

ASSOCIATION OF AIR POLLUTION CONTROL AGENCIES



**STATES AT THE TABLE**  
**Cooperative Federalism & the Clean Air Act**  
**in 2016 and Beyond**

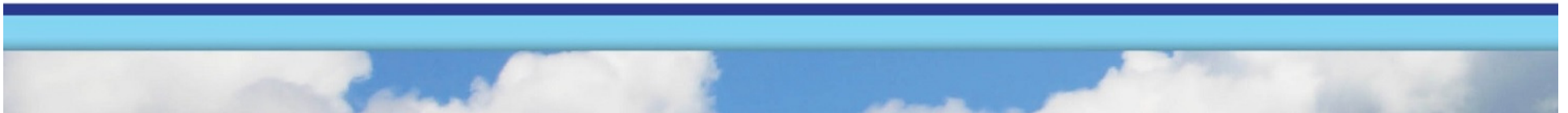
**CIBO Annual Meeting**  
**October 20, 2016**



# OVERVIEW

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- **Introduction to AAPCA**
- **State Clean Air Act Implementation Deadlines**
- **Upcoming Clean Air Act Rulemakings of Interest**
- **Other Issues on the Horizon**
- **2015 Ozone Standards – Implementation & Lessons**
- **Clean Power Plan – Context, Resources, Key Considerations**
- **Conclusion**



# INTRODUCTION TO AAPCA

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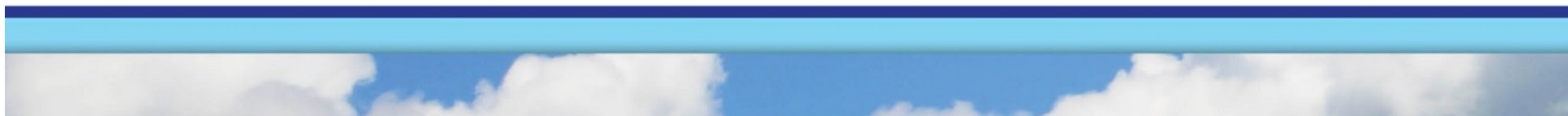
- **Association of Air Pollution Control Agencies**
- **Consensus-driven organization of state and local air quality agencies**
- **Focus on technical information sharing and serving as a conduit with U.S. EPA**
- **20 Member States serve on AAPCA Board**
- **Located in Lexington, KY with the Council of State Governments**
- **11 Technical Committees**



# INTRODUCTION TO AAPCA

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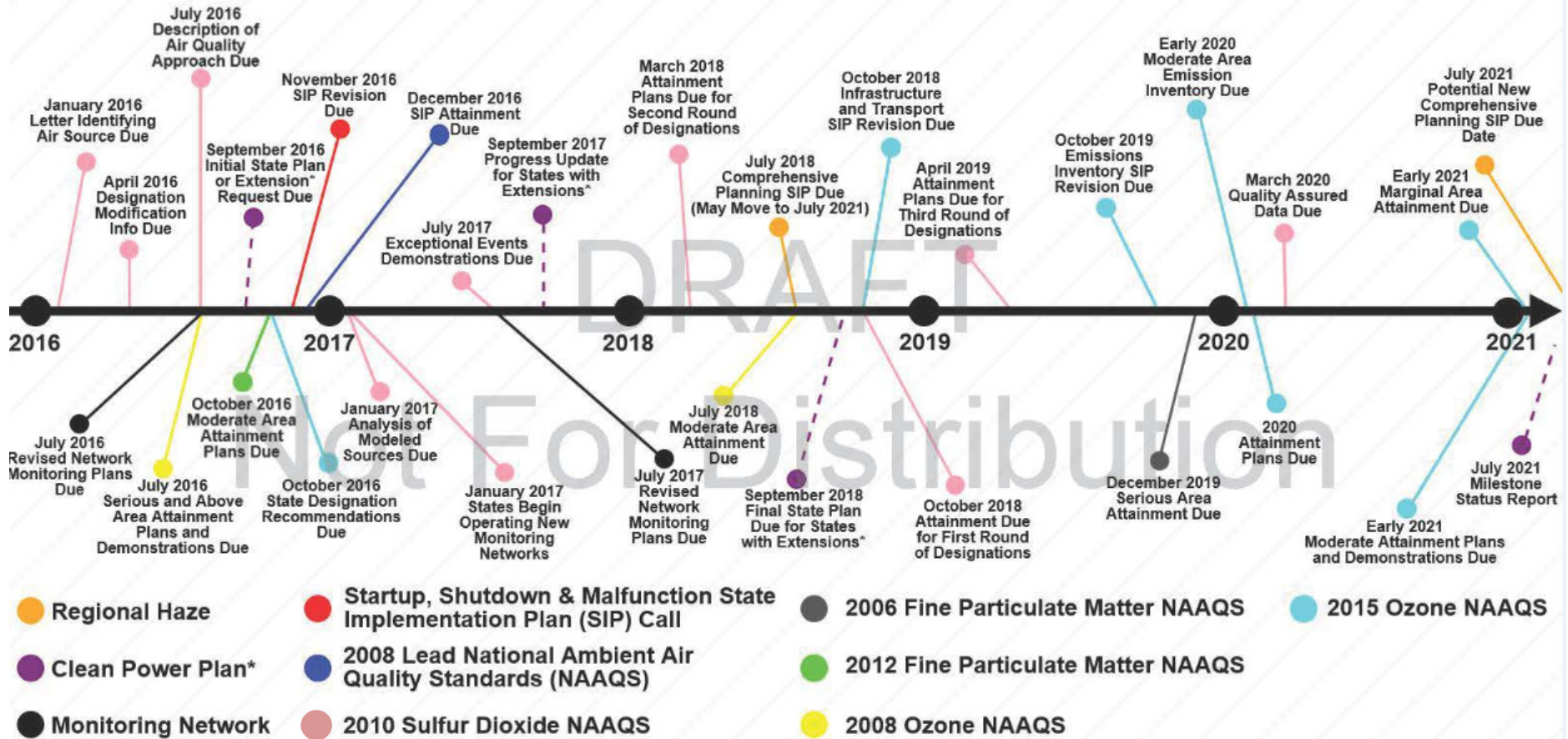
- **Illustrative Current and Upcoming Projects**
  - **Fact Sheet: “Preparing for Personal Air Sensors: Definition, Opportunities, and Data Limitations”**
  - **Metrics/Air Quality Indicators**
  - **Resource Guide for State Opportunities with Federal Advisory Committees**
  - **“Get to Know an EPA HQ Office” Webinar Series**
  - **Surveys of state perspectives on issues like timely NAAQS tools, background pollution, and the Clean Air Scientific Advisory Committee**



October 2016



# State Clean Air Act Deadlines, 2016 - 2021



\* On February 9, 2016, the U.S. Supreme Court stayed implementation of the Clean Power Plan. According to U.S. EPA: "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."

