Update on EPA Rule Making

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EPA Region 1
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Topics Covered Last Year (Apr 9, 2015)

- **Climate Change**
  - Sept. 2013 Proposed Carbon Pollution Standards for new power plants under §111(b)
  - June 2014 Proposed Carbon Pollution Standards for modified and reconstructed power plants under §111(b)
  - June 2014 Proposed Clean Power Plan for existing power plants under CAA §111(d)

- **Air Quality**
  - Final March 2015 2008 O_3 Implementation Rule
  - Stay lifted on Cross State Air Pollution Rule (CSAPR)
  - Plan for 2008 Transport Rule
  - Emission Offsets for Nonattainment NSR
  - Dec. 2014/March 2015 Designations for 2012 $PM_{2.5}$ NAAQS
  - Final March 2015 Wood Heater NSPS
  - Status of SO_2 NAAQS Designations
  - Proposed Nov. 2014 Ozone NAAQS

Presentation Overview

- **Climate Change**
  - Final Carbon Pollution Standards for Modified and New Power Plants
  - Final Clean Power Plan and legal proceedings
  - Proposed GHG Standards for Medium- and Heavy-Duty Engines and Vehicles
  - EPA Activities to Reduce Methane Emissions from the Oil and Natural Gas Industry
- **Air Quality**
  - Implementation of 2008 Ozone NAAQS
  - 2015 Ozone NAAQS
  - 1-Hr SO_2 NAAQS Implementation

Carbon Pollution Standards

In Aug, 2015, EPA took three actions to significantly reduce carbon pollution from the power sector, the largest source of carbon pollution in the US

- The final Carbon Pollution Standards for new, modified and reconstructed power plants, set under the authority of Clean Air Act section 111(b);
- The final Clean Power Plan to cut carbon pollution from existing power plants, set under the authority of section 111(d); and
- A proposed federal plan and modeling trading rule associated with the final Clean Power Plan.

EPA's actions

- Achieve significant pollution reductions
- Deliver an approach that gives states and utilities plenty of time to preserve ample, reliable and affordable power
- Spur increased investment in clean, renewable energy

All of today's content is based on the Clean Power Plan as published to the Federal Register on October 23, 2015. The Supreme Court stayed implementation and enforcement on February 9, 2016. States have no obligations under the Clean Power Plan while the rule is stayed.

Final Carbon Pollution Standards Under 111(b)

- Final Carbon Pollution Standards apply to newly constructed power plants or existing units that meets certain, specific conditions.
  - A **new source** is any newly constructed fossil fuel-fired power plant that commenced construction after January 8, 2014.
  - A **modification** is any physical or operational change to an existing source that increases the source's maximum achievable hourly rate of air pollutant emissions. This standard would apply to units that modify after June 18, 2014.
  - A **reconstructed source** is a unit that replaces components to such an extent that the capital cost of the new components exceeds 50 percent of the capital cost of an entirely new comparable facility. This standard would apply to units that reconstruct after June 18, 2014.

- EPA established separate standards for two types of fossil-fuel fired sources:
  - stationary combustion turbines, generally firing natural gas; and
  - electric utility steam generating units, generally firing coal

Supreme Court Stays the Clean Power Plan

- On February 9, 2016, the Supreme Court stayed implementation and enforcement of the Clean Power Plan pending judicial review. The Court's decision was not on the merits of the rule.
- EPA firmly believes the Clean Power Plan will be upheld when the merits are considered because the rule rests on strong scientific and legal foundations.
- For the states that choose to continue to work to cut carbon pollution from power plants and seek the agency's guidance and assistance, EPA will continue to provide tools and support.
- EPA will make additional information available as necessary.

Key Points

- Implementation and enforcement are on hold.
- Initial submittals not required on September 6, 2016.
- EPA will continue to work with states that want to work with us on a voluntary basis.

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Outreach Shaped the Clean Power Plan

- More than two years of unprecedented outreach to stakeholders and public engagement
- More than 4 million public comments submitted to the EPA
- Final rule incorporates critical changes that stakeholders and states requested in their comments
- Public engagement was essential throughout the development of the Clean Power Plan, and that outreach will continue

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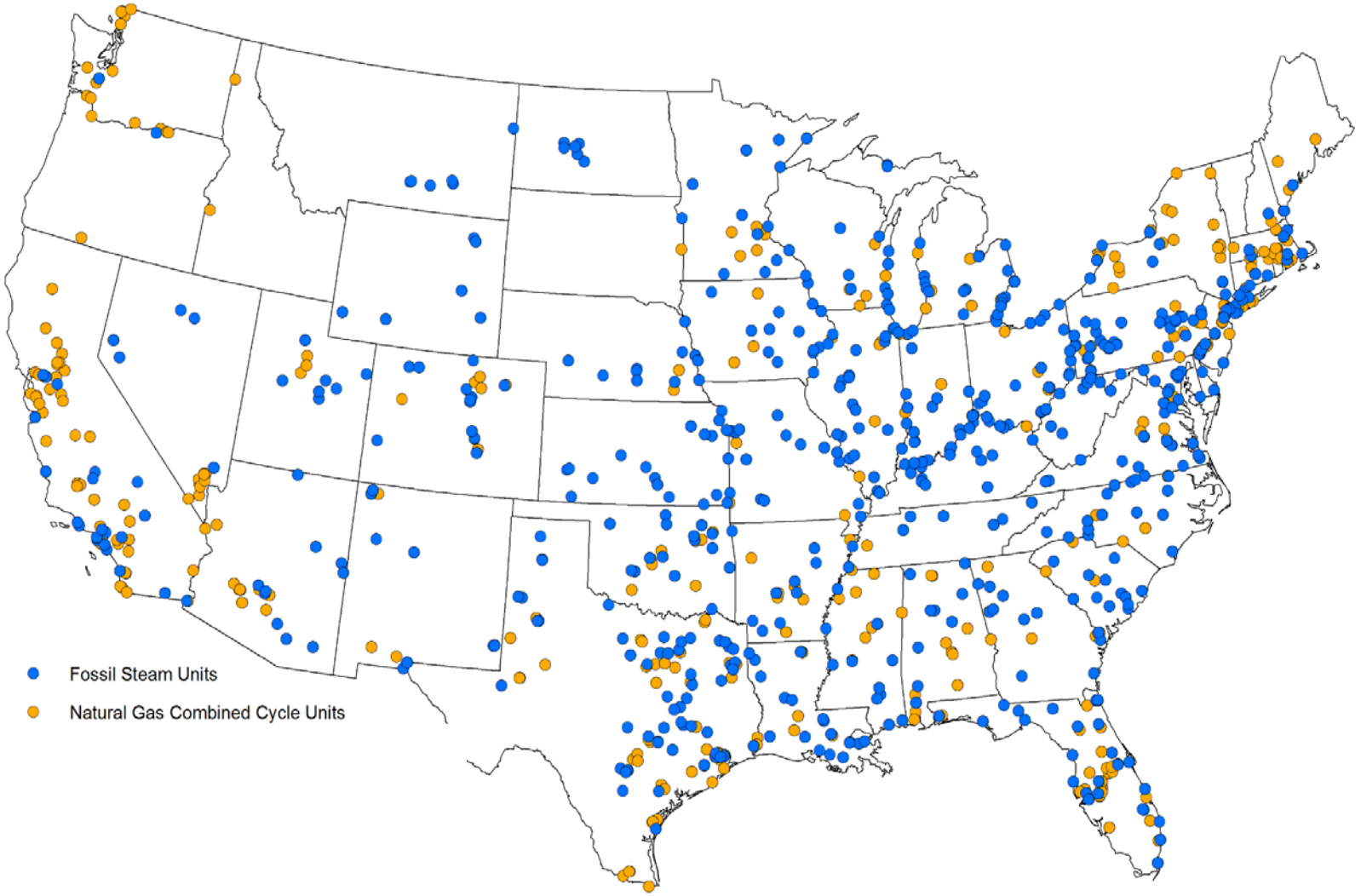
The Clean Power Plan

What sources?



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Best System of Emission Reduction: Three Building Blocks

Building Block	Strategy EPA Used to Calculate the State Goal	Maximum Flexibility: Examples of State Compliance Measures
1. **Improved efficiency at power plants**	Increasing the operational efficiency of existing coal-fired steam EGUs on average by a specified percentage, depending upon the region	-Boiler chemical cleaning -Cleaning air preheater coils -Equipment and software upgrades
2. **Shifting generation from higher-emitting steam EGUS to lower-emitting natural gas power plants**	Substituting increased generation from existing natural gas units for reduced generation at existing steam EGUs in specified amounts	Increase generation at existing NGCC units
3. **Shifting generation to clean energy renewables**	Substituting increased generation from new zero-emitting generating technologies for reduced generation at existing fossil fuel-fired EGUs in specified amounts	Increased generation from new renewable generating capacity, e.g., solar, wind, nuclear, and combined heat & power

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Clean Power Plan Flexibilities

Measures

- Opportunity to use existing tools or tools provided by the CPP to address emissions
- Flexibility to use measures that best suit their circumstances and policy goals (not limited to the BSER building blocks)

Plan Types

- Rate- or mass-based emissions goals
- State measures or emissions standards approach
- Multi-state or individual plans
- Trading-ready options (emission reduction credits or allowances)

Reliability

- Reliability safety valve mechanism to address unanticipated and significant reliability challenges

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Incentives for Early Investments

- EPA is providing the Clean Energy Incentive Program (CEIP) to incentivize early investments that generate wind and solar power or reduce end-use energy demand.
- The CEIP is an optional, matching program that states may choose to use to:
  - Incentivize early investments in wind or solar power, and
  - Incentivize demand-side energy efficiency measures that are implemented in low-income communities.
- EPA will provide matching allowances or Emission Rate Credits (ERCs) to states that participate in the CEIP, up to an amount equal to the equivalent of 300 million short tons of CO_2 emissions.
- The CEIP will help ensure that momentum to no-carbon energy continues and give states a jumpstart on their programs

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Clean Power Plan Timeline*

**Timeline as published in the Federal Register. As noted previously, implementation and enforcement has been stayed; there are no submission or compliance obligations at this time.*

Summer 2015	• August 3, 2015 - Final Clean Power Plan
1 Year	• September 6, 2016 – States make initial submittal with extension request or submit Final Plan
3 Years	• September 6, 2018 - States with extensions submit Final Plan
7 Years	• January 1, 2022 - Compliance period begins
15 Years	• January 1, 2030 - CO_2 Emission Goals met

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Choosing the Glide Path to 2030

