

OTC Mobile Sources Committee Overview

November 18, 2020

Kelly Crawford, DC DOEE
Chair
Mobile Sources Committee



OZONE TRANSPORT COMMISSION

2020 Charge



Highest Priority: Medium- and Heavy-Duty Trucks



Medium- and Heavy-Duty ZEV Technical Support



Heavy-Duty Vehicle Data Gathering



Additional Items as Resources Allow: Idle Reduction, Tampering, Telework Policies, General Support

2020 Charge: Medium and Heavy-Duty Trucks

Actions:

- **Evaluated programmatic elements of the CARB Omnibus program and Cleaner Trucks Initiative;**
- In coordination with the Modeling Committee, evaluated a Cleaner Trucks Initiative Scenario using the CMAQ model;
- Learned about a Manufacturers of Emissions Control Association Cleaner Trucks Initiative air quality analysis;
- Presentation from CARB on the Omnibus regulation; and
- Met with the Engine Manufacturers Association to discuss elements of the EPA and CARB heavy-duty NOx regulations.

Next Steps:

- Evaluate EPA Cleaner Trucks Initiative NPRM when released
- Finalize data logging results to support OTC NPRM comments

2020 Charge: Medium and Heavy-Duty Trucks

Actions:

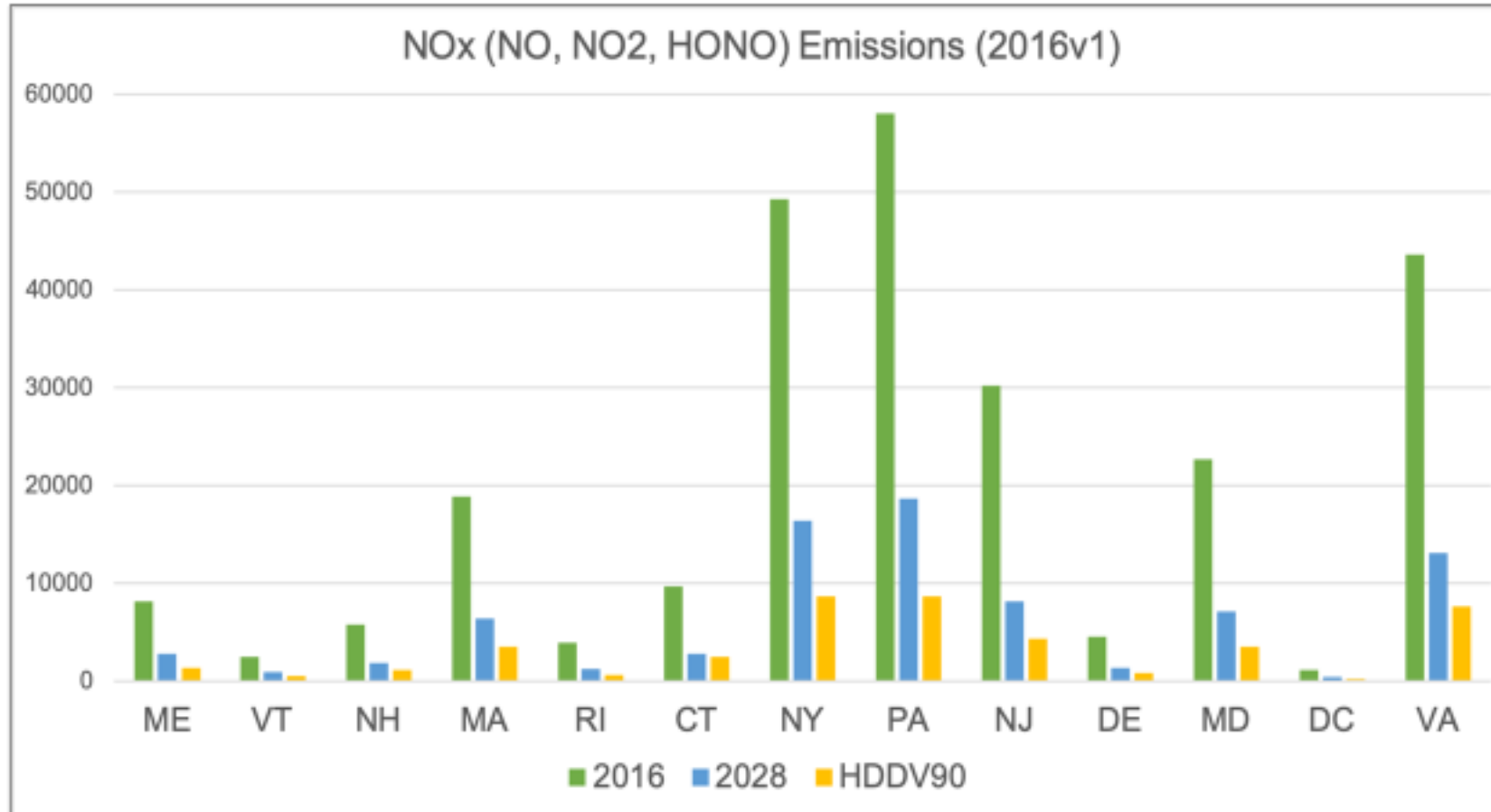
- Evaluated programmatic elements of the CARB Omnibus program and Cleaner Trucks Initiative;
- **In coordination with the Modeling Committee, evaluated a Cleaner Trucks Initiative Scenario using the CMAQ model;**
- Learned about a Manufacturers of Emissions Control Association Cleaner Trucks Initiative air quality analysis;
- Presentation from CARB on the Omnibus regulation and coordinated state testimony at CARB hearing; and
- Met with the Engine Manufacturers Association to discuss elements of the EPA and CARB heavy-duty NOx regulations.