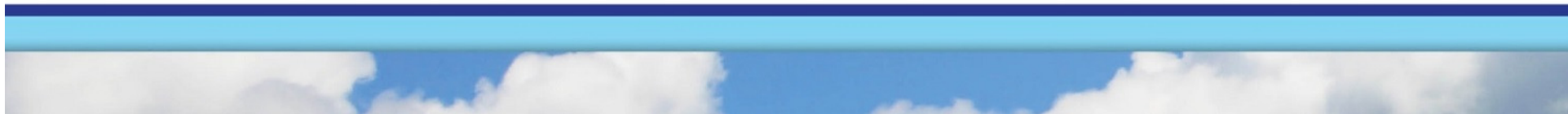
# MORE TO COME IN 2016

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- Final Revisions to the Guideline on Air Quality Models (OIRA since 9/2/16)
- Proposed 2015 Ozone NAAQS SIP Requirements Rule (11/16 – Finished interagency review 9/28/16)
- Final Amendments to Regional Haze Rule (Late 2016)
- Final Interstate Transport Rule for 2008 Ozone NAAQS (10/16)\*
- Proposed RFS Program Amendments (10/16)\*
- Final Clean Air Act Permitting Electronic Notice Rule (10/16)\*
- Final Greenhouse Gas Reporting Program--General Revisions (OIRA since 10/12/16)
- Final Modernization of Accidental Release Prevention Regulations (OIRA since 10/14/16)
- Final NESHAP – Subpart W: Standards for Radon Emissions From Operating Uranium Mill Tailings (OIRA since 7/28/16)
- Proposed NESHAP - Publicly Owned Treatment Works Risk and Technology Review (12/16)
- Final RFS Volumes for 2017 and Biodiesel Volumes for 2018 (12/16)
- Final Federal Plan for Clean Power Plan (12/16)
- Final Amendments to Implementing Regulations for Acting on 111(d) State Plans (12/2016)
- Final PSD Preconstruction Permits Rescission Rule (Fall/Winter 2016)
- Notice of Control Techniques Guideline for the Oil and Natural Gas Sector (OIRA since 6/28/16)



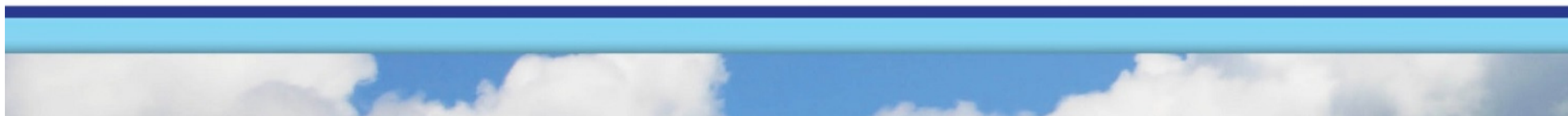
\* Posted, but not yet printed in Federal Register as of 10/18/16



# MORE TO COME IN 2016

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- **Guidance:**
  - Ozone and PM<sub>2.5</sub> significant impact levels (SILs) (draft posted for comment in August 2016)
  - Model emissions rates for precursors (MERPs) (Fall 2016)
  - PM<sub>2.5</sub> Precursor Demonstration Guidance
  - Title V Program and Fee Evaluation Guidance
  - Results of interstate transport modeling info for 2015 ozone NAAQS
- **NAAQS review milestones:**
  - Primary NO<sub>2</sub> - Policy and Risk & Exposure Assessments
  - Secondary NO<sub>2</sub> and SO<sub>2</sub> – Final Integrated Review Plan
  - PM – Final Integrated Review Plan



# PROJECTED 2017 CAA ACTIVITY

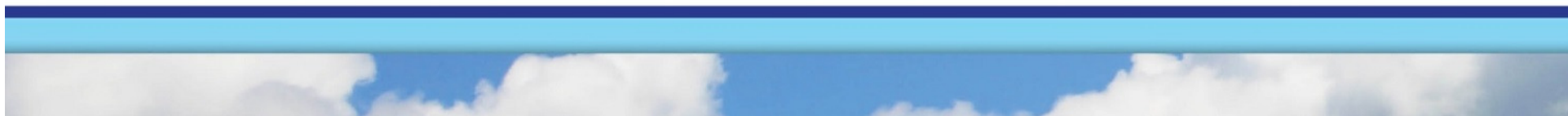
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- **NAAQS Review Milestones**

- Primary NO<sub>2</sub> - Policy and Risk & Exposure Assessments (Winter 2016/2017)
- Primary SO<sub>2</sub> - Policy Assessment (5/2017)
- Primary NO<sub>2</sub> - Proposal (8/2017)
- PM Draft Integrated Science Assessment/Risk & Exposure Assessment Planning (Fall 2017)
- Secondary NO<sub>2</sub>/SO<sub>2</sub> - Draft Integrated Science Assessment (Winter 2017)

- **NAAQS Implementation Activity**

- 2015 Ozone NAAQS:
  - “120 Day” Letters (6/2017)
  - 2015 Ozone NAAQS – Final Designations, Classifications and Non-Attainment Area SIP Requirements Rule (10/2017)
  - Updated Transportation Conformity Guidance for Non-Attainment Areas (Fall 2017)
- 2010 One-Hour SO<sub>2</sub> NAAQS - Round 3 of designations (by December 31, 2017)





# PROJECTED 2017 CAA ACTIVITY

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- **GHG Rules**

- Proposed Endangerment Finding for Lead Aviation Emissions (12/17)
- Final Revisions to the PSD and Title V Permitting Regulations for GHG and Establishment of a GHG Significant Emissions Rate (SER) (proposed 8/16)
- Clean Power Plan/Clean Energy Incentive Program?

- **Additional Actions Initiated**

- Response to Section 176A Petition (within 12 months of 8/16)
- Determinations of attainment/failure to attain for 2006 24-hour PM<sub>2.5</sub> NAAQS – NPRM (within 12 months of 8/16)
- Revisions to Procedure 2 – QA Requirements for PM Continuous Emission Monitoring Systems at Stationary Sources (within 12 months of 5/16)
- Rule Responding to Remands of SO<sub>2</sub> Emissions Budgets Under the Cross-State Air Pollution Rule – NPRM (within 12 months of 5/16)
- Final Removal of Title V Emergency Affirmative Defense Provisions (proposed 8/16)
- Final Revisions to the Petition Provisions of the Title V Permitting Program (proposed 8/16)



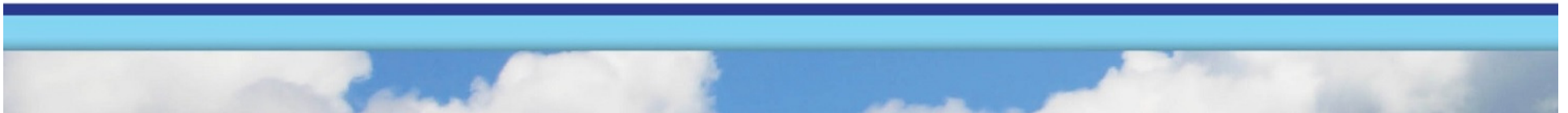
Additional 14 NESHAP/RTR rulemakings in appendix