- **Phased-in glide path**
  - The interim period runs from 2022-2029 and includes three interim performance periods creating a reasonable trajectory (smooth glide path)
  - Interim steps*:
    - Step 1 – 2022-2024
    - Step 2 – 2025-2027
    - Step 3 – 2028-2029
  - Provided that the interim and final CO_2 emission performance rates or goals are met, for each interim period a state can choose to follow EPA's interim steps or customize their own

**Interim steps as published in the Federal Register. As noted previously, implementation and enforcement has been stayed; there are no compliance obligations at this time.*

- **Renewables and energy efficiency can help states meet their goals**
  - Investments in renewables can help states under all plan approaches to achieve the Clean Power Plan emission goals while creating economic growth and jobs for renewable manufacturers and installers, lowering other pollutants and diversifying the energy supply
  - Energy efficiency improvements are expected to be an important part of state compliance across the country and under all state plan types, providing energy savings that reduce emissions, lower electric bills, and lead to positive investments and job creation

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Overview of the Federal Plan and Model Trading Rules Proposal

- The federal plan and model trading rules demonstrate a readily available path forward for Clean Power Plan implementation, and present flexible, affordable implementation options for states.
- EPA proposed that it would implement the federal plan in any state that does not submit an approvable plan under the Clean Power Plan.
- The model rules provide a cost-effective pathway to adopt a trading system supported by EPA and make it easy for states and power plants to use emissions trading. It does the heavy lifting for states who may choose to use a model rule as their state plan.
- The federal plan and model rules proposal contains four key actions:
  - A rate-based model trading rule
  - A mass-based model trading rule
  - A rate-based federal plan
  - A mass-based federal plan

EPA proposed that <u>both</u> the rate-based and mass-based model trading rules will be finalized

EPA proposed that **<u>either</u>** the mass-based or rate-based approach will be finalized for a federal plan

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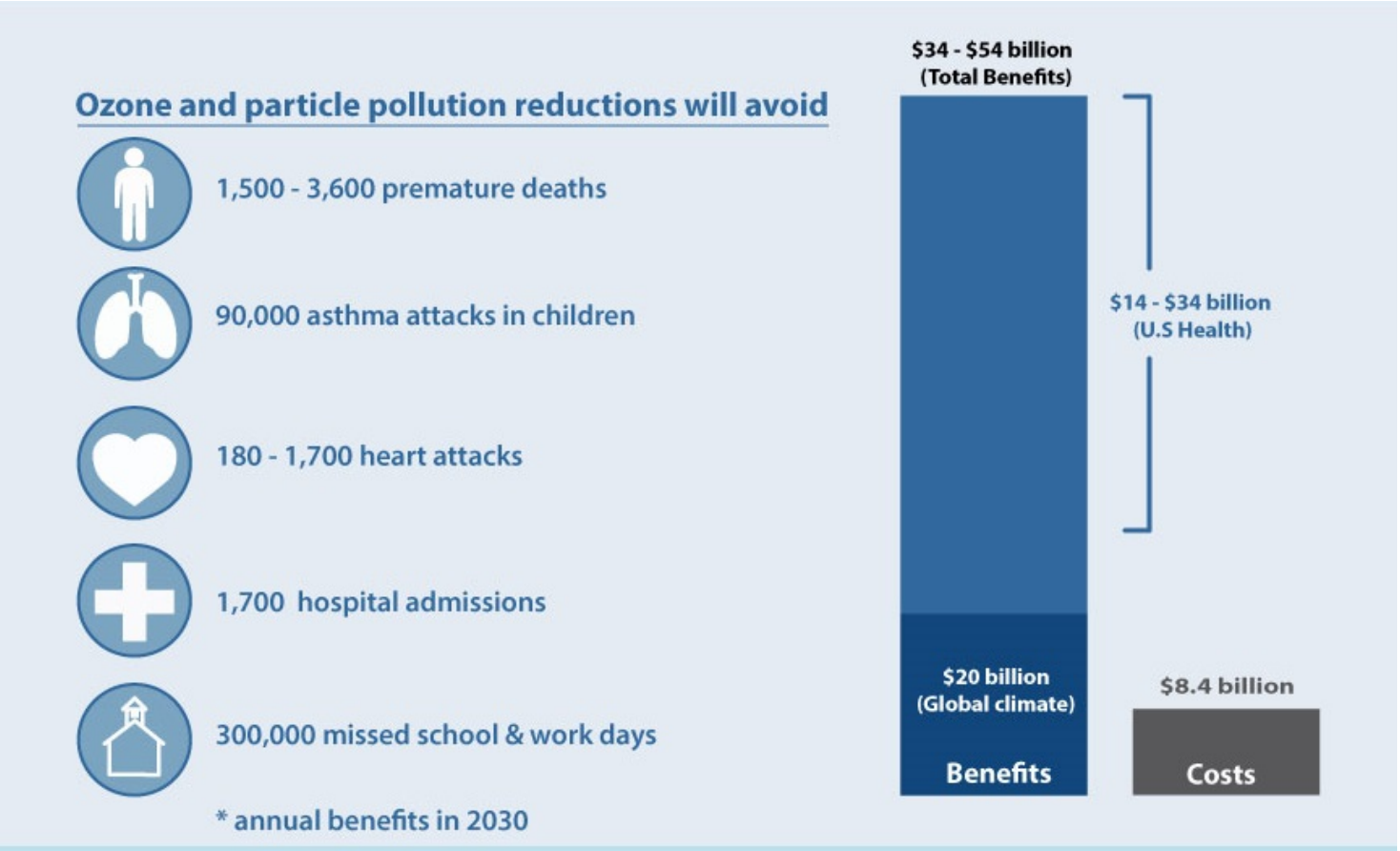
Benefits of the Clean Power Plan

The transition to clean energy is happening faster than anticipated. This means carbon dioxide and air pollution are already decreasing, improving public health each and every year.



While this chart reflects health benefits in 2030, EPA's Regulatory Impact Analysis for the CPP estimates health benefits due to reduced emissions beginning in 2020.

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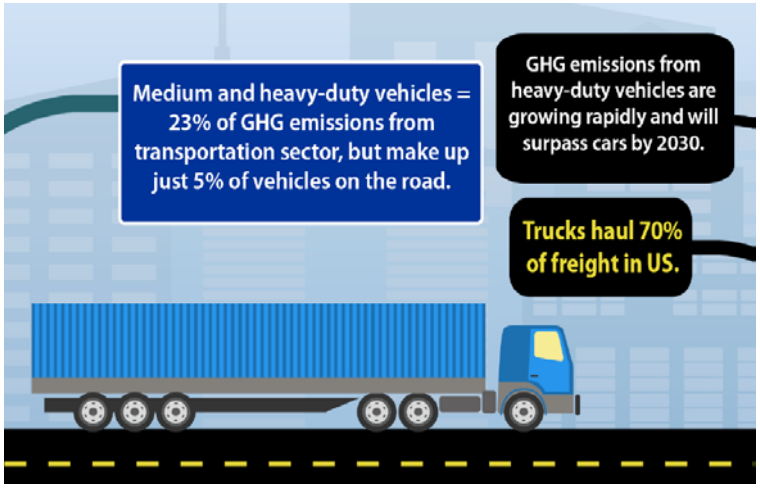
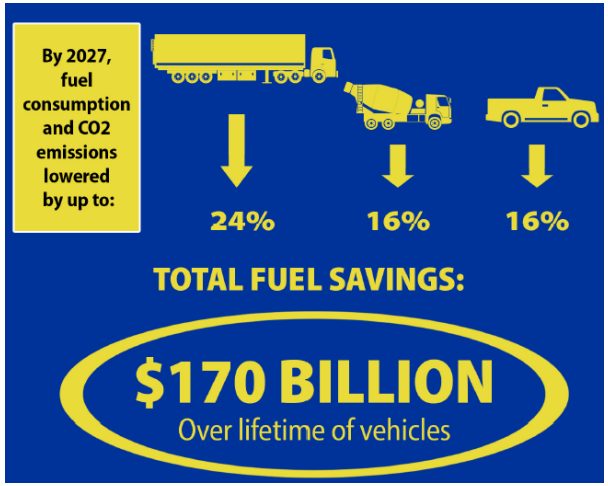
Proposed GHG Standards for Medium- and Heavy-Duty Engines and Vehicles

- On June 19, 2015, EPA and National Highway and Traffic Safety Administration (NHTSA) jointly proposed standards for medium- and heavy-duty vehicles that would improve fuel efficiency and cut carbon pollution.
  - The program would cut carbon pollution by about **1 billion metric tons.**
  - This is roughly equivalent to the GHG emissions associated with the electricity and power use from all U.S. residences for one year
- The standards would cover model years 2021-2027, and apply to semi-trucks, pickup trucks, and all types and sizes of buses and work trucks.
- Standards for trailers would start in model year 2018.





EPA Activities to Reduce Methane Emissions from the Oil and Natural Gas Industry

- On March 10, 2016, as part of the Administration's commitment to addressing air pollution and climate change, EPA announced its next step in reducing emissions from the oil and natural gas industry: Moving to regulate emissions from existing sources.
- The agency will begin with an Information Collection Request (ICR) to gather a broad range of information on existing sources of methane emissions, technologies to reduce those emissions, and the costs of those technologies.
  - Will cover the production, gathering, processing, and transmission and storage segments of the oil and gas sector.
- EPA anticipates signing draft ICR this spring; surveys would go out this fall.

