



NAAQS Implementation Updates

LADCO Fall Meeting
September 2019

Scott Mathias, Acting Director, Air Quality Policy Division
Office of Air Quality Planning and Standards

Overview

- NAAQS Review Update
- EPA Strategic Plan Priority Goal for Nonattainment Areas
- NAAQS Implementation Updates
 - Ozone
 - Sulfur Dioxide (SO₂)
 - Lead (Pb)
- Exceptional Events
- Regional Haze



NAAQS Review Status

(Sept 2019)

	Ozone	Lead	Primary NO ₂	Primary SO ₂	Secondary (Ecological) NO ₂ , SO ₂ , PM ¹	PM ²	CO
Last Review Completed (final rule signed)	Oct. 2015	Sept 2016	April 2018	Feb 2019	Mar 2012	Dec 2012	Aug 2011
Recent or Upcoming Major Milestone(s)	<u>Sept/Oct 2019</u> Draft ISA and Draft PA ³ <u>Early 2020</u> Proposal <u>Late 2020</u> Final	TBD ⁴	TBD	TBD	<u>Timing of next steps is TBD</u> Final ISA; draft REA/PA	<u>Sept 5, 2019</u> Draft PA released to CASAC and public <u>Early 2020</u> Proposal <u>Late 2020</u> Final	TBD

Additional information regarding current and previous NAAQS reviews is available at: <http://www.epa.gov/ttn/naaqs/>

¹ Combined secondary (ecological effects only) review of NO₂, SO₂, and PM

² Combined primary and secondary (non-ecological effects) review of PM

³ IRP – Integrated Review Plan; ISA – Integrated Science Assessment; REA – Risk and Exposure Assessment; PA – Policy Assessment

⁴ TBD = To be determined



EPA Strategic Plan Foundation



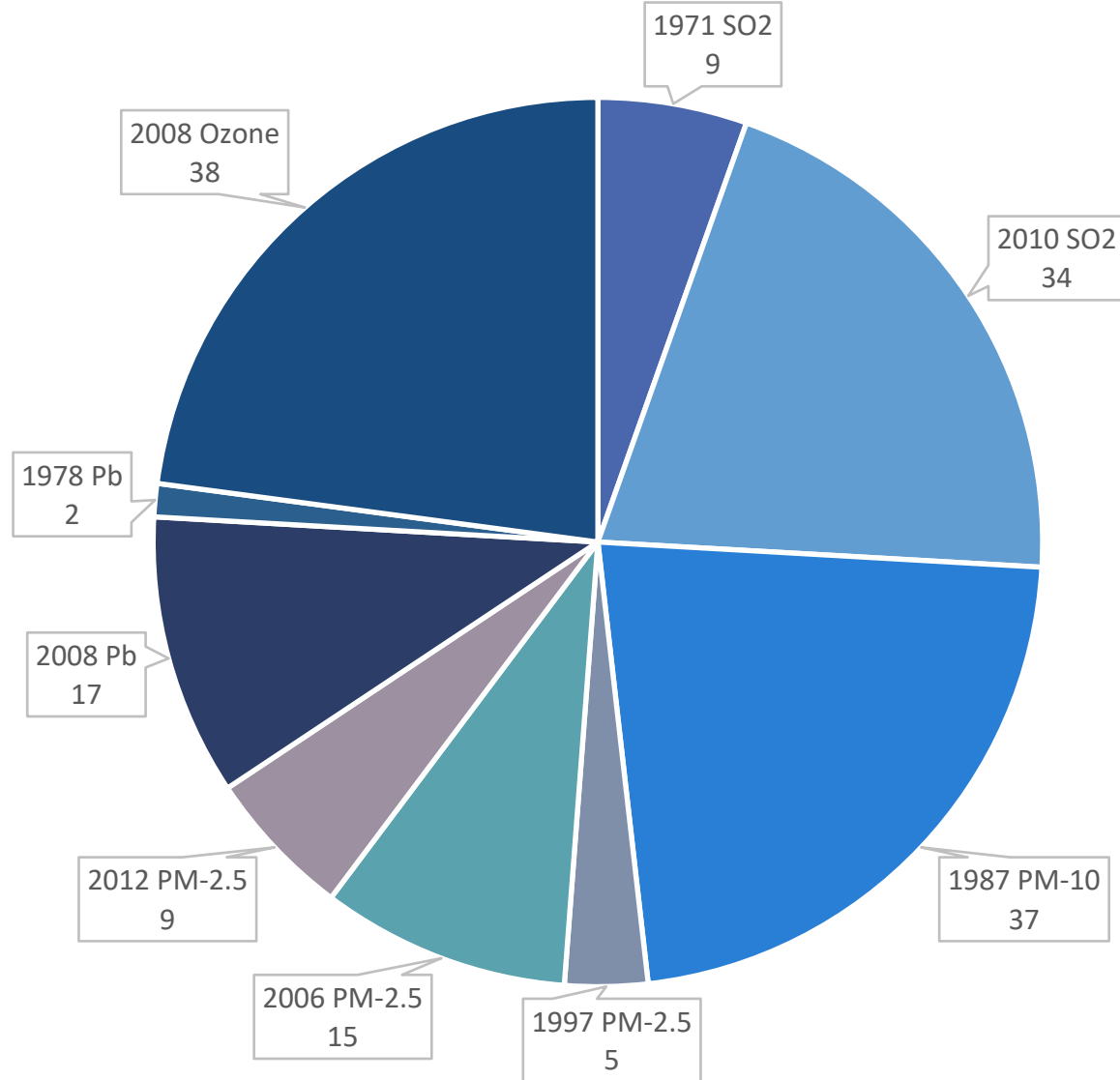
Goal 1: Deliver a cleaner, safer and healthier environment for all Americans and future generations by carrying out the agency's core mission.