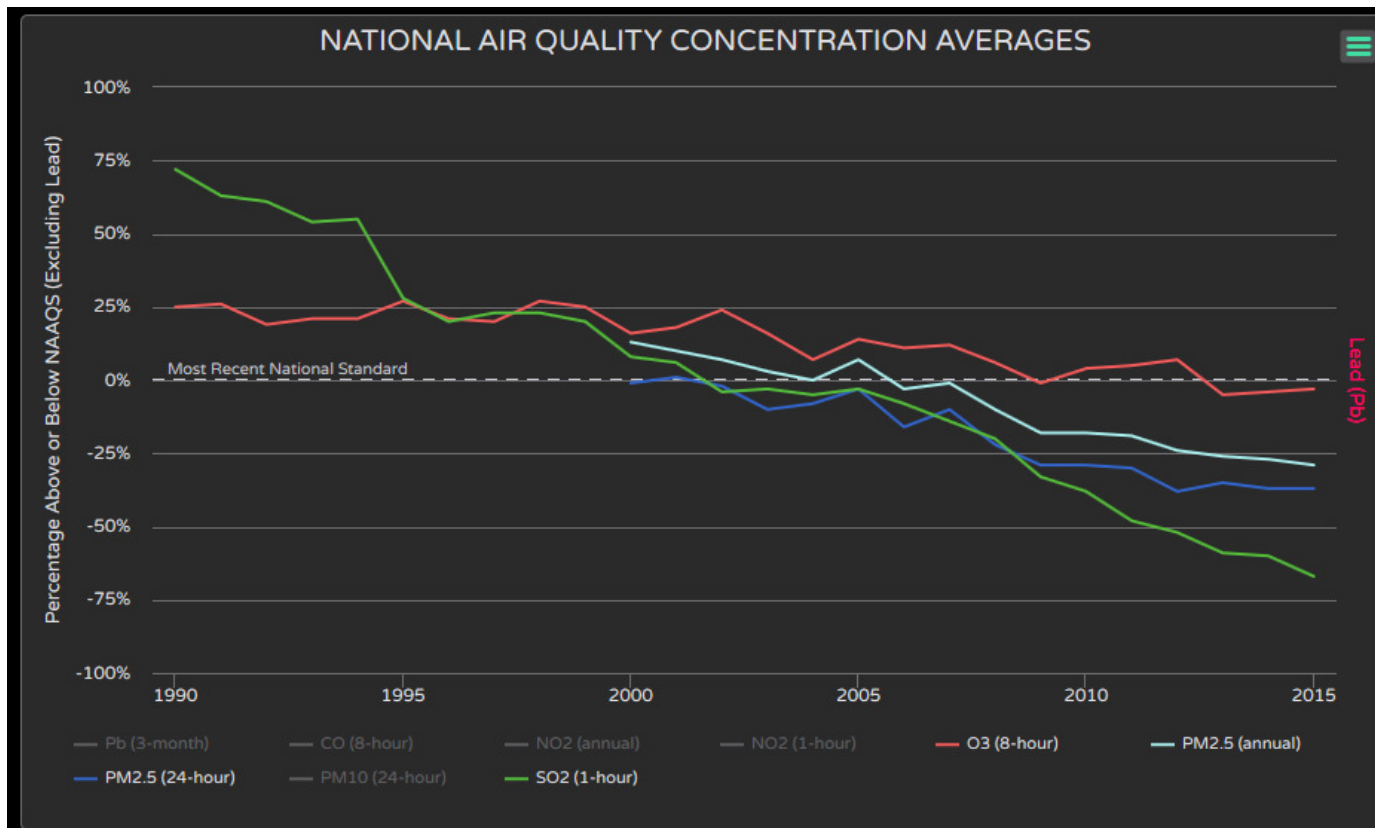
# OTHER ISSUES ON THE HORIZON

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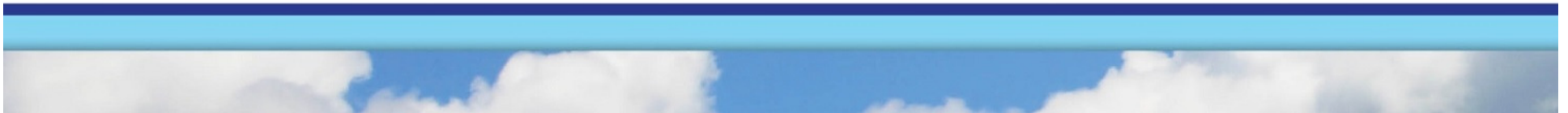
- **Litigation-driven priorities and deadline suits**
- **New CAA Initiatives**
  - Section 115
  - Low Carbon Fuel Standard
- **Enforcement priorities and settlement agreements**
- **Interstate & international transport**
- **Role of background pollution**
- **Communication & context challenges**
  - Citizen Science & Personal Air Sensors
  - Work with communities/Environmental Justice
  - EJSCREEN/NATA/C-FERST



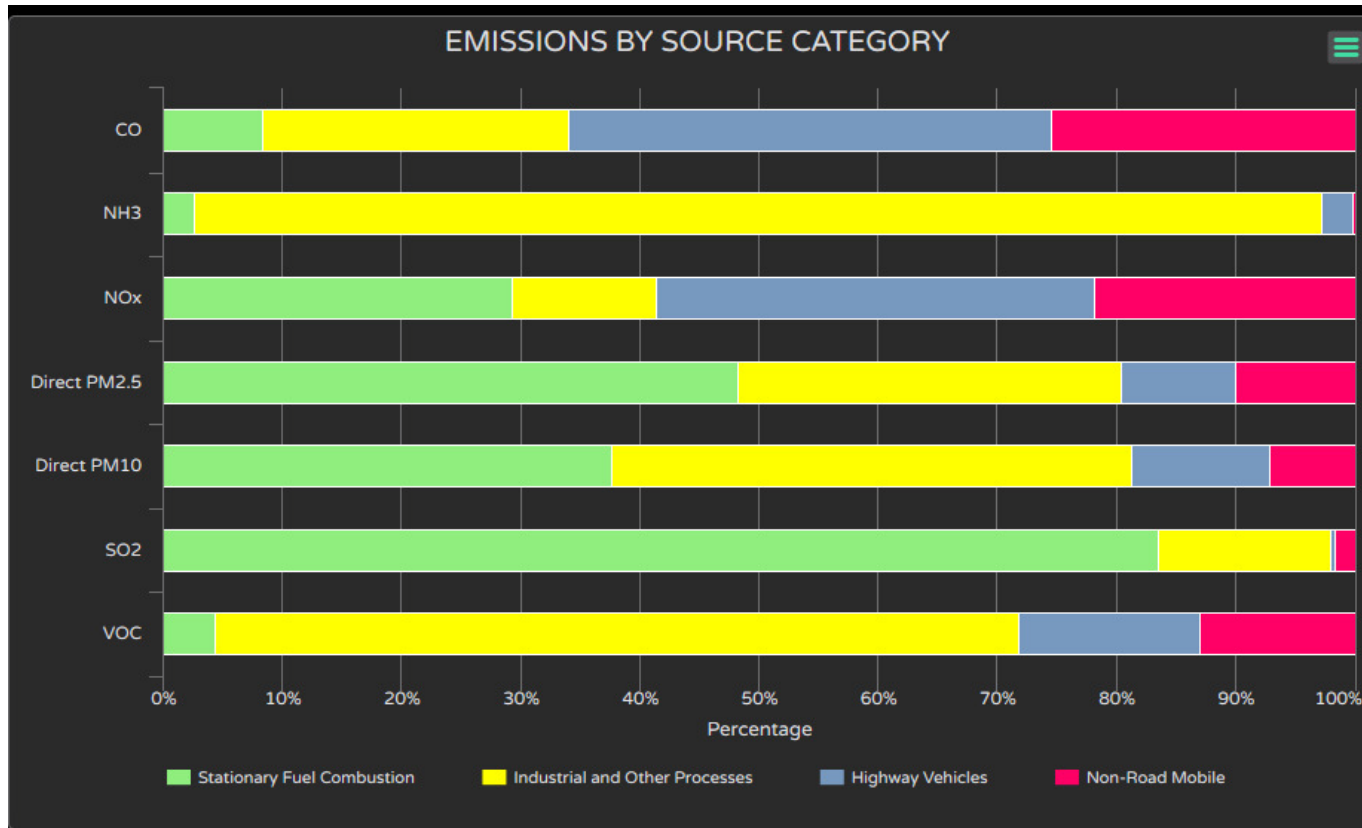
# CRITERIA POLLUTANTS – CONTEXT & PROGRESS