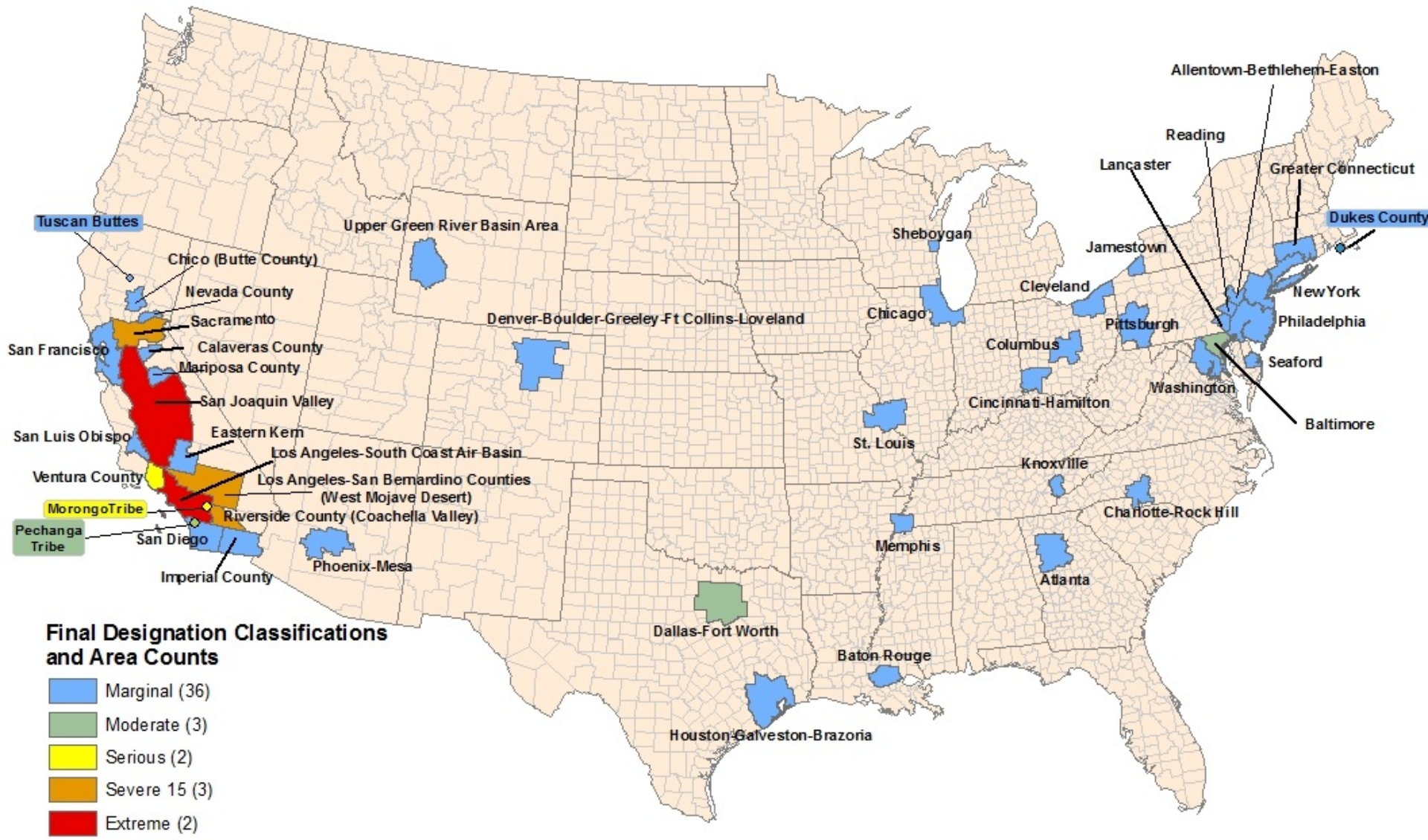
- More information at: https://www3.epa.gov/airquality/oilandgas/pdfs/20160310fs.pdf

Air Quality

- Implementation of 2008 Ozone NAAQS (75 ppb)
  - Marginal Area Actions
  - Interstate Pollution Transport for 2008 NAAQS
- 2015 Ozone NAAQS (70 ppb)
- 1-Hr SO2 NAAQS Implementation (75 ppb)

Nonattainment Areas for 2008 Ozone NAAQS by Classification

(Effective July 20, 2012)



Notes:

- EPA has not designated as nonattainment any areas outside the Continental US.
- Map reflects classifications following requests for voluntary bump-up.

Marginal NAAs
(attain. date was July 20, 2015)

- On April 11, 2016, EPA finalized several actions for 36 Marginal areas:
  1. Determinations of attainment by the attainment date for 17 areas
  2. One-year extensions of the attainment date for 8 areas
  3. Reclassification to Moderate due to failure to attain by the attainment date proposed for 11 areas

See: https://www.epa.gov/ozone-pollution/2008-ozone-national-ambient-air-quality-standards-naaqs-nonattainment-actions

Marginal nonattainment areas subject to these actions

Areas that Attained 2008 NAAQS by the July 20, 2015 Attainment Date	Areas that Did Not Attain by the July 20, 2015 Attainment Date but Are Eligible for a 1-Yr Attainment Date Extension	Areas that Did Not Attain by the July 20, 2015 Attainment Date and will be Reclassified as Moderate
Allentown-Bethlehem-Easton, PA	Cleveland-Akron-Lorain, OH	Atlanta, GA
Baton Rouge, LA	Houston-Galveston-Brazoria, TX	Chicago-Naperville, IL-IN-WI
Calaveras County, CA	Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Denver-Boulder-Greeley-Fort Collins-Loveland, CO
Charlotte-Rock Hill, NC-SC	Pittsburgh-Beaver Valley, PA	Greater Connecticut, CT
Chico (Butte County), CA	San Luis Obispo County (Eastern San Luis Obispo), CA	Imperial County, CA
Cincinnati, OH-KY-IN	Sheboygan, WI	Kern County (Eastern Kern), CA
Columbus, OH	St. Louis-St. Charles-Farmington, MO-IL	Mariposa County, CA
Dukes County, MA	Washington, DC-MD-VA	Nevada County (Western part), CA
Jamestown, NY		New York, N. New Jersey-Long Island, NY-NJ-CT
Knoxville, TN		San Diego County, CA
Lancaster, PA		Phoenix-Mesa, AZ
Memphis, TN-MS-AR		
Reading, PA		
San Francisco Bay Area, CA		
Seaford, DE		
Tuscan Buttes, CA		
Upper Green River Basin Area, WY		

New York City & Greater Connecticut Nonattainment Requirements

Moderate Area SIP Revision -

- States with reclassified areas are required to submit revised SIPs to the EPA as expeditiously as practicable, but no later than January 1, 2017 for each area.
  - *Includes new ozone attainment demonstration, associated reasonably available control measures, a reasonable further progress plan, contingency measures, and other planning SIPs related to attainment of the standard.*
- Areas reclassified as Moderate would be required to attain the 2008 ozone standards as expeditiously as practicable, but no later than July 20, 2018 (based on 2015-2017 ozone data).

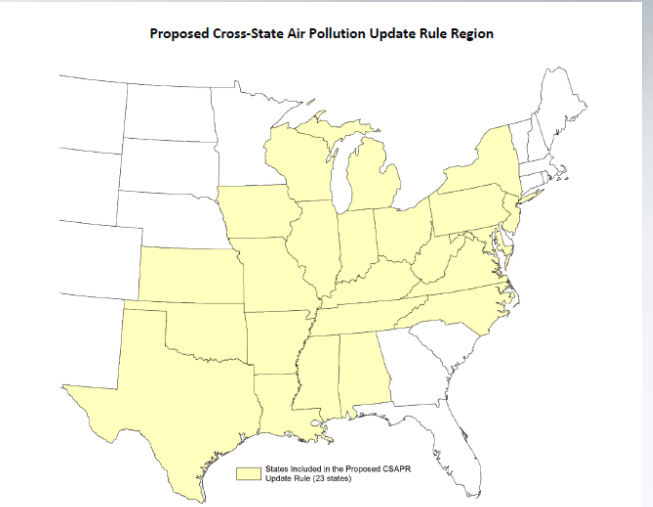
For the New York, N. New Jersey-Long Island, NY-NJ-CT area –

- EPA also rescinded the Clean Data Determination for the 1997 ozone NAAQS and issued a SIP call. However, because the area is being reclassified to moderate under 2008 ozone NAAQS, the three states are expected to be able to meet their obligations under the SIP call by satisfying the requirements for a Moderate area attainment plan for the 2008 ozone NAAQS by the due date of January 1, 2017.

Cross State Air Pollution Rule (CSAPR) Update

In Nov 2015, EPA proposed an update to CSAPR ozone season program to assist states in meeting the 2008 Ozone NAAQS.

- Focus on near-term measures in the power sector that can be in place in 23 states by 2017 (to help meet Moderate area attainment deadline for 2008 NAAQS).
- For the 2017 ozone season, EPA found that meaningful NOx reductions can be made by optimizing operation of existing pollution control technology, turning on existing pollution controls that are currently idled, upgrading to state-of-the-art low-NOx combustion controls, and shifting generation to lower-emitting power plants.
- EPA estimates that the proposed CSAPR Update would reduce summertime NOx emissions from power plants by 85,000 tons in 2017 compared to without the rule.
- Due to this proposed rule and other changes already underway in the power sector, ozone season NOx emission will be 150,000 tons lower in 2017 than in 2014, a reduction of more than 30 percent.



Applying the CSAPR 4-step approach

- The CSAPR approach was designed to help states meet the 1997 ozone NAAQS, and was used to define upwind state obligations under the CAA "good neighbor" provision. It has has been affirmed by the Supreme Court

- EPA is applying the same 4-step approach to the 2008 ozone NAAQS.

  1. Identify downwind receptors that are expected to have problems attaining or maintaining clean air standards;
  2. Determine which upwind states contribute to these identified problems in amounts sufficient to "link" them to the downwind air quality problems;
  3. Identify upwind emissions that significantly contribute to downwind nonattainment or interfere with downwind maintenance of a standard by quantifying available upwind emission reductions and apportioning upwind responsibility among linked states;
  4. Adopt FIPs that require sources to reduce the identified upwind emissions via regional emissions allowance trading programs.