Next Steps:

- Finalize air quality analysis

Air Quality Analysis of a Cleaner Trucks Scenario

OTR state total NO_x emissions decrease considerably between 2016 and 2028



- 2028 BAU onroad emissions are on average 68% lower than emissions in 2016 in the OTR
- HDDV90 onroad emissions in the OTR are on average 43% lower than 2028 BAU

Estimated Design Value Changes with HDDV90 scenario

Location	2014-2018 DV _{avg} (measurements)	Change in DVF, HDDV90 from 2028 (CMAQ)
New York City	70.3	-2.2
Greenwich, CT	79.3	-2.3
New Castle, DE	73.7	-2.4
Washington, DC	71	-2.8
Edgewood, MD	74	-2.6
Fall River, MA	71.7	-2.0
Rockingham, NH	66.7	-1.9
Camden, NJ	75.3	-2.4
Allegheny County, PA	69.7	-1.4
Kent, RI	71.3	-2.5
Arlington, VA	71	-2.7

HDDV90 lowers OTR DV at individual monitors by additional ~2 ppb from 2028 BAU

2020 Charge: Medium and Heavy-Duty Trucks

Actions:

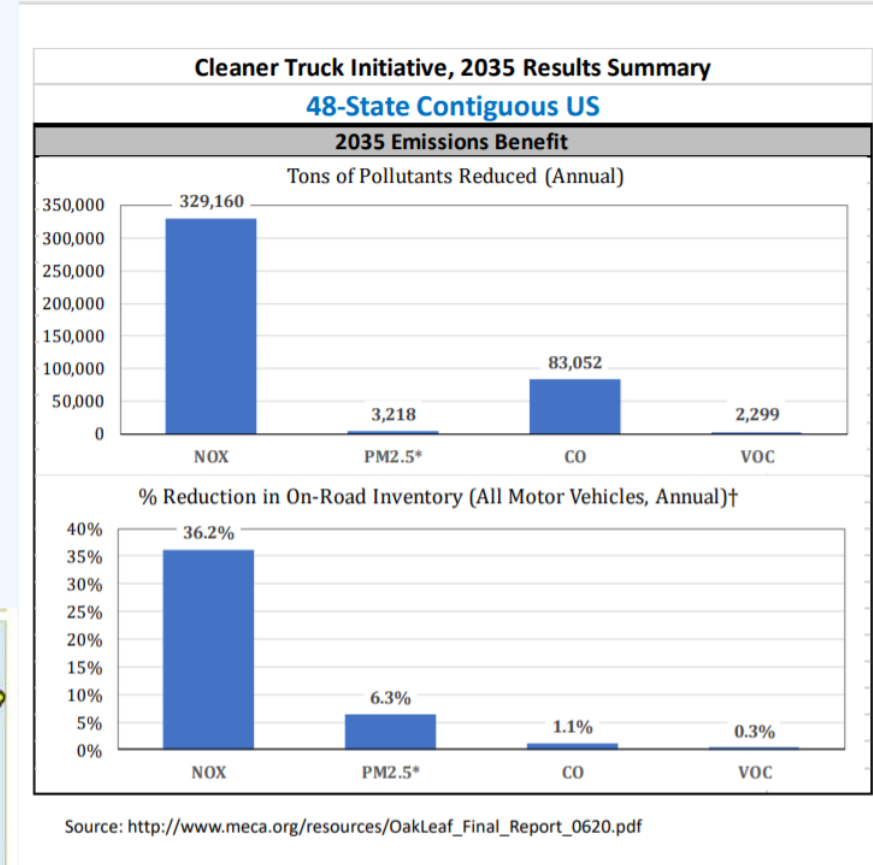
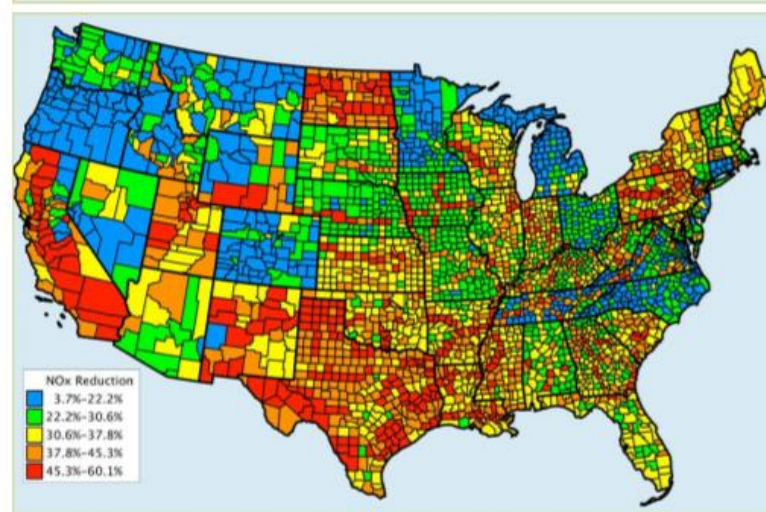
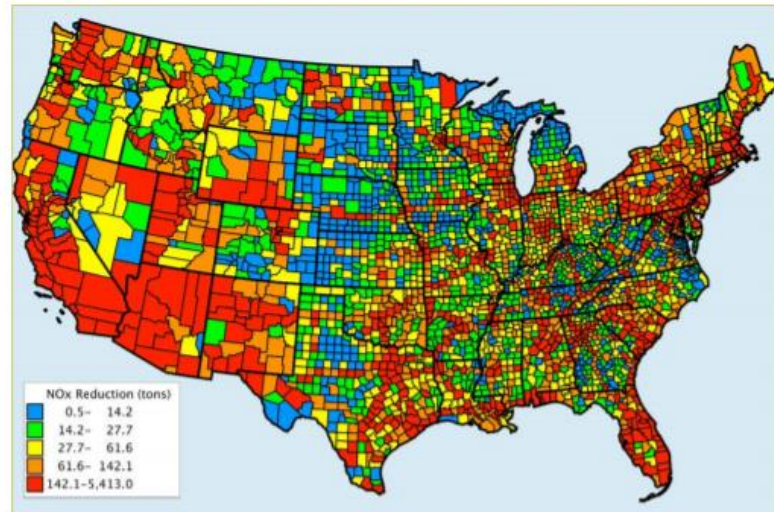
- Evaluated programmatic elements of the CARB Omnibus program and Cleaner Trucks Initiative;
- In coordination with the Modeling Committee, evaluated a Cleaner Trucks Initiative Scenario using the CMAQ model;
- **Learned about a Manufacturers of Emission Controls Association Cleaner Trucks Initiative air quality analysis;**
- Heard from CARB on the Omnibus regulation; and coordinated state testimony at CARB hearing
- Met with the Engine Manufacturers Association to discuss elements of the EPA and CARB heavy-duty NOx regulations.