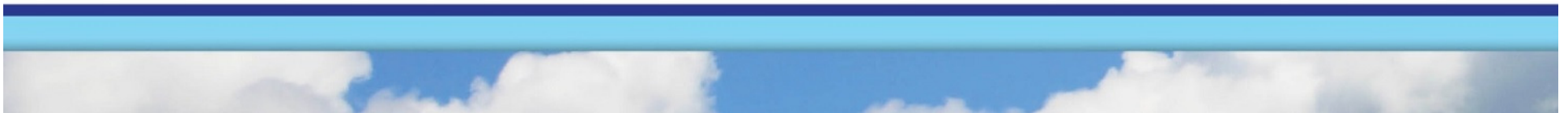
<https://gispub.epa.gov/air/trendsreport/2016/>



# CRITERIA POLLUTANTS - CONTEXT & PROGRESS



<https://gispub.epa.gov/air/trendsreport/2016/>



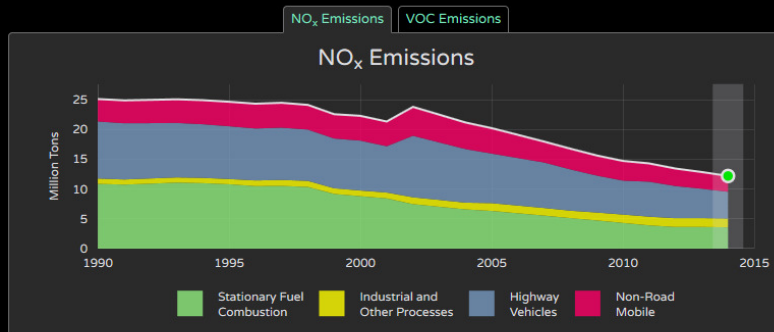
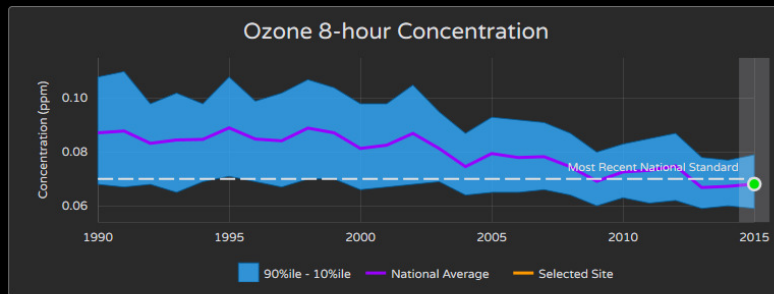
# OZONE NAAQS – CONTEXT & PROGRESS

## CRITERIA POLLUTANT TRENDS SHOW CLEAN AIR PROGRESS

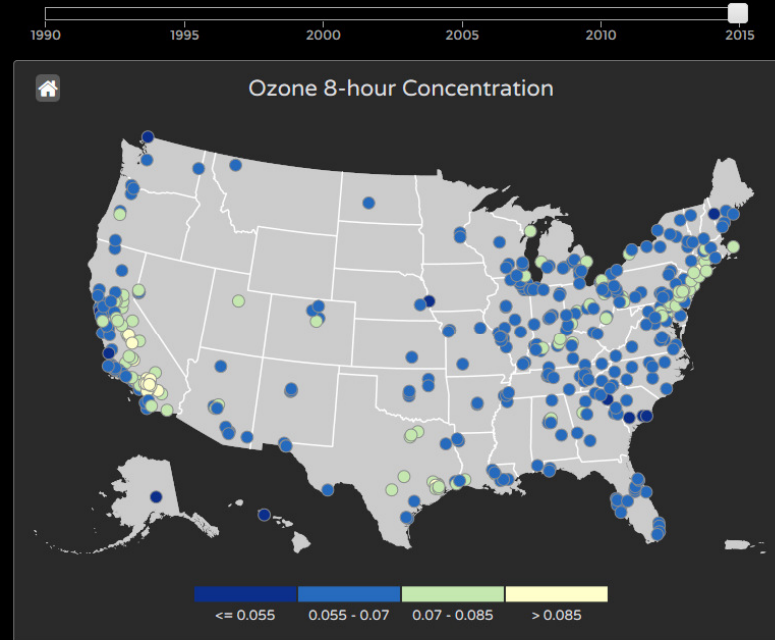
Select a NAAQS to view concentration and emission trends ↕

Ozone (Fourth Daily Max 8-hour)

Year: 2015 ▶



**CHARTS** Click and drag the green circle to manually change the year. Click on emission tabs to change the emissions chart. (2015 emissions will be released later in 2016.)



**ANIMATION** Click the play/pause button to start and pause animation. Click and drag the gray square in the slider to manually change the year.

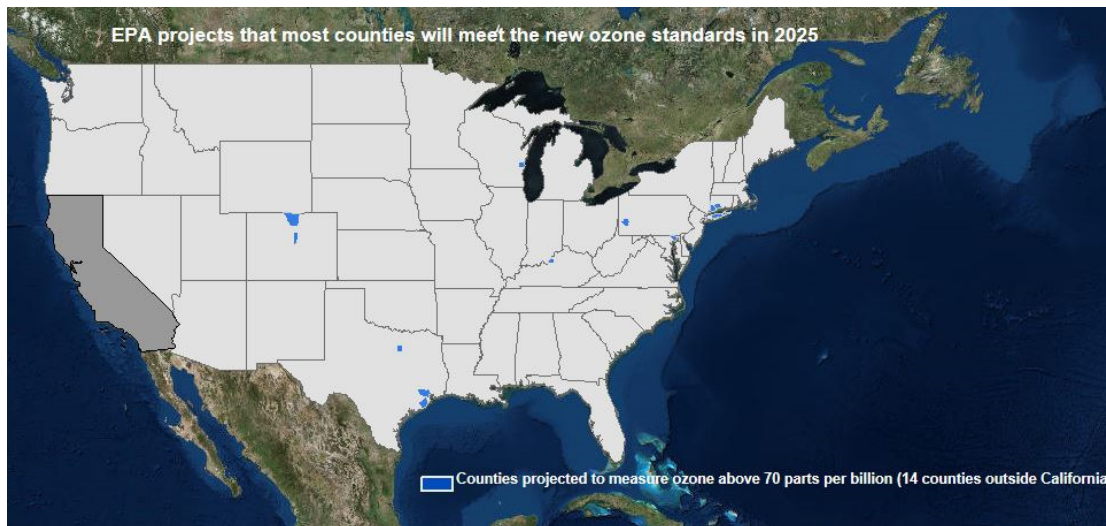
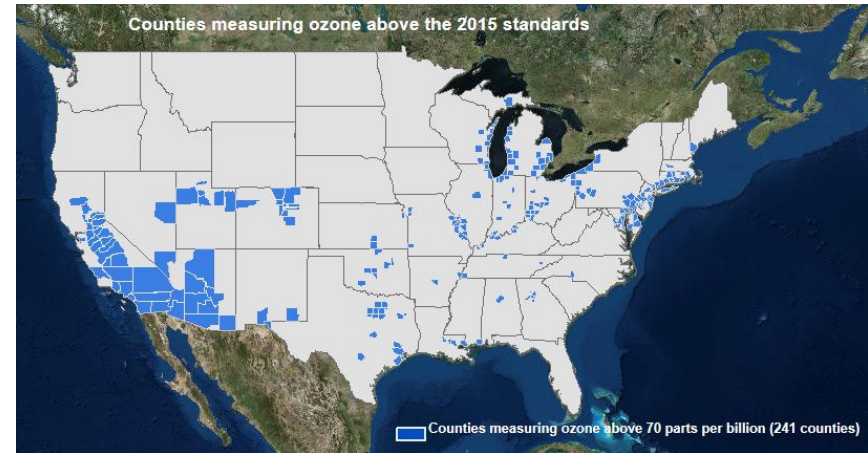
**MAP** Click on a monitor to display annual concentration data. Double click to zoom in. Click the home button to reset.