2015 Ozone NAAQS

2015 Final
Ozone Standards

Primary: 70 ppb
Secondary: 70 ppb

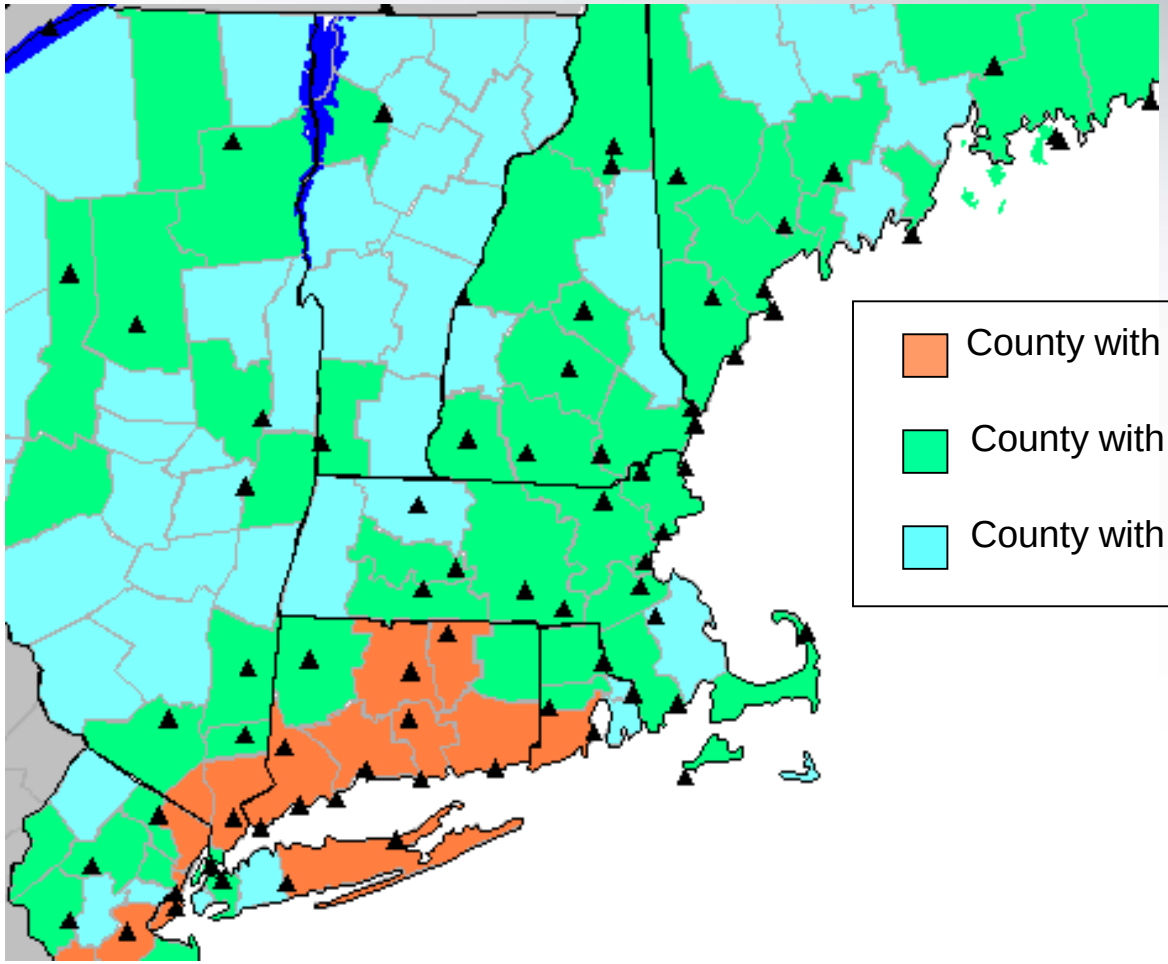
Current standards: 75 ppb.

- Updated standards
- Current data and trends
- AQI & new monitoring provisions
- Implementation
  - Guidance
  - Timelines
  - Ozone transport for 2015 NAAQS

Updated Standards – Primary & Secondary

- Based on the science, the Administrator has determined that the **2008 standard was not adequate to protect public health**.

- **Revised Primary Standard of 70 ppb**:
  - Is below the level shown to cause adverse health effects in the clinical studies.
  - Essentially eliminates exposures shown to cause adverse health effects, protecting 99.5 % of children from even single exposures to ozone at 70 ppb.
  - Substantially reduces exposures to levels lower than 70 ppb, reducing multiple exposures to 60 ppb by more than 60%.
- **Secondary Standard of 70 ppb:**
  - A standard that generally limits cumulative, seasonal exposures above a W126 index level of 17 parts per million-hours (ppm-hours) will provide requisite protection.
  - Analyses of data from air quality monitors show that a level of 70 ppb will limit cumulative, seasonal exposures above a W126 index of 17 ppm-hours, averaged over three years.

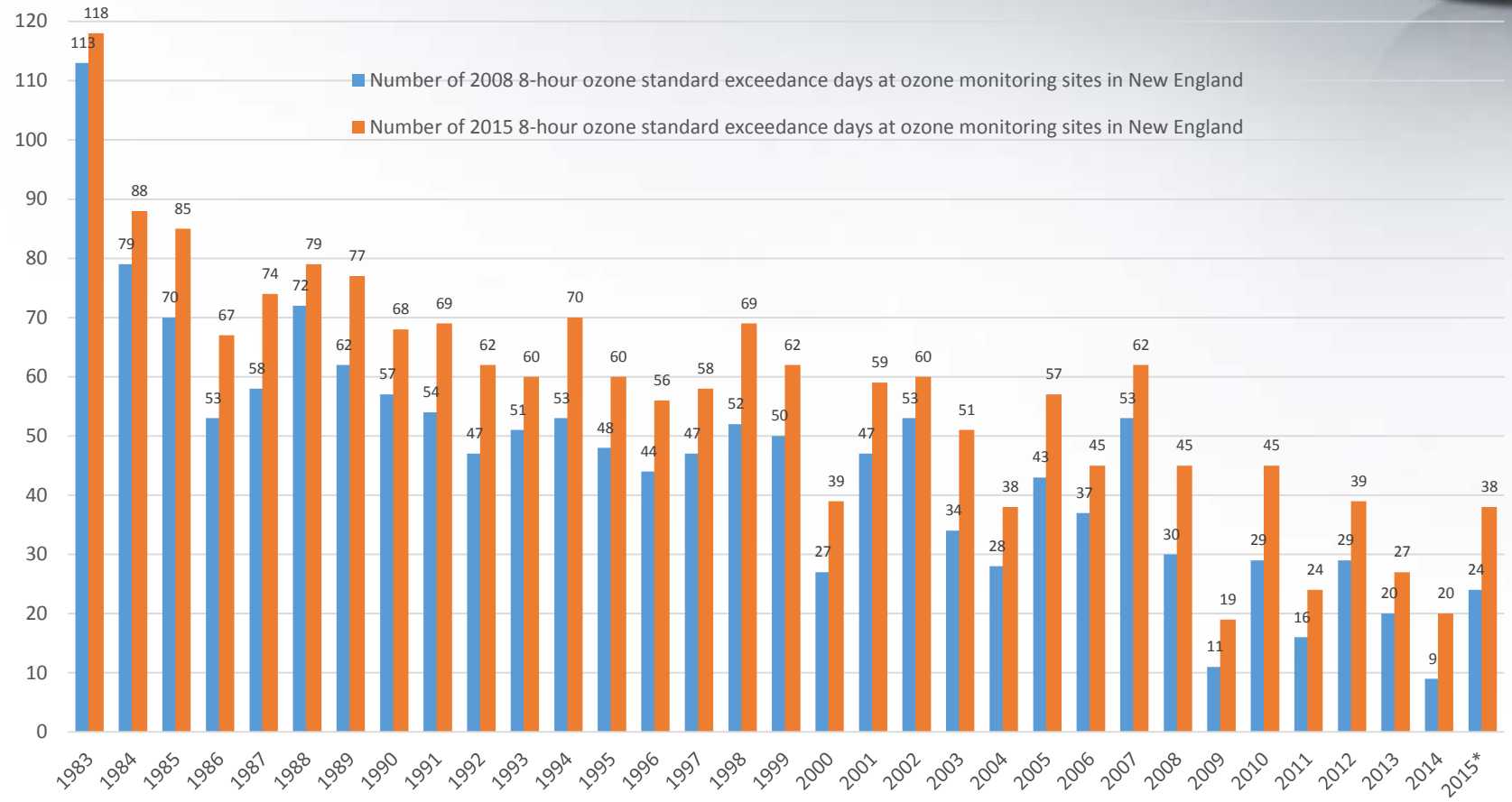


- **Based on 2013 – 2015* monitoring data**

* 2015 ozone data is preliminary and subject to change

•Please note: Not all ozone monitoring locations are included

8-Hour Ozone Exceedance Days in New England (2008 NAAQS vs 2015 NAAQS)



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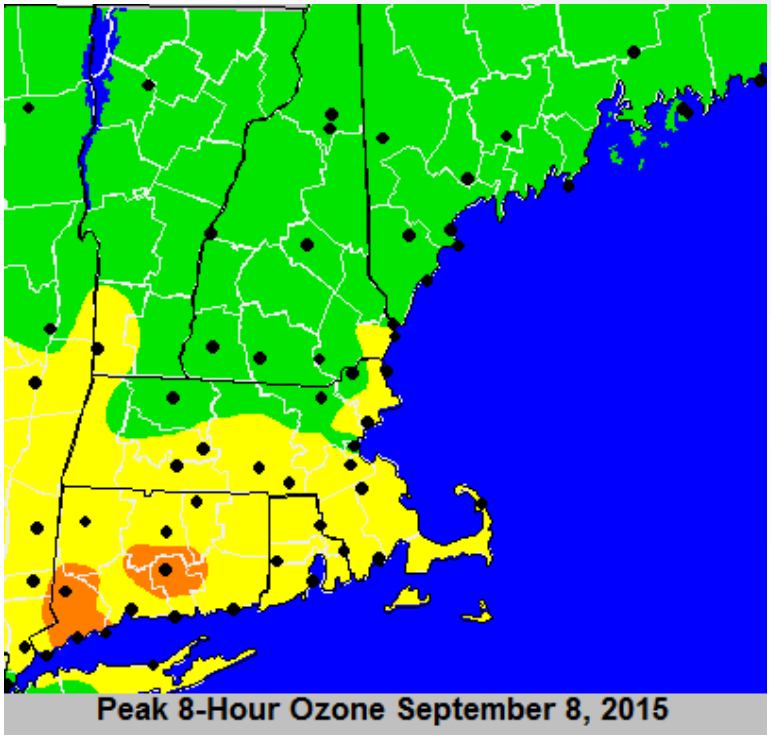
Air Quality Index

AQI Category	Index Values	Breakpoints in the 2008 AQI (ppb, 8-hour average)	Updated Breakpoints (ppb, 8-hour average)
Good	0 - 50	0-59	0-54
Moderate	51 - 100	60-75	55-70
Unhealthy for Sensitive Groups	101 – 150	76-95	71-85
Unhealthy	151 – 200	96-115	86-105
Very Unhealthy	201 – 300	116-374	106-200
Hazardous	301 –500	375 to the Significant Harm Level*	201 to the Significant Harm Level*

