improvement – mostly due to sulfate reductions, making nitrates more impactful.
- ✓ MANEVU continuing coordination with other RPOs for 3rd round SIP planning and modeling, timeframes are TBD based on ANPRM for RH rule.
- ✓ TSC focused on SIP comment:
 - ✓ Opposing certain EPA actions relative to new ‘uniform rate of progress’ policy and
 - ✓ Opposing EPA’s guidance that grid reliability be taken into account within CAA’s statutory four-factor analysis

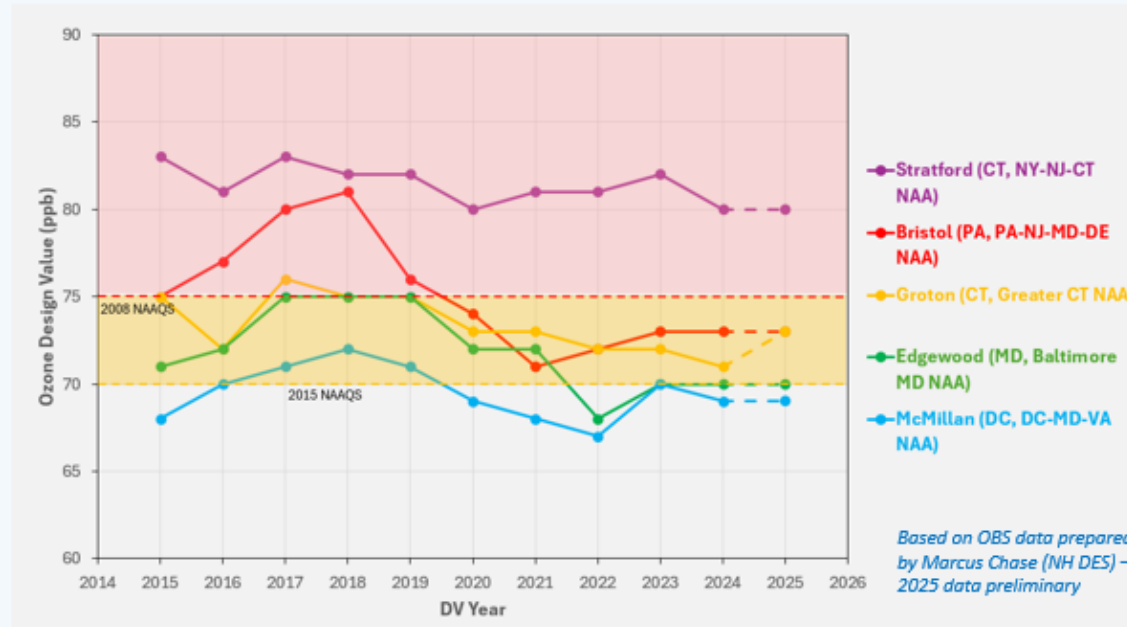
2026 OTC Meeting Formal Actions

- Approved 2026-27 Mobile Source Committee Charge
- Approved 2026-27 Stationary & Area Sources Charge
- Adopted by unanimous voice vote a joint resolution with the Mid Atlantic/Northeast Visibility Union on the need for robust future-year emissions inventories Approved statement on the need for Federal Action to reduce ozone-forming pollution from mobile sources
- Adopted by unanimous voice vote a resolution on monetizing health benefits in rulemakings. Approved a Resolution on Addressing Interstate Transport of Ozone and Ozone Precursors

Challenges Ahead – Modeling Committee

- Regulatory rollbacks -
- Endangerment finding and vehicle GHG standards that also reduced NOx
- Tier 4 2-3 year delay and reconsideration
- Ozone SIP proposal
- HDDE NOx

Time Series of Monitored Ozone Design Values



m is available, and EPA
h the EIC to develop a
available in 2027.

- Regional base year modeling with the 2022v2 emissions platform has been completed.
- A series of emission reduction sensitivity tests showed that it is very unlikely for the OTR to reach ozone attainment without emission reductions in mobile sources.
- Non-attainment continues to be an issue in the OTR, and we will continue our cross-committee collaboration to develop emission reduction strategies.

Thank you!

Paul Farrell, CT Department of Energy and Environmental Protection



OZONE TRANSPORT COMMISSION