Next Steps:

- No specific follow up items

Manufacturers of Emission Controls Association (MECA)

- Air quality modeling
 - MECA Sponsored
 - Conducted by Alpine Geophysics
- Assumed phase in of a CTI 90% NOx reduction
- Resulted in a 36% reduction in onroad NOx emissions
- ~2 ppb ozone reduction



2020 Charge: Medium and Heavy-Duty Trucks

Actions:

- Evaluated programmatic elements of the CARB Omnibus program and Cleaner Trucks Initiative;
- In coordination with the Modeling Committee, evaluated a Cleaner Trucks Initiative Scenario using the CMAQ model;
- Learned about a Manufacturers of Emissions Control Association Cleaner Trucks Initiative air quality analysis;
- **Heard from CARB on the Omnibus regulation; and coordinated state testimony at CARB hearing**
- **Met with the Engine Manufacturers Association to discuss elements of the EPA and CARB heavy-duty NOx regulations.**

Next Steps:

- Hear from CARB on Omnibus 15-day notice
- Exchange information on truck data gathering and NOx sensor development with EMA

2020 Charge: MHD ZEV Technical Support

- MOU was signed July 14th
- 16 signatories: California, Connecticut, Colorado, D.C., Hawaii, Maine, Maryland, Massachusetts, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, Washington
- Discussing potential analysis of the emissions benefits of MHD ZEV with the modeling committee
- Reach out to MOU states for support needs



2020 Charge: Report on Heavy-Duty Data Project

Actions Taken

- Data logging begun - six trucks have been data logged
- Gathering information on truck activity and NOx emissions during normal operation
- Early data analysis complete

Next Steps

- Complete data logging over next six months
- Analyze data and summarize



2020 Charge: As Resources Allow Anti-tampering

Action:

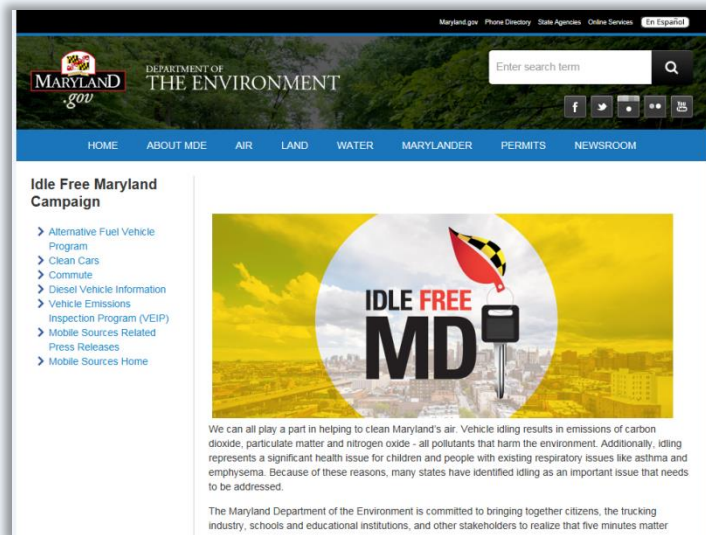
- The MSC heard from New Jersey on its Manheim Auto Auction enforcement action.
- NJ sued Manheim Auto Auction for selling vehicles with tampered emission control systems.
- NJ inspected 50 vehicles up for auction and a found tampering rate of 28%.
- Tampered vehicles emit up to 300 times the pollutants of a vehicle with a functioning emission control system.



2020 Charge: As Resources Allow Idle Reduction

Action:

- The Committee heard from DC and MD on their idle reduction efforts and plans to hear from NYC and NJ in follow on calls.