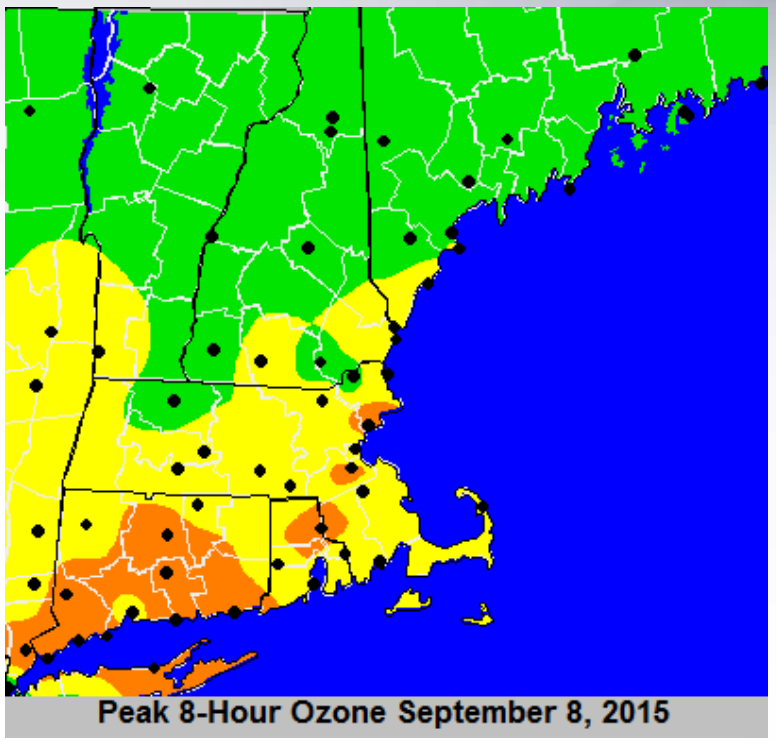
**The Significant Harm Level for ozone is 600 ppb, two-hour average*

AQI Example for *AirNow* Maps

- Current AQI Cutpoints
  - 2008 Ozone Standard (75 ppb)



- Revised AQI Cutpoints
  - 2015 Ozone Standard (70 ppb)



Good | Moderate | USG | Unhealthy | Very Unhealthy | Hazardous

AQI Example for *AirNow* Maps

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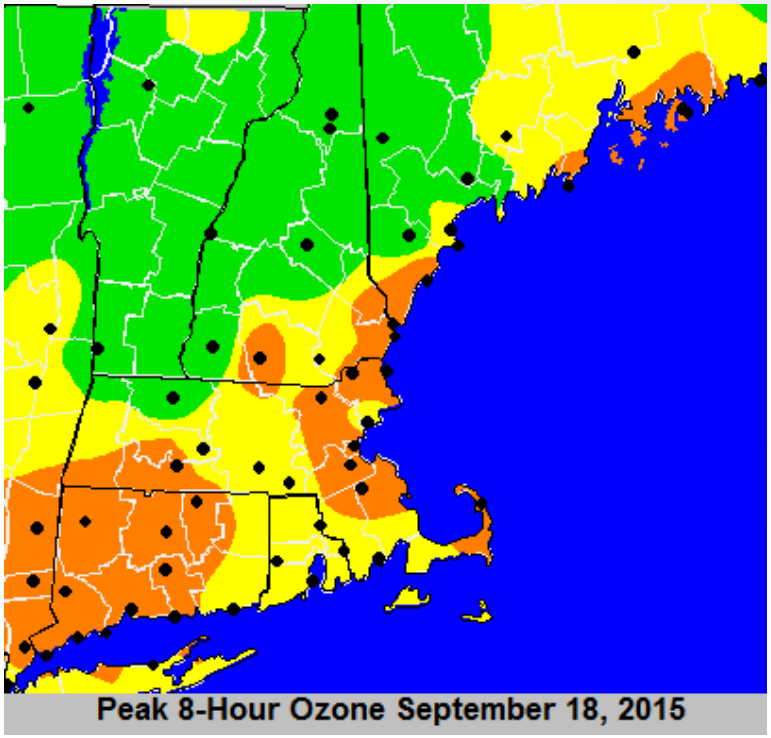

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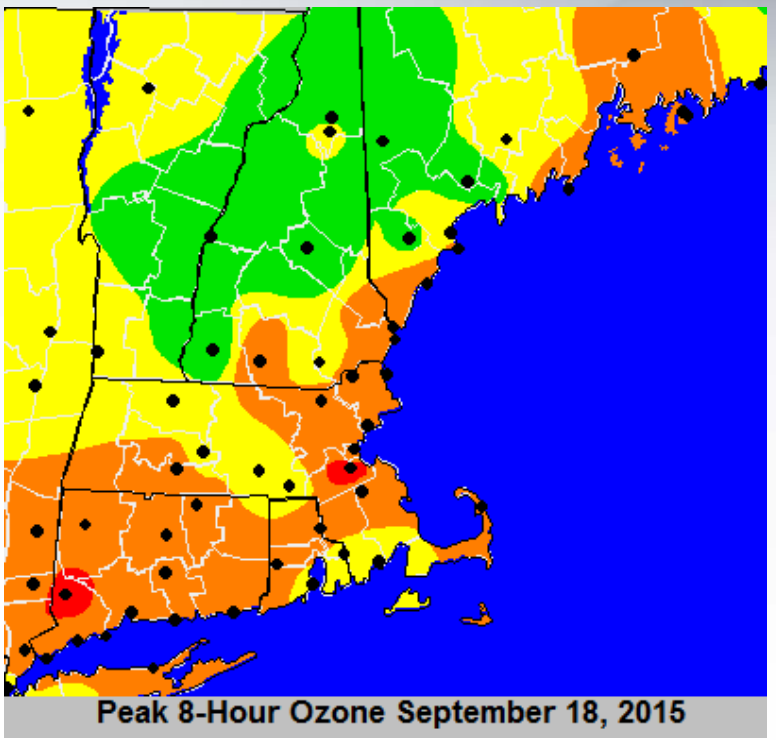
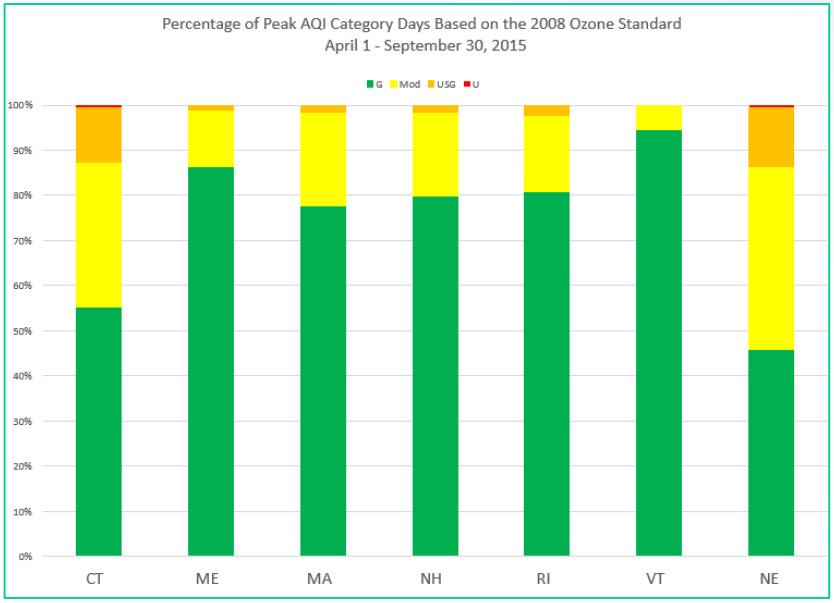


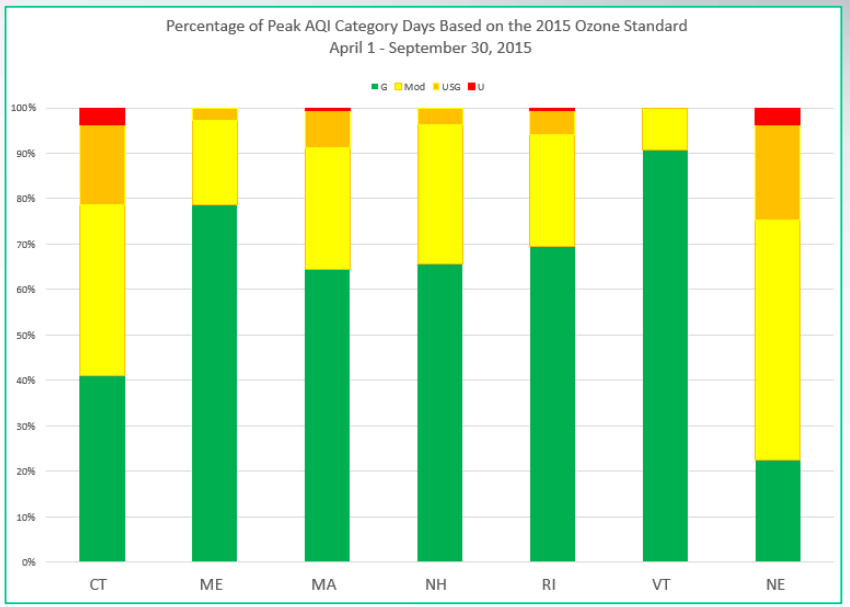
Good | Moderate | USG | Unhealthy | Very Unhealthy | Hazardous

