

OTC Modeling Committee Update

2025 OTC/MANEVU Stakeholders Meeting

October 9, 2025

OTC Modeling Committee

Chairs, Eric Zalewsky and Kevin Civerolo, NYS DEC
Committee Lead, Alexandra Karambelas, OTC/NESCAUM

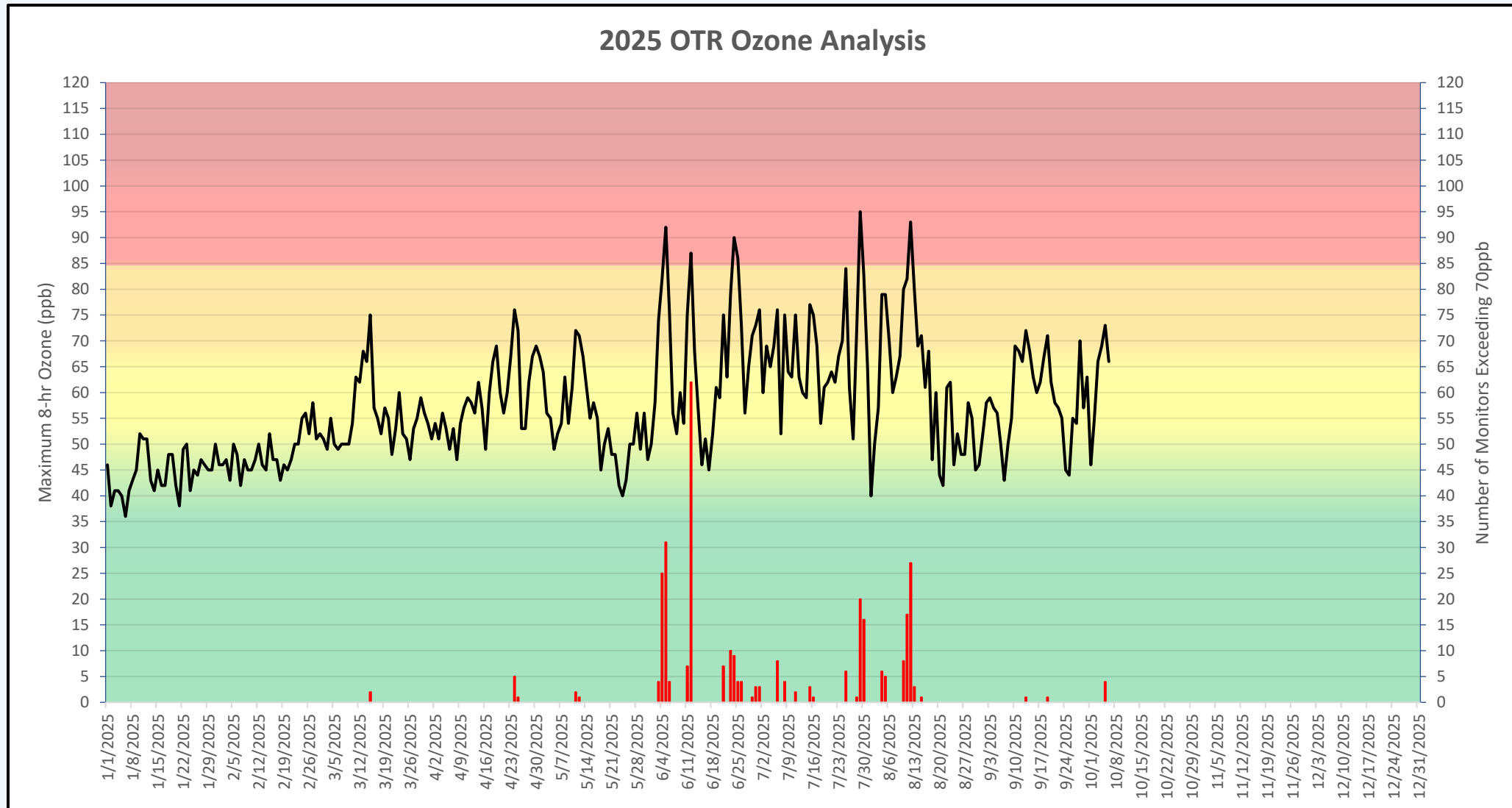