Goal 2: Provide certainty to states, localities, tribal nations and the regulated community in carrying out shared responsibilities and communicating results to all Americans.

Goal 3: Increase certainty, compliance and effectiveness by applying the rule of law to achieve more efficient and effective agency operations, service delivery and regulatory relief.



Nonattainment Areas for Non-revoked NAAQS as of October 1, 2017 (166)

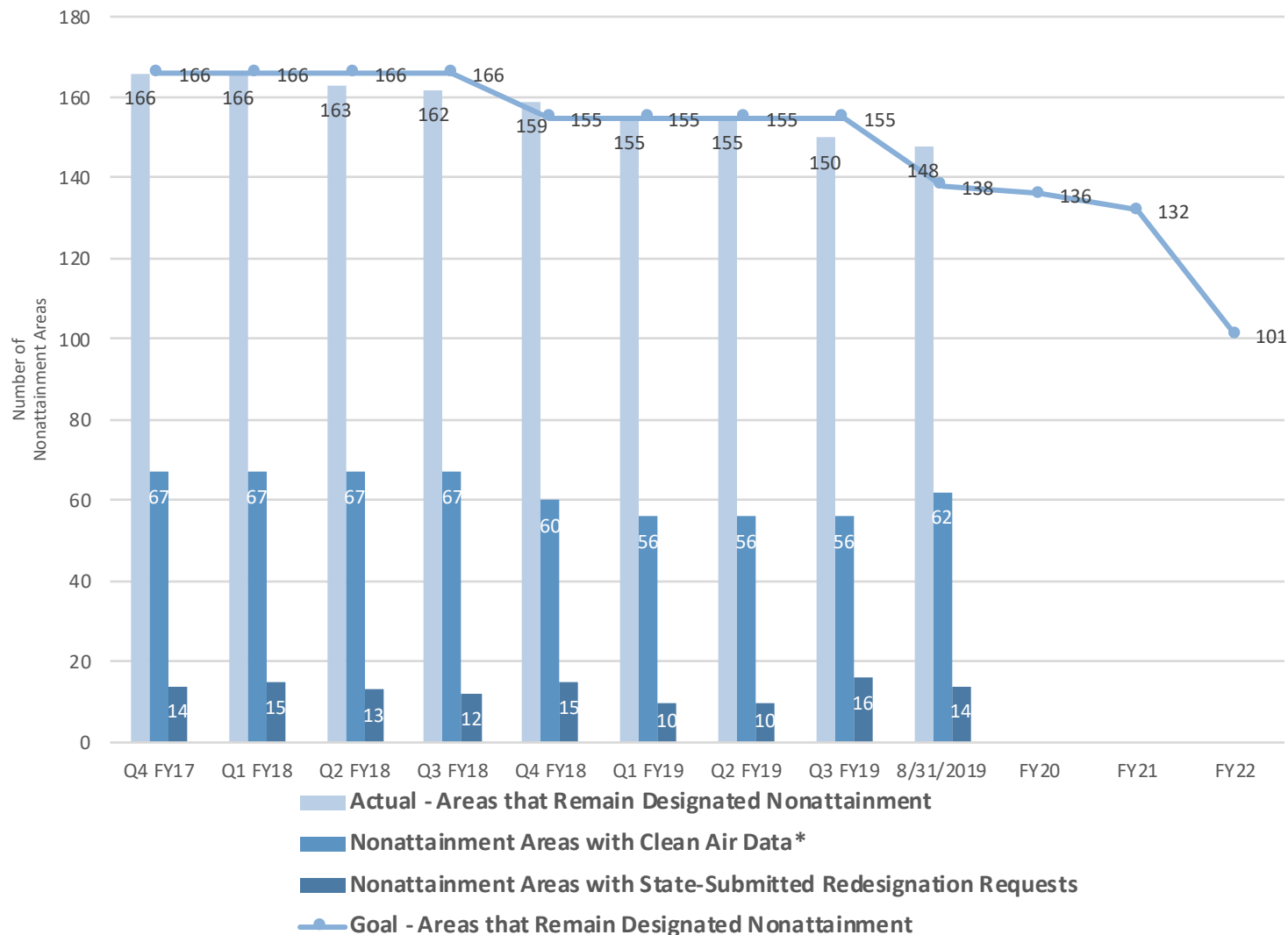


EPA Priority Goal: Reduce Number of Nonattainment Areas

- Work with states to prioritize redesignation request submissions.
- Ensure states have necessary rules, guidance, and tools.
- Improve the efficiency and effectiveness of the SIP/TIP process, including EPA's review process, to maximize timely processing of requested SIP/TIP actions.
- Take federal oversight actions, where necessary.
- For EPA to approve a state's requests to redesignate a nonattainment area, the request must meet the minimum Clean Air Act requirements, which include:
 - A demonstration that the area has air quality that is attaining the NAAQS;
 - Establishing that pollution reductions are due to implementing permanent and enforceable measures;
 - A 10-year maintenance plan that includes contingency measures to be triggered in the event of a re-violation of the NAAQS; and,
 - Satisfying any other applicable and outstanding attainment planning and emissions control requirements.

Agency Priority Goal: *By September 30, 2022, EPA, in close collaboration with states, will reduce the number of nonattainment areas to 101 from a baseline of 166.*

Reduce Number of Nonattainment Areas



*Clean air data is a key step to redesignation to attainment, which can occur once an area's air quality attains the federal standard.



Pollutant-Specific Implementation Updates

Ozone, SO₂, Pb

2015 Ozone NAAQS Implementation Update

- 52 areas initially designated nonattainment:
 - 51 areas (excluding San Antonio) effective August 3, 2018 (83 FR 25776; 6/04/18)
 - San Antonio, Texas area effective September 24, 2018 (83 FR 35136; 7/25/18)