Increases in Bad Air Days

- Current AQI Cutpoints



- Revised AQI Cutpoints

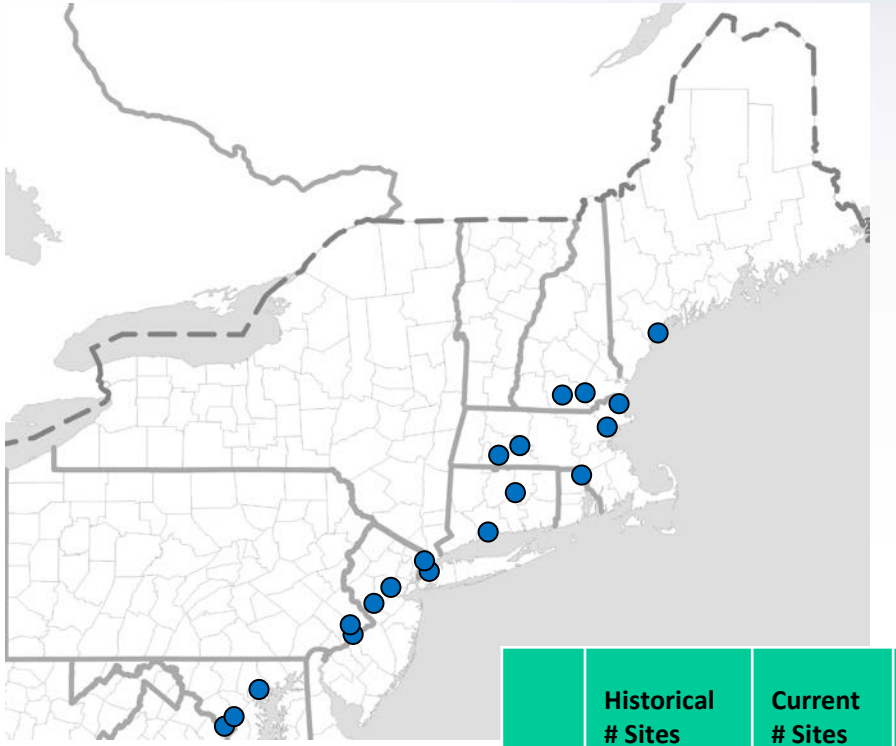


PAMS Network Design

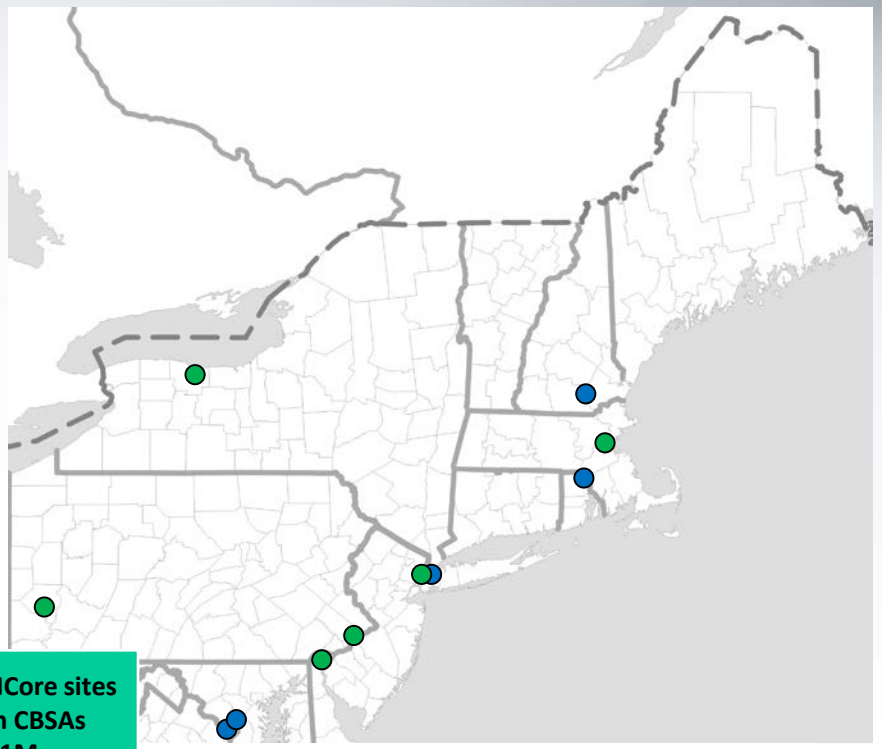
- EPA is replacing the existing 20 year-old multi-site, enhanced ozone network design with an updated two-part network design.
- Requiring PAMS measurements to be collocated with all existing NCore sites in areas with population of 1 million or more.
- Requires states with Moderate or above non-attainment areas and **all states in Ozone Transport Region** to develop and implement an EMP (enhanced ozone monitoring plan) to support flexible approaches for collecting data to understand ozone issues in new and existing high ozone areas.
- Schedule:
  - PAMS monitoring at NCore sites will become effective by June 1, 2019.
  - EMPs submitted within two years of designations.
- EPA intends to redistribute available PAMS funding to support the new requirements.

PAMS Sites in Northeast

•Current PAMS Sites



•NCore sites in
•CBSAs > 1,000,000

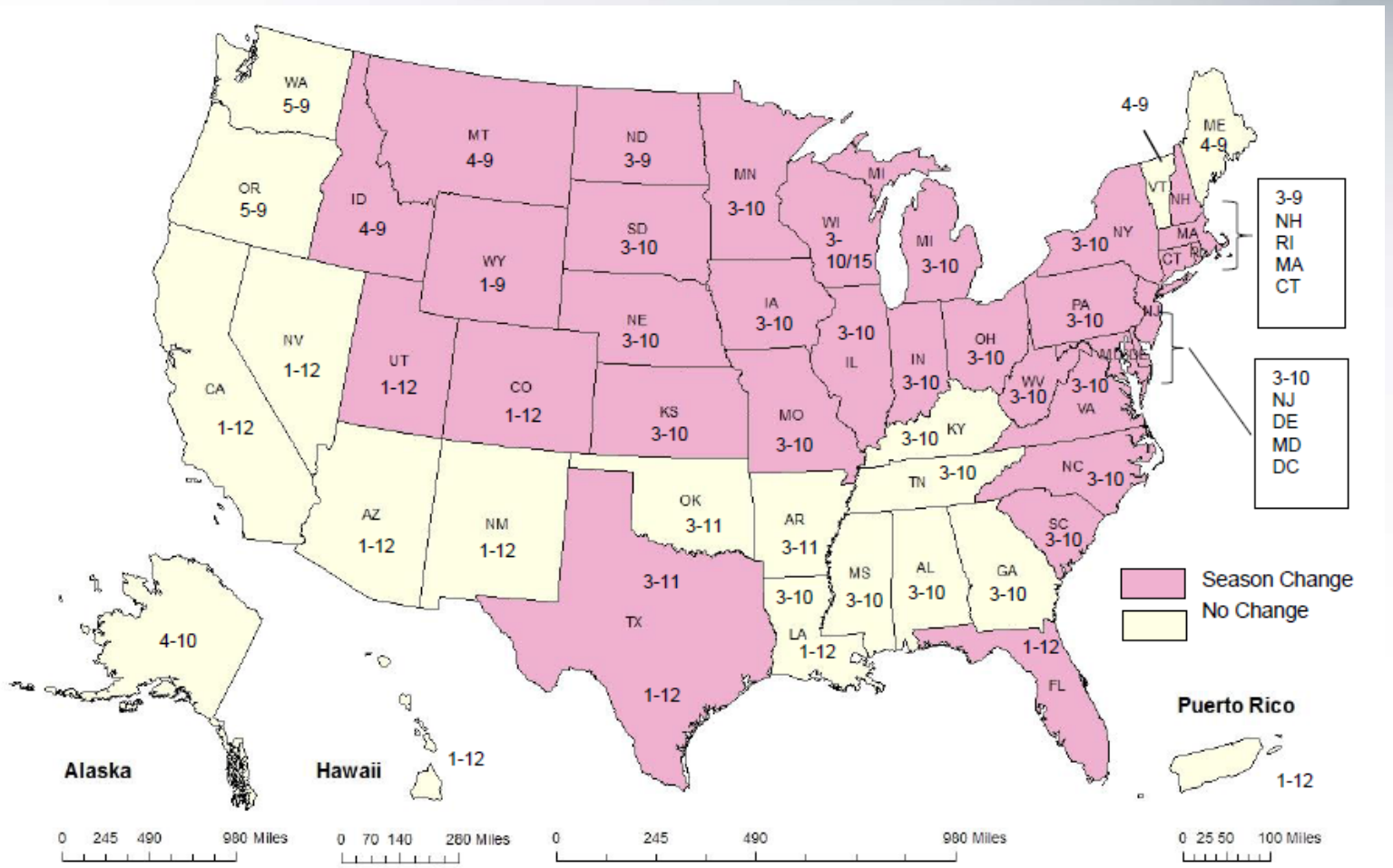


	Historical # Sites	Current # Sites	NCore sites in CBSAs >1M
CT	4	2	
MA	8	4	1
ME	2	1	
NH	2	2	1
RI	2	1	1

•New PAMS location
•Existing PAMS location

Ozone Monitoring Seasons

- **Final rule extends ozone monitoring season for 32 states and D.C.,**
- **effective January 1, 2017***

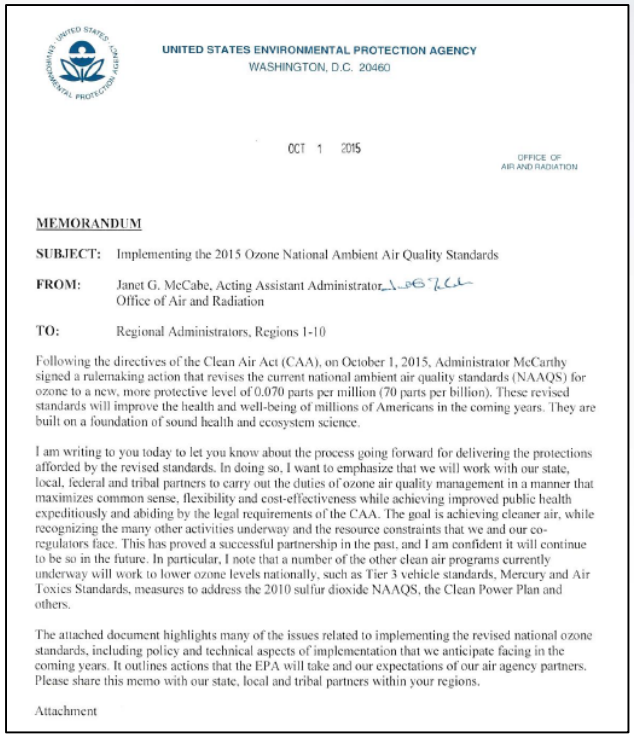


- * EPA Regional Administrators will still be allowed to approve changes to states' ozone monitoring seasons without rulemaking.

Memo from Acting Assistant Administrator

- Memo issued with the revised standards outlines the agency's plans for addressing issues related to:
  - Guidance available to agencies;
  - Ensuring major source permitting is effective and efficient;
  - Designating areas;
  - Background ozone;
  - Interstate ozone transport;
  - The challenges of reducing ozone in CA;
  - Managing monitoring networks;
  - Emissions from wildland fires; and
  - Transportation planning.

- Memo available at: https://www.epa.gov/sites/production/files/2015-11/documents/20151001memo_-_ozone_naaqs_implementation.pdf



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 1 2015

OFFICE OF AIR AND RADIATION

MEMORANDUM

SUBJECT: Implementing the 2015 Ozone National Ambient Air Quality Standards

FROM: Janet G. McCabe, Acting Assistant Administrator
Office of Air and Radiation

TO: Regional Administrators, Regions 1-10

Following the directives of the Clean Air Act (CAA), on October 1, 2015, Administrator McCarthy signed a rulemaking action that revises the current national ambient air quality standards (NAAQS) for ozone to a new, more protective level of 0.070 parts per million (70 parts per billion). These revised standards will improve the health and well-being of millions of Americans in the coming years. They are built on a foundation of sound health and ecosystem science.