OZONE TRANSPORT COMMISSION

Announcements/Accomplishments

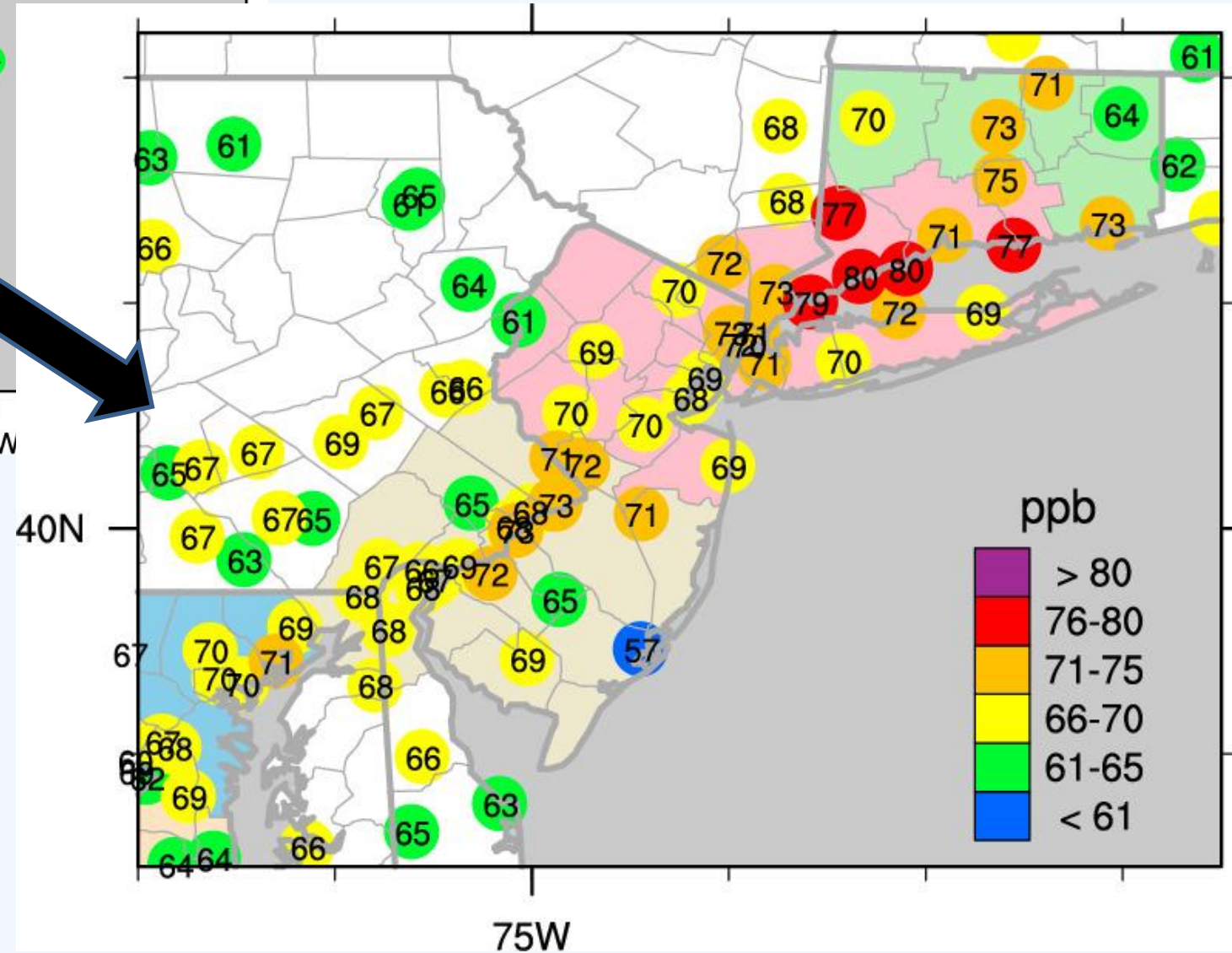
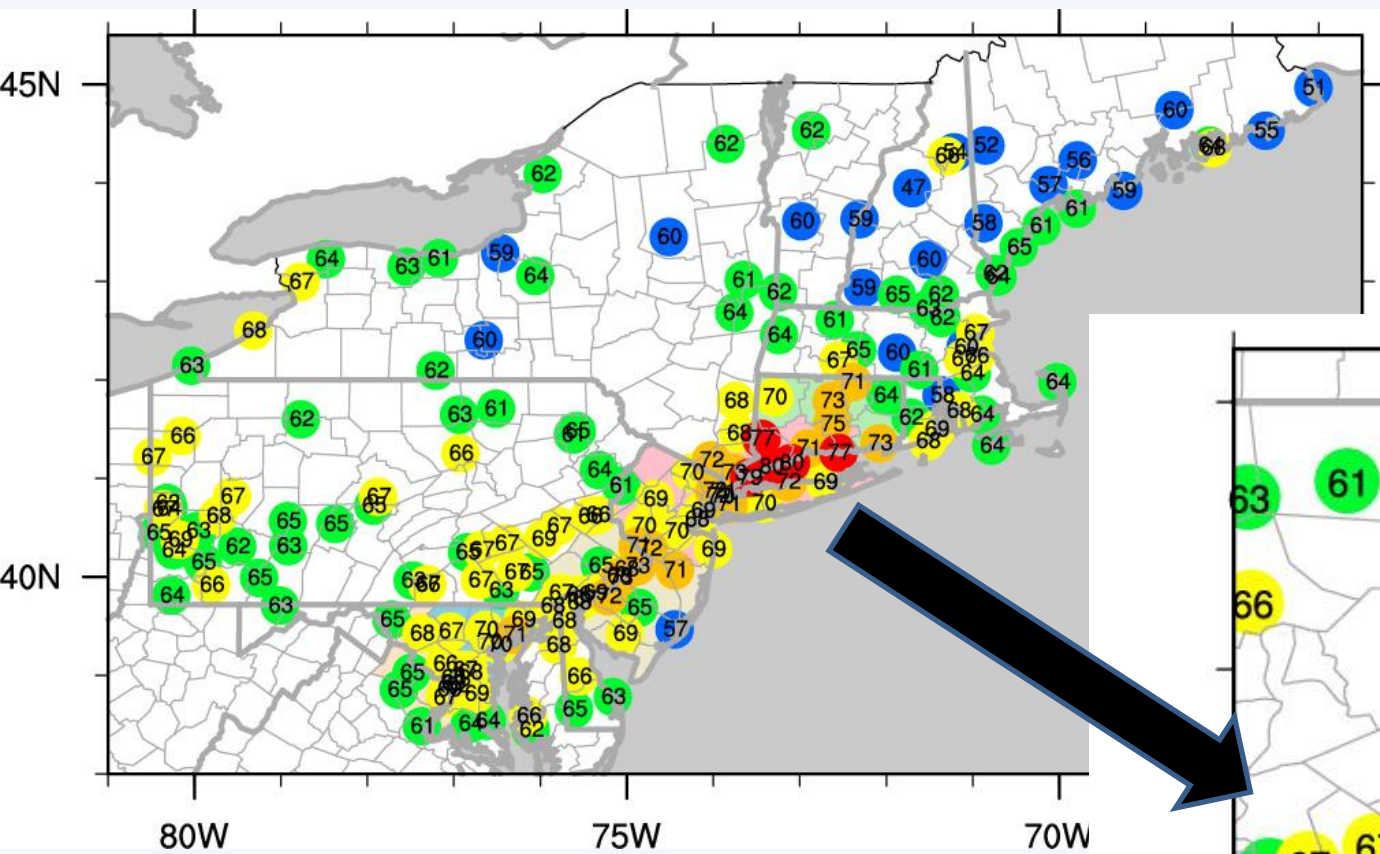
- New co-chair Ruby Tian (January 2026)
- Tracked current OTR O₃ levels and preliminary attainment status
- Completed 2022 & 2026 simulations with CMAQ using 2022v1 platform (Emissions Collaborative), with EPA EGU and ERTAC EGU options
- 2026 (2022v1) DVFs are available
- Completed 2022v1 Technical Support Document
- Other on-going initiatives