<https://gispub.epa.gov/air/trendsreport/2016/>

# OZONE NAAQS - CONTEXT & PROGRESS

2015: 241 counties measuring  
ozone above 70 parts per  
billion



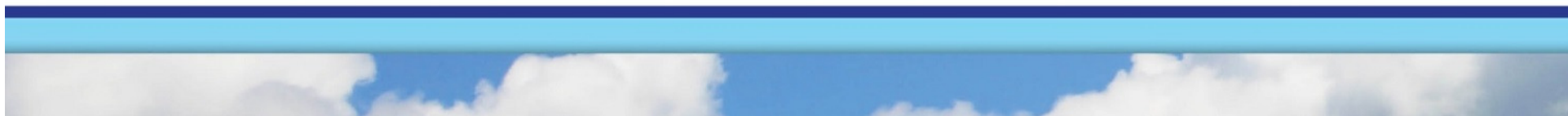
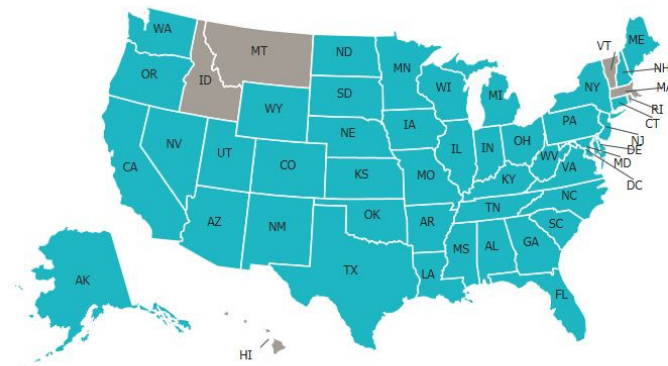
2025: 14 counties outside  
CA measuring ozone  
above 70 parts per billion

EPA RIA

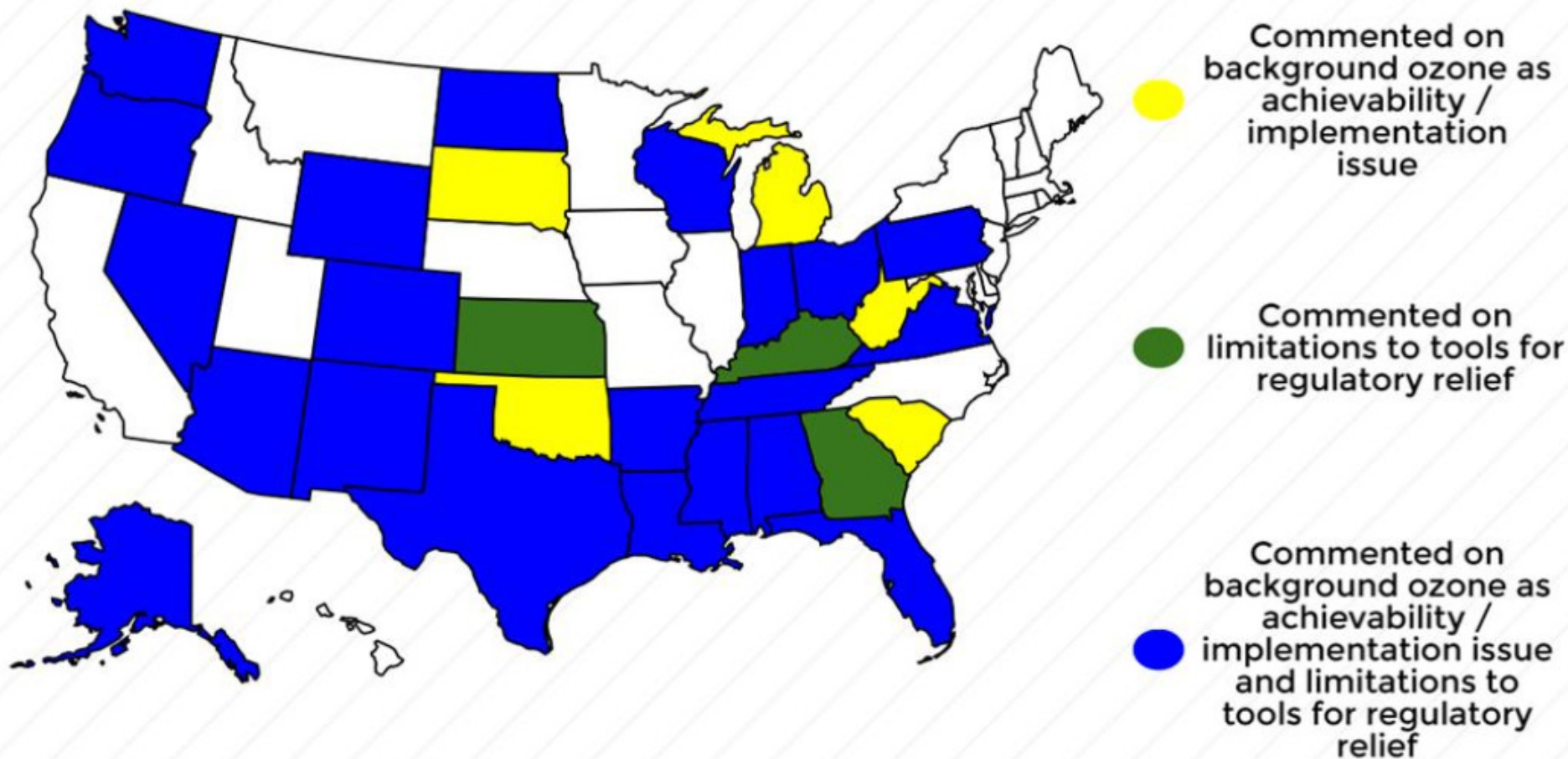
# 2015 OZONE NAAQS OVERVIEW

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- **Primary and secondary NAAQS of 70 ppb**
- **Air Quality Index & Monitoring Updates**
- **Outstanding Issues:**
  - **PSD Permitting**
  - **Exceptional Events Rule revision**
  - **Wildfire Guidance**
  - **Background Ozone**
  - **Transport for 2008 & 2015 NAAQS**
  - **Litigation**
- **44 individual state environmental agency comments**