I am writing to you today to let you know about the process going forward for delivering the protections afforded by the revised standards. In doing so, I want to emphasize that we will work with our state, local, federal and tribal partners to carry out the duties of ozone air quality management in a manner that maximizes common sense, flexibility and cost-effectiveness while achieving improved public health expeditiously and abiding by the legal requirements of the CAA. The goal is achieving cleaner air, while recognizing the many other activities underway and the resource constraints that we and our co-regulators face. This has proved a successful partnership in the past, and I am confident it will continue to be so in the future. In particular, I note that a number of the other clean air programs currently underway will work to lower ozone levels nationally, such as Tier 3 vehicle standards, Mercury and Air Toxics Standards, measures to address the 2010 sulfur dioxide NAAQS, the Clean Power Plan and others.

The attached document highlights many of the issues related to implementing the revised national ozone standards, including policy and technical aspects of implementation that we anticipate facing in the coming years. It outlines actions that the EPA will take and our expectations of our air agency partners. Please share this memo with our state, local and tribal partners within your regions.

Attachment

Timeline for designations and implementation

2015 Ozone NAAQS Timeline

October 2015

Final Rule

October 2016

Sates Submit Nonattainment Designation Recommendations

October 2017

EPA Nonattainment Area Designations

October 2018

Infrastructure/Transport SIP Due

•Attainment Dates

2020 - Marginal	**2023** - Moderate	**2026** - Serious

Significant Actions Underway to Help in Meeting the 2015 Ozone Standards

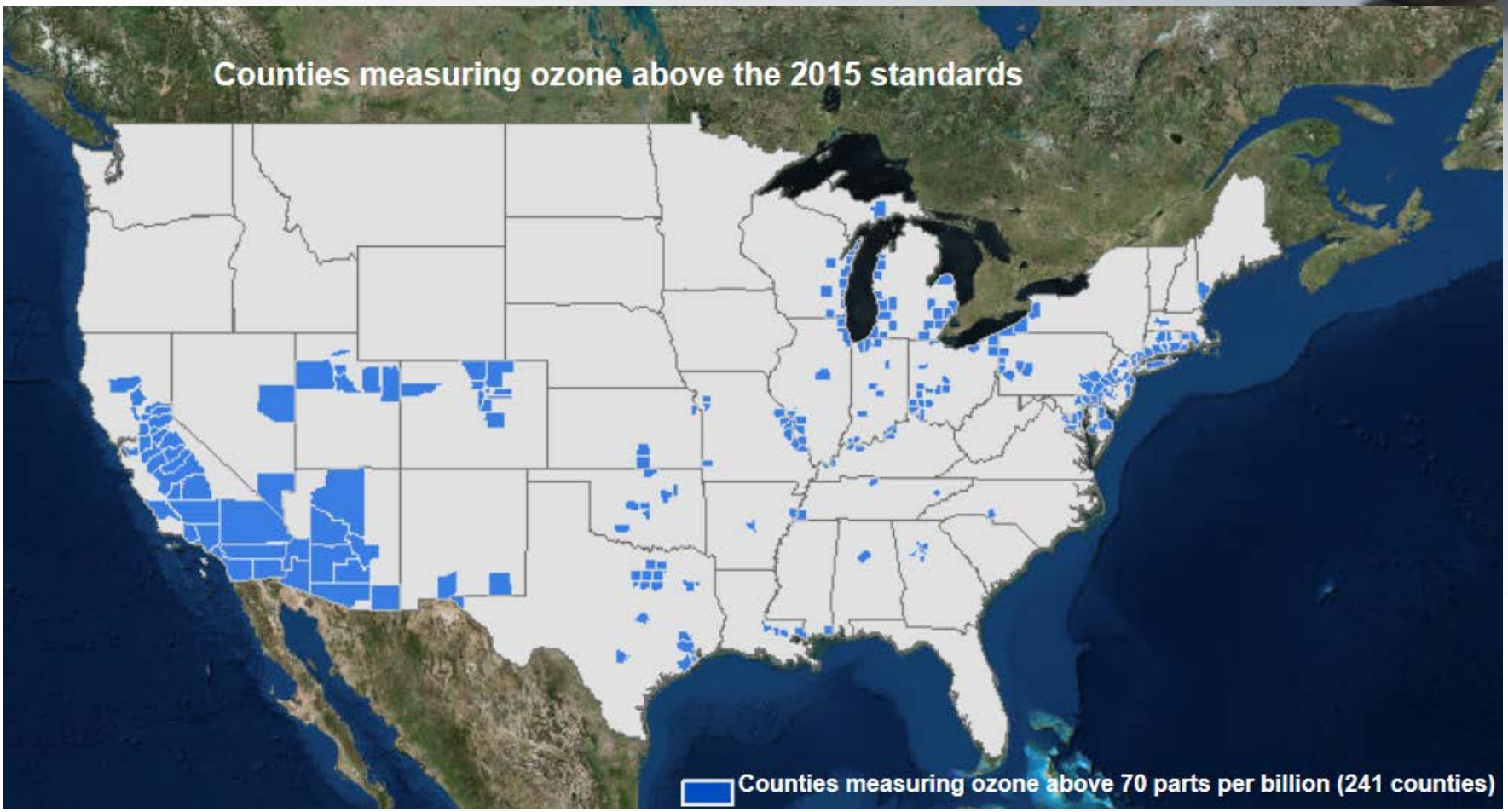
Existing federal rules will help states meet the new ozone standards. Significant progress will come from:

- Light-Duty Vehicle Tier 2 Rule
  - *Began in 2004, passenger vehicles sold today are 77 to 95 percent cleaner than before the program*
- Cross State Air Pollution Rule (rule that replaced Clean Air Interstate Rule (CAIR))
  - *After litigation resolved, began Jan 1, 2015. Under CSAPR, power plant SO_2 emissions projected to drop by 73 percent from 2005 levels, and NOx emissions projected to drop by 54 percent.*
- Mercury and Air Toxics Standards
  - *The final rule establishes power plant standards for mercury, acid gases, and other toxics.*
  - *In effect now, although some facilities have compliance extensions until April 2016. Will prevent:*
    - ***90 percent of the mercury** in coal burned in power plants from being emitted to the air;*
    - *reduce **88 percent of acid gas emissions** from power plants; and*
    - *cut **41 percent of sulfur dioxide emissions** from power plants beyond Cross State Air Pollution Rule.*
- Tier 3 Vehicle Emissions and Fuels Standards – Starts in 2017
  - *Tailpipe standards for light-duty vehicles represent approx. **an 80% reduction in NMOG+NOX** (non-methane organic gases and nitrogen oxides) from today's fleet average and a **70% reduction in per-vehicle particulate matter (PM) standards**.*
  - *The program is projected to cost **less than a penny per gallon of gasoline**, and **about $72 per vehicle**.*

Significant Actions Underway to Help in Meeting the 2015 Ozone Standards (cont.)

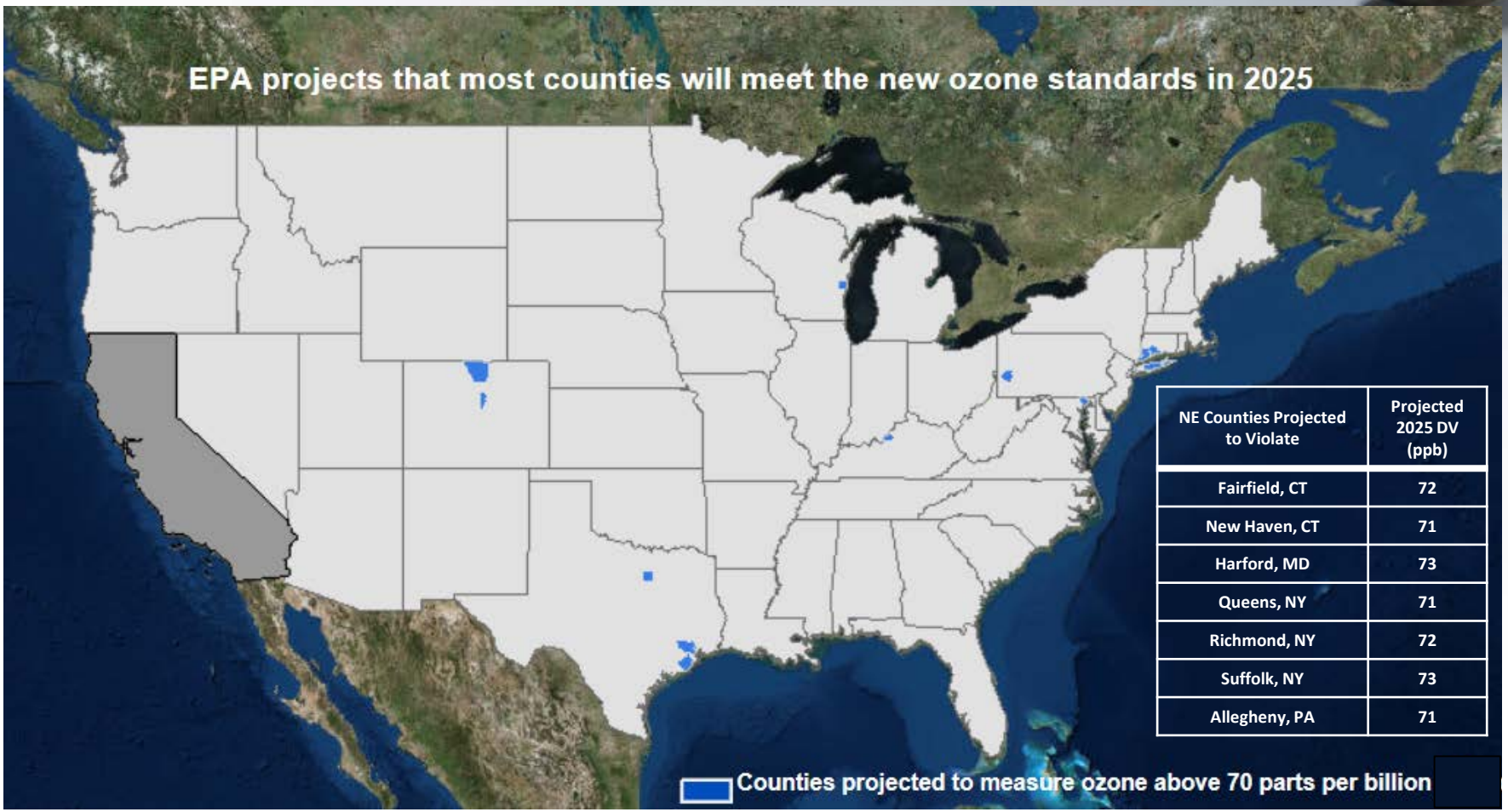
- Other final/proposed strategies that provide ozone benefits:
  - Clean Power Plan
  - Light-Duty GHG Standards (Phase 1 & 2)
  - Heavy-Duty Vehicle Greenhouse Gas Rule (Phase 1 final, Phase 2 proposed)
  - Reciprocating Internal Combustion Engines (RICE) NESHAP
  - ICI Boilers and Process Heaters MACT
  - Oil And Natural Gas Industry measures
    - *Sept 2015 - Proposed updates to New Source Performance Standards (NSPS) and Draft Control Techniques Guidelines (CTGs) to cut methane and VOC emissions*