DISTRICT OF COLUMBIA

ENGINE IDLING CITIZEN ENFORCEMENT PILOT PROGRAM

WHEN FILING A VIOLATION REPORT, DO NOT APPROACH OR VERBALLY ENGAGE THE DRIVER OF THE VEHICLE:

The information required for the report does not require any information to be obtained from the vehicle operator. DO NOT ENTER PRIVATE PROPERTY TO OBSERVE A VIOLATION. All violations should be observed from publicly accessible areas.



Once the report of violation is received by DOEE through the DC311 App Portal, the report will be reviewed by a DOEE inspector who will determine whether the report has the required information. An affidavit to be filled out and signed with information regarding the violation, to be sworn under penalty of perjury.

The DC311 App will allow for the submission of up to five (5) photographs, which must be stamped with the time and location and can be taken using the native camera within the DC311 App. Submitted photos must meet these minimum requirements:

- **At least 2 photographs to mark the start and stop of the observation period** (when the time period is "for more than three minutes," the observed time should be five (5) minutes or more; when the temperature is below 32 degrees F, the observed time should be six (6) minutes or more).
- **A photograph of the license plate** of the truck or bus.
- **At least one photograph that shows any company identifying information or logo**, and when on the vehicle, there should be a photograph of the U.S. Department of Transportation (DOT) number on the vehicle.



GOVERNMENT OF THE DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR

2020 Charge: As Resources Allow Telework

Action:

- The MSC formed a Telework Subgroup that is meeting bi-weekly and will evaluate the potential emissions reductions from telework policies.

Next Steps:

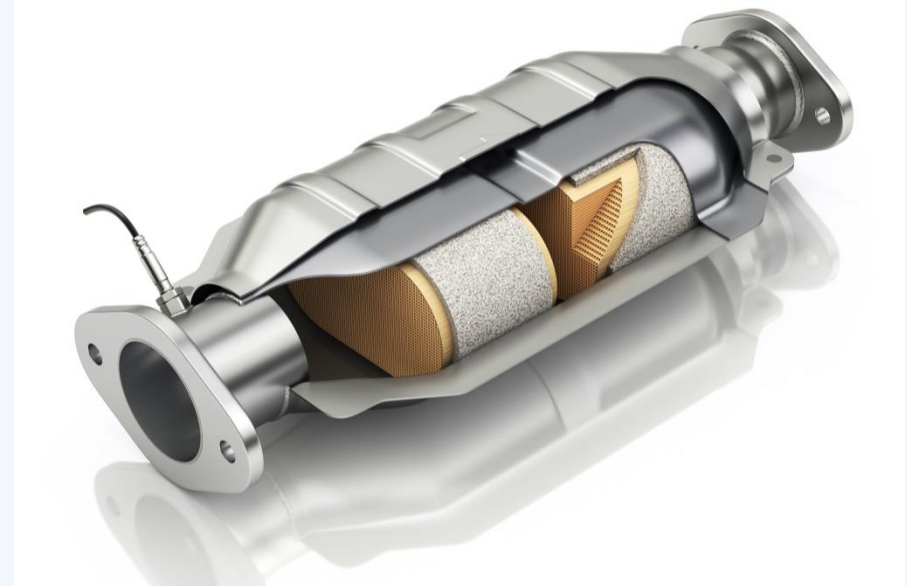
- The subgroup will hear results of analyses from states, Georgetown Climate Center, and others and may conduct additional analysis.



2020 Charge: As Resources Allow Aftermarket Catalysts

Action:

- The MSC discussed an aftermarket catalyst regulation with Colorado and heard from MECA on the development of a manual to aid in matching vehicles with CARB verified aftermarket catalysts.



Next Steps:

- The MSC will follow up with states to determine if support is additional needed.

2020 Charge: As Resources Allow

TCI Update

Action:

- The MSC heard from Georgetown Climate Center on TCI.

Next Steps:

- The OTC MSC and GCC will coordinate on sharing of modeling results from UNC, HEI, and Cambridge Systematics.