# State Environmental Agency Comments on Background Ozone & Limitations of Current Tools for Regulatory Relief



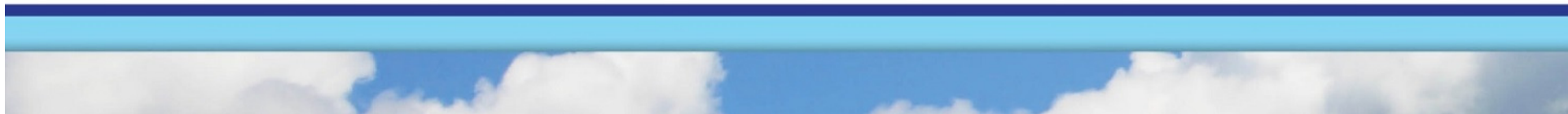
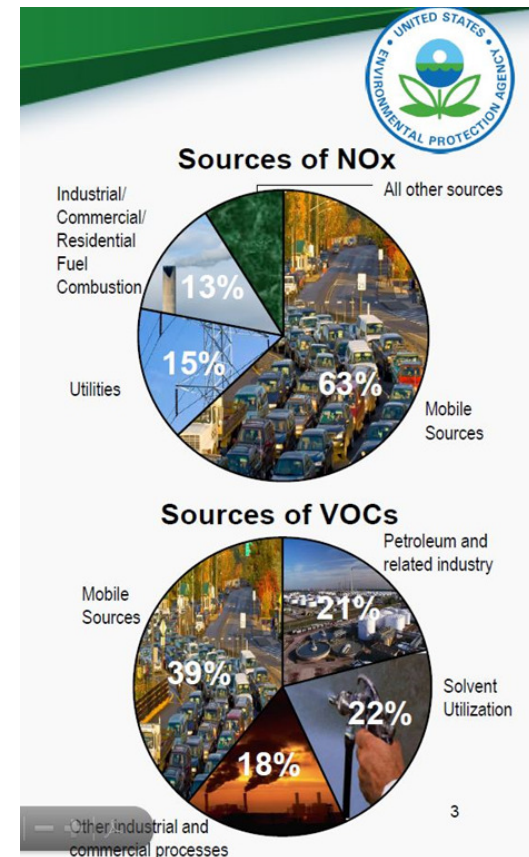


# STATE PERSPECTIVES - TECHNOLOGY & UNKNOWN CTRLS

**Table 6-19. Sector-Specific NO<sub>x</sub> Emissions Reductions for the Revised and Alternative Standard Levels<sup>a</sup>**

Emissions Sector	Revised and Alternative Standard Levels			
	70ppb		65ppb	
	CA NOX Emis Rdxn	nonCA NOX Emis Rdxn	CA NOX Emis Rdxn	nonCA NOX Emis Rdxn
Aircraft, locomotives and marine vessels	-	-	-	-
Area sources	-	32,224	-	69,576
Cement kilns	-	19,285	-	31,963
Electricity Generating Units	-	47,507	-	113,678
Industrial point sources	-	134,763	-	319,484
Non-road mobile sources	-	2,832	-	8,791
On-road mobile sources	-			
Pulp and paper facilities	-	42	-	265
Refineries		3,134	-	7,735
Residential wood combustion				
Unknown sector	51,000	46,542	99,500	862,803
<b>TOTAL</b>	<b>51,000</b>	<b>286,330</b>	<b>99,500</b>	<b>1,414,296</b>

<sup>a</sup>All values are tons of NO<sub>x</sub> reductions (75 ppb vs revised and alternative standard levels). Results are presented both for “CA NO<sub>x</sub>” (emissions in CA only – used in post-2025 scenario PM<sub>2.5</sub> cobenefits modeling) and “nonCA NO<sub>x</sub>” (emissions reductions outside of CA – used in 2025 scenario PM<sub>2.5</sub> cobenefits modeling).

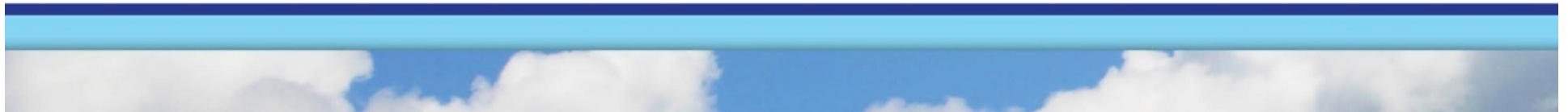


# STATE PERSPECTIVES - TIMELY IMPLEMENTATION

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- Of the 44 state environmental agencies that filed individual comments, roughly three-quarters raised concerns about the need for timely implementation rules and guidance from U.S. EPA under a revised standard.
- Citing the delayed timeline of implementation for the 2008 ozone NAAQS and the truncated requirements for state and local agencies, many states also suggested a timeline for U.S. EPA to issue and finalize implementation rules and guidance.
- Of the states commenting on when U.S. EPA should issue proposed implementation rules and guidance for a revised ozone NAAQS, more than 90 percent recommended that the Agency do so at the time the final NAAQS is promulgated (October 2015).
- Of the states commenting on when U.S. EPA should finalize implementation rules and guidance for a revised ozone NAAQS, more than half recommended finalizing these tools within one year and roughly one-quarter recommended finalizing with final area designations.

"Failure on the EPA's part to issue timely regulations sets the states up for unsuccessful implementation, invites litigation, and leads to disputes over missed deadlines, rather than focusing on the health of our environment and those that live in it."  
- Wyoming Department of Environmental Quality



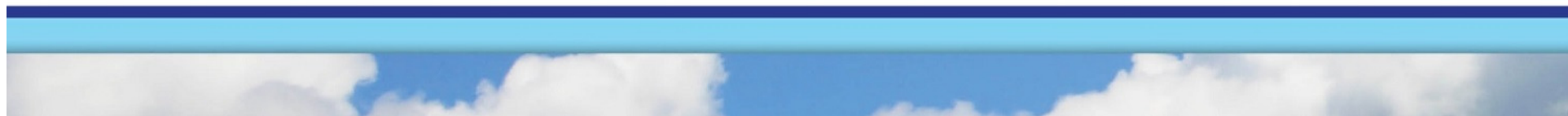
# 2015 OZONE NAAQS – STATE DELIVERABLES

Deliverable	Anticipated Due Date	EPA Guidance/Rule Needed	Guidance/Rules Required By
State Designation Recommendations	October 1, 2016	<ul style="list-style-type: none"> <li>Designations Guidance</li> <li>Exceptional Events Guidance/Rule</li> </ul>	February 2016
Infrastructure and Transport SIP Revision	October 1, 2018	<ul style="list-style-type: none"> <li>Updated Infrastructure SIP Guidance (if applicable)</li> <li>Interstate Transport Guidance/Final Transport Rule</li> </ul>	October 2016
Emissions Inventory SIP Revision	October 2019	<ul style="list-style-type: none"> <li>Final Designations/Classifications Rule</li> <li>SIP Requirements Rule</li> <li>Final Emissions Inventory Guidance</li> </ul>	By the time of final designations (October 2017)
Attainment Demonstration/RFP SIP Revisions (moderate areas and above)	<p>October 2020 (moderate areas)</p> <p>October 2021 (serious areas and above)</p>	<ul style="list-style-type: none"> <li>Final Designations/Classifications Rule</li> <li>SIP Requirements Rule</li> <li>Final Emissions Inventory Guidance</li> <li>Rural and International Transport Guidance</li> <li>Final Modeling Guidance</li> </ul>	By the time of final designations (October 2017)