2025 OTR Statistical Information



Data prepared by Marcus Chase (NH DES) – data through 10/6/2025

Preliminary 2023-25 Design Values



* NJ & MD submitted
Exceptional Event
demonstrations for 2023
data due to wildfire smoke

*Based on data prepared by Marcus Chase (NH DES) – data
through 10/06/2025*

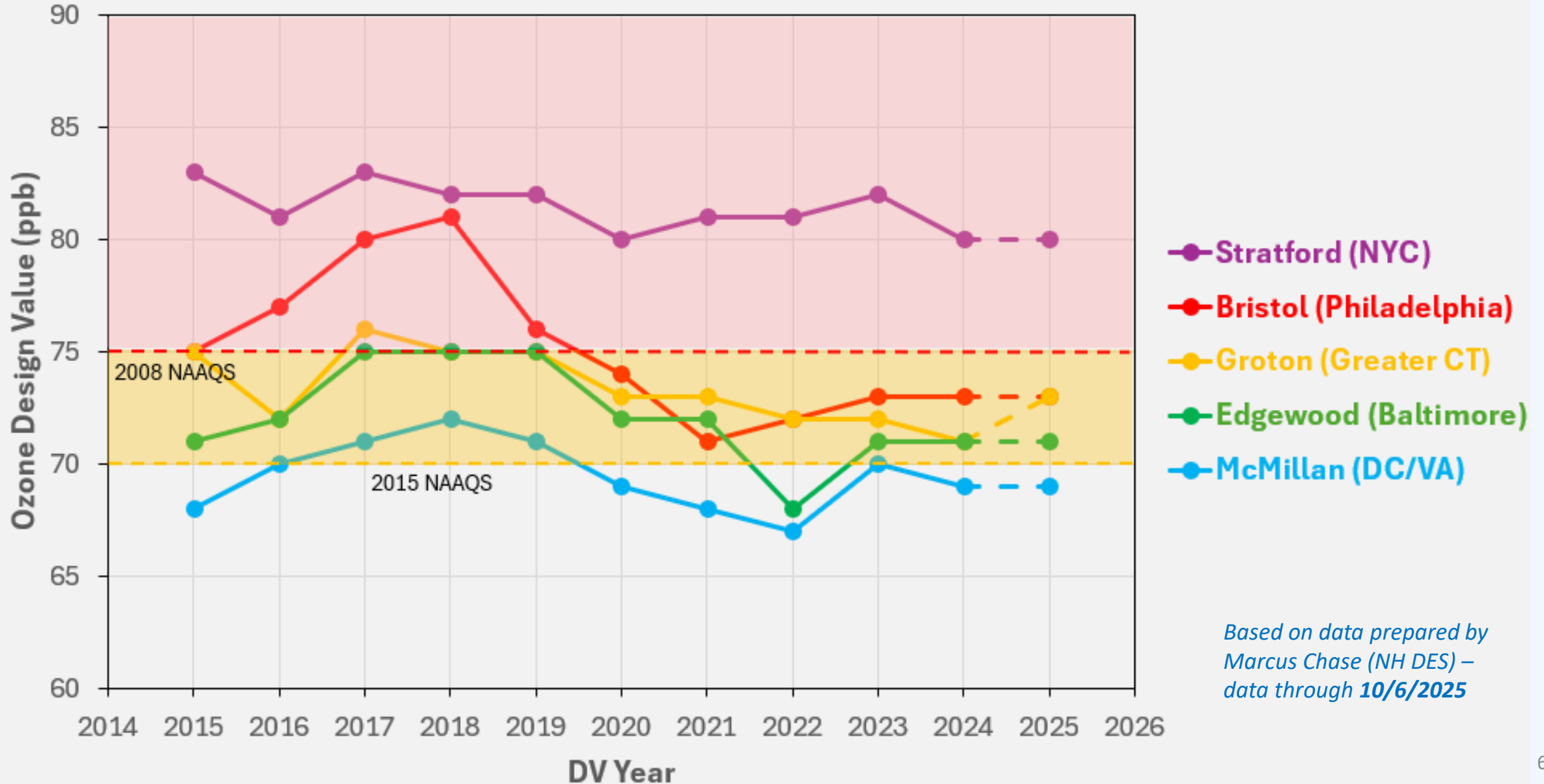
2025 Preliminary Design Values

Monitors w/23-25 DV in Violation of 2015 NAAQS			
Agency	Site	AQS Code	23-25 DV (ppb)
CT	Greenwich	90010017	79
CT	Danbury	90011123	77
CT	Stratford	90013007	80
CT	Westport	90019003	80
CT	East Hartford	90031003	73
CT	Middletown	90079007	75
CT	New Haven (Criscuolo Park)	90090027	71
CT	Madison	90099002	77
CT	Groton (Fort Griswold)	90110124	73
CT	Stafford	90131001	71
MD	Edgewood	240251001	71*
NJ	Leonia	340030006	73
NJ	East Greenwich (Clarksboro)	340150002	72*
NJ	Lawrence (Rider University)	340210005	72
NJ	Titusville (Wash. Crossing)	340219991	71*
NJ	Jackson (Colliers Mills)	340290006	71*
NY	NYC (Pfizer Lab)	360050133	71
NY	NYC (CCNY)	360610135	72
NY	NYC (Queens College)	360810124	71
NY	Rockland County	360870005	72
NY	Old Field (Flax Pond)	361030044	72
NY	White Plains	361192004	73
PA	Bristol	420170012	73
PA	Philadelphia (Northeast Waste)	421010048	73

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*Data prepared by
Marcus Chase (NH DES)
– data through
10/6/2025*

Time Series of Ozone Design Values (ppb)



Model-Projected 2026 Design Values

Site ID	State	Name	Monitored DVs		Modeled Projected DVFs for 2026	
			2020-2024 DVB	2022-2024 DV	2016V2/V3 CMAQ v5.3.3	2022 V1, ERTAC/MEGAN CMAQ v5.4.0.5
					3x3 No Water	3x3 No Water
			AVG		AVG	AVG
90013007	CT	Stratford	81	80	73.2	78.3