Counties Measuring Ozone Above the 2015 Standards (70 ppb)



- **Based on 2012 – 2014 monitoring data**

EPA Projects Most Counties Will Meet 70 ppb Ozone NAAQS in 2025

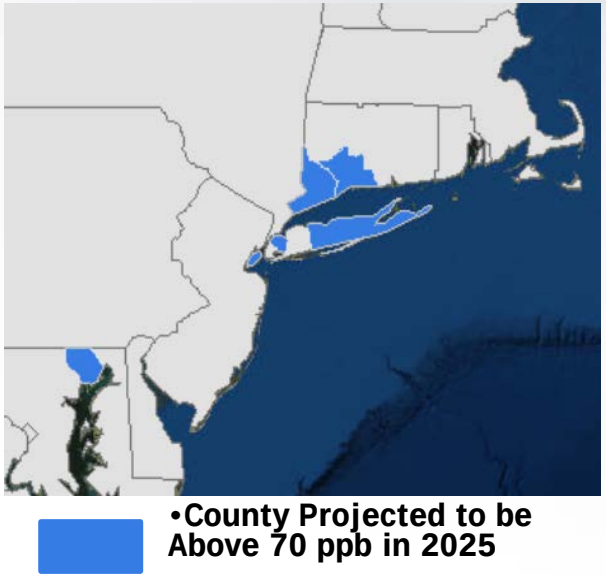


NE Counties Projected to Violate	Projected 2025 DV (ppb)
Fairfield, CT	72
New Haven, CT	71
Harford, MD	73
Queens, NY	71
Richmond, NY	72
Suffolk, NY	73
Allegheny, PA	71

•Federal rules, including the Cross-State Air Pollution Rule, Mercury and Air Toxics Standards, the Tier 3 Vehicle Emissions and Fuels Standards, and the Clean Power Plan, will significantly reduce ozone-forming pollution in the years ahead.

Addressing Ozone Transport for 2015 Standards (70 ppb)

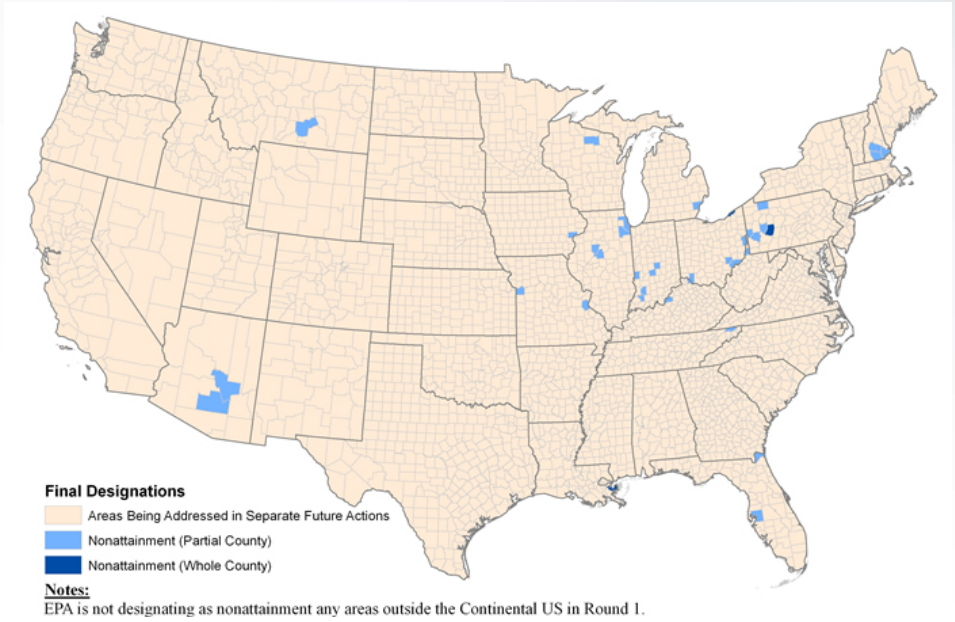
- Transport SIPs for 2015 NAAQS are a state obligation; however, EPA can assist states with technical analyses related to transport.
- EPA is planning to do modeling to provide contribution information to help states begin developing their 110 SIPs (due October 2018).
  - Intends to make this information available in Fall 2016.



2010 SO_2 NAAQS Implementation

- Revised primary SO_2 standard: June 2010 (75 ppb/1-hr)

- Initial nonattainment area designations (Round 1), based on violating monitors, were effective Oct 4, 2013
  - 29 areas in 16 states designated (*Only NH in Region 1*)
  - Attainment plans due April 2015
  - Finding of Failure to Submit issued March 10, 2016 for failure to submit SIPs by April 4, 2015. Included 16 areas in 11 states *(including NH)*.



More info at: www.epa.gov/airquality/sulfurdioxide/designations/data.html

1-hr SO_2 Standard Designations

A March 2015 court order requires the EPA to complete designations for the 2010 SO_2 standard for all remaining areas in the country in up to three additional rounds:

1. **By July 2, 2016**
   a) areas that have monitored violations of the 2010 SO_2 standard based on 2013 – 2015 air quality data; and
   b) areas that contain any stationary source not announced for retirement that according to EPA's Air Markets Database emitted in 2012 either (a) more than 16,000 tons of SO_2 or (b) more than 2,600 tons of SO_2 and had an average emission rate of at least 0.45 lbs SO_2 /mmbtu.

2. **By December 31, 2017** – areas where states have not installed and begun operating a new SO_2 monitoring network.

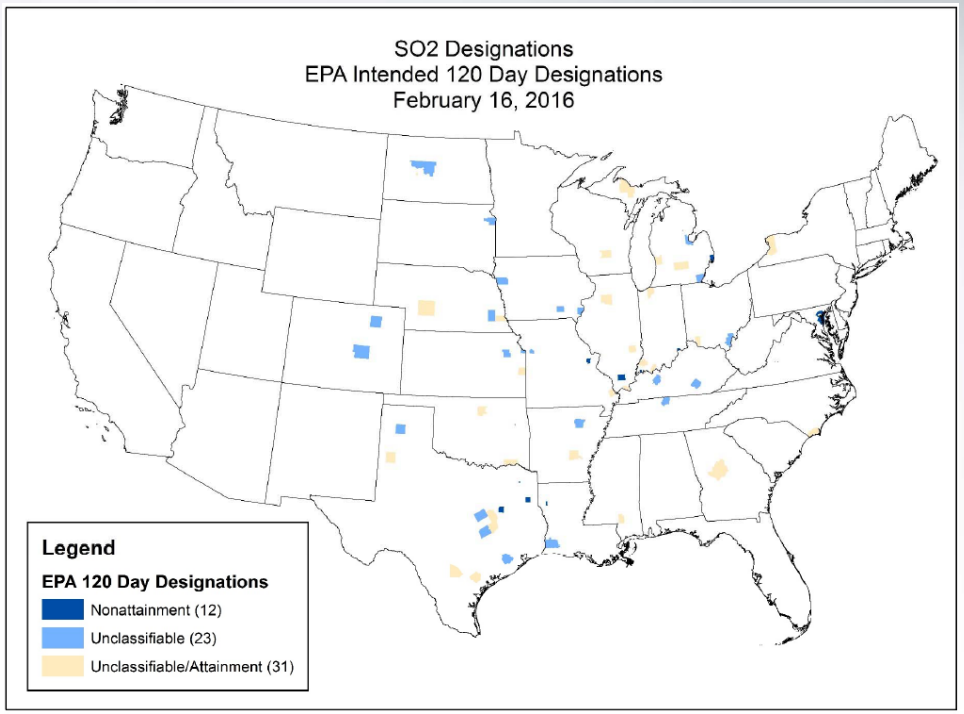
3. **By December 31, 2020** – all remaining areas.

See: https://www3.epa.gov/airquality/sulfurdioxide/designations/data.html

Designations Required by July 2016

Status:

- In Feb 2016, EPA responded to recommendations from state and tribal representatives, and outlined the area designations it intends to complete by July 2, 2016.
- States had until Mar 31, 2016 to submit comments.



See: https://www3.epa.gov/airquality/sulfurdioxide/designations/regs.html

Data Requirements Rule (DRR)

- **Data Requirements Rule (DRR)** (issued Aug 2015):
  - Requires air agencies to monitor or model ambient SO_2 levels in areas with largest SO_2 sources
  - At a minimum, the air quality around sources that emit 2,000 tons per year must characterized
  - States and/or EPA have the discretion to add smaller sources or clusters of sources.
  - In March, EPA sent letters replying to Jan 2016 State letters
    - National source list* has approximately 375 sources
    - *Modeling expected from NE States for Bridgeport Harbor (CT), Newington Station (NH), Schiller (NH), and Wyman (ME). MassDEP also modeling Brayton Point for interstate transport.*

* Has been posted at: https://www3.epa.gov/airquality/sulfurdioxide/drr.html

Designations Required by Dec 2017

Required for any area a state has not elected to install an air monitor under the DRR.

Next steps under DRR:

1) By July 1, 2016, for each source area on the list, the State will identify the approach (ambient monitoring or air quality modeling) it will use to characterize air quality.
2) For source areas that a State decides to evaluate through air quality modeling, a modeling protocol must be provided to the EPA Region by July 1, 2016.
3) The modeling analysis must be submitted to the EPA by Jan 13, 2017.
4) By no later than Sept 1, 2017, EPA notifies states concerning any intended modifications (120-day letters)

Designations Required by Dec 2020

- Designations for all remaining areas:
  - Per SO_2 DRR, States begin operating new monitoring network by Jan 1, 2017
  - By May 1, 2020, States certify 2019 monitoring data (to calculate 2017-2019 design value)
  - Then by no later than Sept 2, 2020, EPA notifies states concerning any intended modifications (120-day letters)

Questions