**“With the promulgation of the 2015 ozone [NAAQS], states will be required to develop multiple documents for submittal to [U.S. EPA], including complex state implementation plan (SIP) revisions that require a substantial amount of time and effort to complete...The TCEQ has estimated that the agency’s level of effort required to develop an attainment demonstration and reasonable further progress SIP revision for a moderate nonattainment area is 45,000 to 55,000 hours of staff time, with an estimated cost of over \$1 million dollars.”**



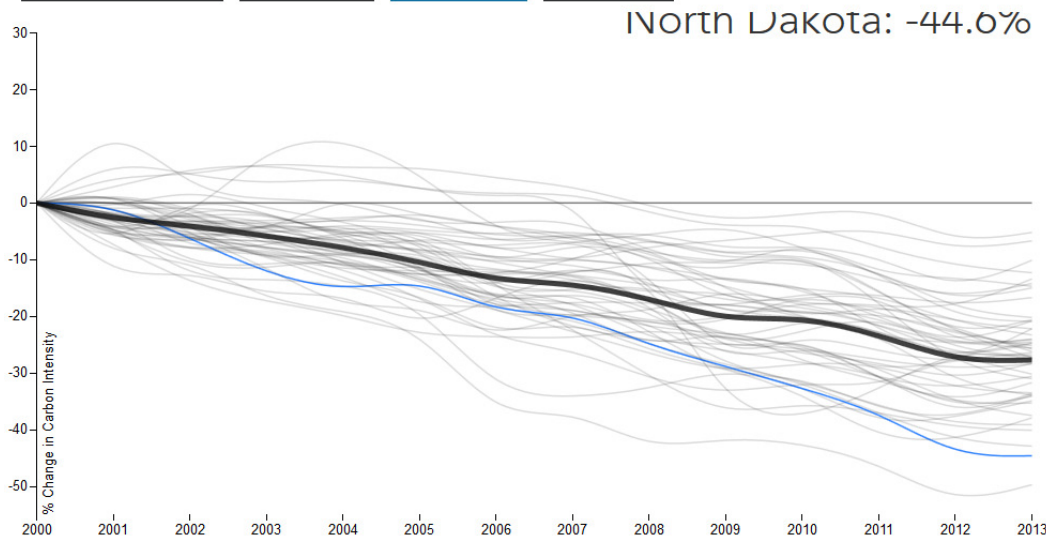
TCEQ presentation to OIRA, 9/22/2015



# CLEAN POWER PLAN – CONTEXT & PROGRESS

Each state's percent change since 2000 in...

Per Capita CO2 Emissions Energy Intensity Carbon Intensity About the Data



Data from EIA, [Energy-Related Carbon Dioxide Emissions at the State Level, 2000-2013](#), October 2015. [Infographic](#) from DOE.



From 2000 – 2013, the 20 states that sit on AAPCA's Board:

- Experienced an average reduction in per capita energy-related carbon dioxide emissions of 19.86% (national average: 19.02%)
- Saw an average drop in carbon intensity of the economy of 28% (national average: 26.61%)
- Energy intensity fell more than 19 percent in AAPCA States from 2000 to 2013 (national average: 18.03%)
- On average, had a 10.38% reduction in energy-related carbon dioxide emissions (national average: 9.12%)

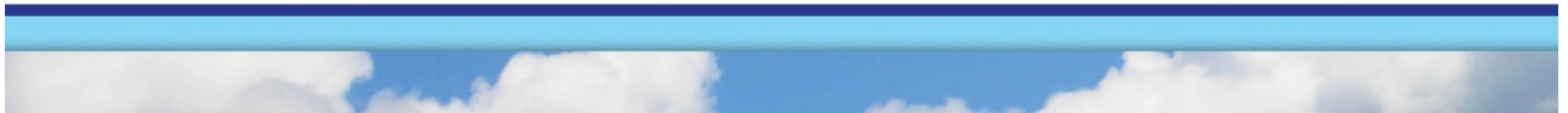
# CLEAN POWER PLAN – HOW DID WE GET HERE?

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- June 2014: Clean Power Plan Proposal (comment deadline October 16, 2014)
  - October 2014 - Notice of Data Availability Released
  - November 2014 - Rate-to-Mass Technical Support Document Released
- October 2014: Clean Power Plan Supplemental Proposal for Tribes and U.S. Territories
- August 3, 2015: Final Clean Power Plan Announced
- October 23, 2015: Final Clean Power Plan published in *Federal Register*
- October 23, 2015: Proposed Federal Plan in *Federal Register* (comment deadline: January 21, 2016)
- January 21, 2016: D.C. Circuit denies motion for a stay
- February 9, 2016: Supreme Court stays implementation
- May 16, 2016: D.C. Circuit reschedules oral arguments (scheduled for three-judge panel on June 2)
- September 27, 2016: Rescheduled oral argument before en banc court

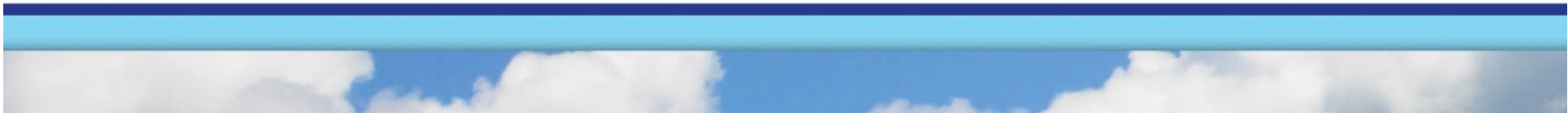
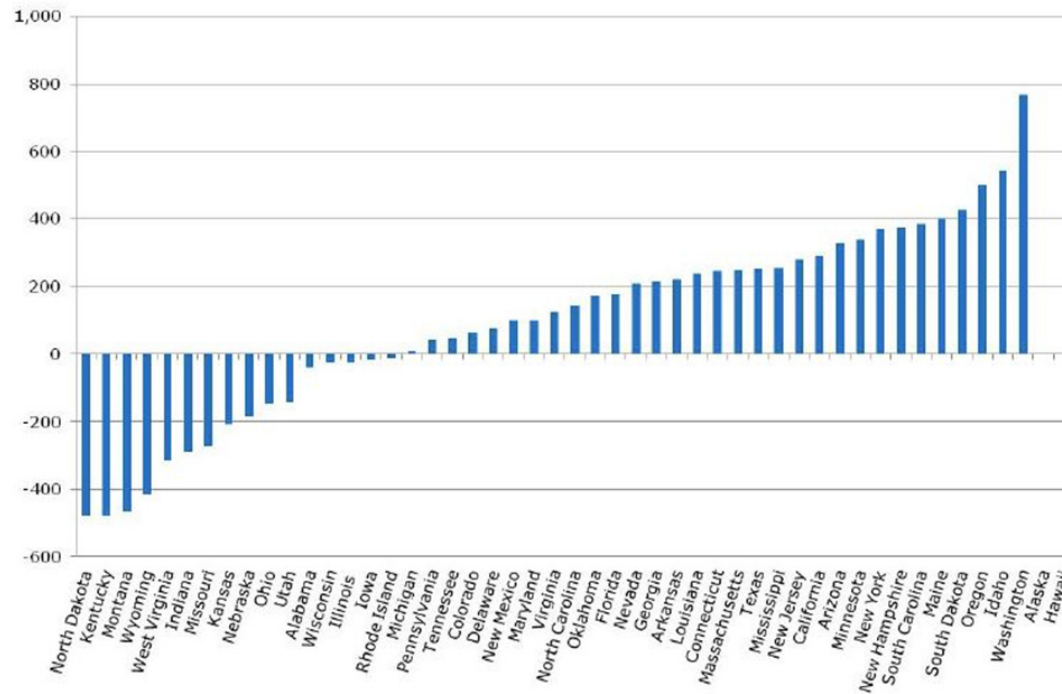
## LOOKING AHEAD