90019003	CT	Westport	80.7	80	74.6	78.1
90010017	CT	Greenwich	78.3	79	73	77.8
90099002	CT	Madison	78	76	69.5	75.1
90079007	CT	Middletown	74	74	68	71
361030002	NY	Babylon	73.7	72	66.4	71.6

Note: All 2026 design values computed with EPA's 3x3 "no water" method

Modeling Technical Support Document (TSD) Status

- Draft Modeling TSD completed review by Modeling Committee
- Final draft Modeling TSD completed review by OTC directors
- Final Modeling TSD posted online October 1, 2025

Other Ongoing Initiatives

- Continue working with EPA, states, MJOs on 2022v2 modeling platform
 - No plans for v2 analytic year (AY) inventories
 - Projections workgroup exploring ways to develop proxy AY inventories
- CMAQ modeling with EPA 2022v2 Emissions Platform for base year
- CAMx modeling with v1 platform
- Continue evaluating updated model components/modules
- Work with other committees to accommodate modeling needs

Key Messages

- Regional modeling with the 2022v1 emissions platform has been completed - final TSD posted online
- Modeled O₃ design values are available for 2026 analytic year from 2022v1 emissions platform
- EPA 2022v2 base year emissions platform is available, but no inventory for any analytic years
- Non-attainment is still an issue in the OTR, and cross-committee efforts to develop emission sensitivity tests are needed

Thank you!

Model Committee Chairs

- Eric Zalewsky and Kevin Civerolo, NYSDEC
(kevin.civerolo@dec.ny.gov and eric.zalewsky@dec.ny.gov)

OTC Committee Lead

- Alexandra Karambelas, OTC/NESCAUM
(akarambelas@nescaum.org)

Emissions Inventory Lead

- Susan McCusker, MARAMA (smccusker@marama.org)

O₃ Season Updates

- Marcus Chase, NHDES (marcus.a.chase@des.nh.gov)