- D.C. Circuit decision in early 2017?
- Supreme Court's final argument days for 2016 October term scheduled for April 2017
- All state legislatures have regular sessions in 2017, but more than 40 states will have adjourned by July 1.



# CLEAN POWER PLAN – PROPOSED VS. FINAL RULES

**Difference Between Proposed and Final Rate-based Goal**



# CLEAN POWER PLAN – STATE RESOURCES

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“The resources necessary to develop and implement the Rule are unprecedented. Approximately 20 GA EPD staff members are involved... expending over 5,000 hours on this effort to date.” – Karen Hays, Georgia EPD

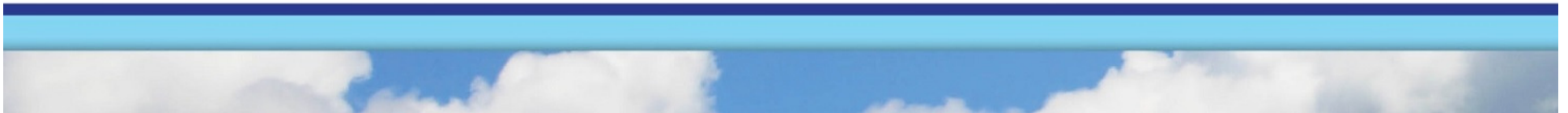
“Assuming ADEM chooses to prepare and submit a plan, my best estimate is that eight man-years of effort (equating to \$760,000 per year for several years) would be needed.” – Ronald Gore, Alabama DEM

“I estimate that DEP will need to engage nine senior staff employees, providing 7,100 hours of effort or more.... The enormous resource drain caused by attempting to ... develop an approvable 111d plan will severely impact the DEP’s ability to fulfill these and other obligations under the [Clean Air Act].” – Fred Durham, West Virginia DEP

“As of October 13, 2015, the Department has dedicated over 1,850 employee hours to evaluating the EPA’s proposed and Final Rule.... Those staff were pulled from their normal responsibilities, which include implementing the Department’s normal Clean Air Act programs, such as [PSD] and Title V. These initial investments of Department resources represent only the tip of the iceberg.” – Todd Parfitt, Wyoming DEQ



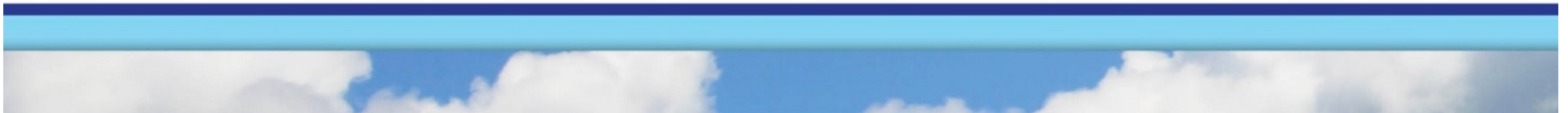
Appendix A to Supreme Court  
Stay Application



# KEY CONSIDERATIONS

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- Are updated state deadlines tolled, consistent with past practice?
- Legislative authority?
- To plan or not to plan?
- State plan pathways –
  - Emission Standards or State Measures? Rate or Mass?
- To trade or not to trade?
- Intrastate considerations
- Interstate considerations –
  - Who jumps first?
  - Multi-state vs. trading ready
- Who to trust for reliable information?
  - Technical resources, i.e. power sector modeling?
- Allowance Allocation
- Reliability considerations/consultation





# CONCLUSION

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- **State and local environmental agencies have full plates even without Clean Power Plan. They are being asked to implement (and provide meaningful comment on) suite of significant rules between 2016 – 2020**
- **Focus on near-term deadlines for SSM SIP Call, ozone designation recommendations, implementation of 2010 SO<sub>2</sub> NAAQS**
- **Significant progress for key air quality indicators; key questions remain about interstate, international, natural vs. anthropogenic sources**
- **Existing implementation timelines and initiated rulemakings will be relevant for transition**
- **Questions?**

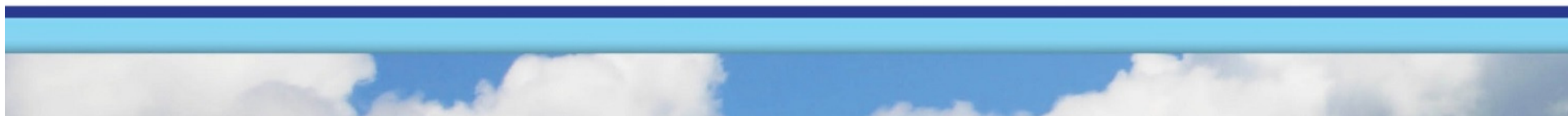
For more information: [cwoods@csg.org](mailto:cwoods@csg.org); 859-244-8040 or visit [www.cleanairact.org](http://www.cleanairact.org)



# APPENDIX

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- **Other NESHAP/RTR rulemakings in 2017 and beyond:**
  - Proposed RTR – Pulp and Paper Combustion Sources (1/17)
  - Proposed RTR – Portland Cement (7/17)
  - Proposed NESHAP – Integrated Iron & Steel Manufacturing Facilities (7/17)
  - Proposed Reconsideration of Polyvinyl Chloride and Copolymers NESHAP (12/17)
  - NESHAP for Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks - NPRM/Direct Final (within 12 months of 8/16)
  - Lime Manufacturing RTR – NPRM (more than 12 months after 7/16)
  - Rubber Tire Manufacturing RTR – NPRM (more than 12 months after 7/16)
  - Reconsideration of Phosphoric Acid Manufacturing and Phosphate Fertilizer Production RTR – NPRM (within 12 months of 6/16)
  - Taconite iron Ore Processing RTR – NPRM (more than 12 months after 6/16)
  - Wool Fiberglass Manufacturing Rotary Spin Bonded Lines Technology Review – NPRM (within 12 months of 6/16)



# APPENDIX

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- **Other NESHAP/RTR rulemakings in 2017 and beyond:**
  - Reinforced Plastics Composites and Boat Manufacturing RTR – NPRM (more than 12 months after 6/16)
  - Stationary Combustion Turbine RTR – NPRM (more than 12 months after 4/16)
  - Engine Test Cells NESHAP RTR – NPRM (more than 12 months after 4/16)
  - Manufacturing Nutritional Yeast RTR – NPRM (within 12 months of