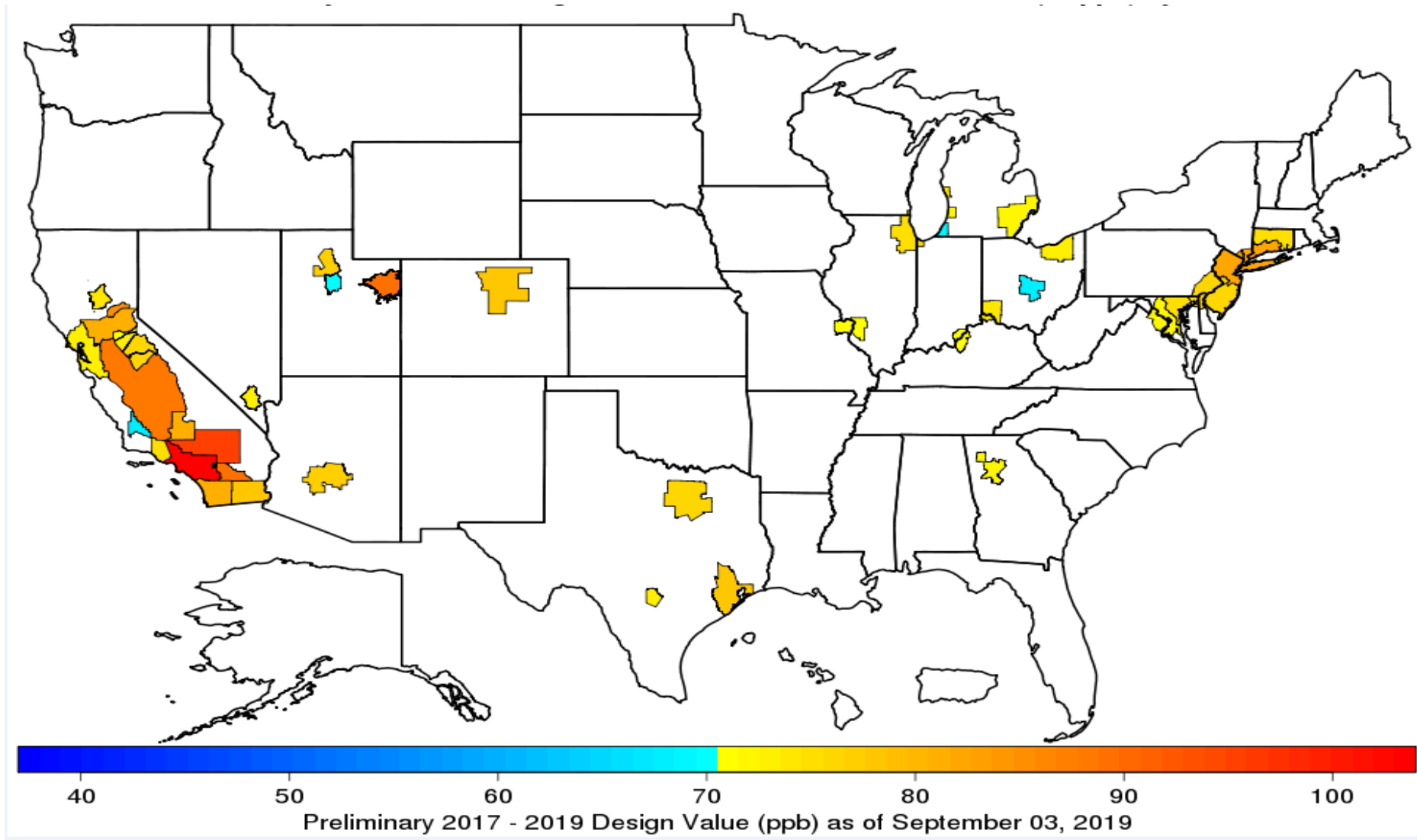
Classification	Number of Areas	Attainment Deadline (years)	Attainment Date
Marginal	39	3	August 3, 2021* (2018-2020 DV)
Moderate	5	6	August 3, 2024
Serious	2	9	August 3, 2027
Severe-15	2	15	August 3, 2033
Extreme	2	20	August 3, 2038
Rural Transport (Marginal)	2	N/A	---
TOTAL	52		
* Sep 24, 2021 for San Antonio, TX area			

- Columbus, OH area redesignated to attainment (84 FR 43508; 8/21/19)
- Initial SIP submittals (emissions inv./statements) due August 3, 2020



Preliminary 2017-2019 Design Values for 2015 Ozone Nonattainment Areas

(70 ppb NAAQS)



2015 Ozone NAAQS Implementation Update (cont.)

- Infrastructure SIP update
 - SIPs were due October 1, 2018
 - EPA has received 34 full submittals and 9 partial submittals
- Litigation on 2015 Ozone NAAQS SIP Requirements Rule
 - Final rule published December 6, 2018 (83 FR 62998)
 - Petitioners' brief filed July 22, 2019:
 - NNSR interprecursor trading
 - RFP requirements: milestone compliance demonstrations
 - RFP requirements: alternative baseline year
 - Early implemented contingency measures
 - EPA's reply brief due November 1, 2019; oral arguments timing TBD



2015 Ozone NAAQS Interstate Transport

- EPA is actively reviewing submitted 2015 ozone NAAQS transport SIPs
 - Received 40 of 56 states/jurisdictions
 - Finalized approval action on 2 state SIPs
 - Proposed approval on an additional 4 SIPs
- Notice of Intent (NOI) to file mandatory duty deadline suit to make Findings of Failure to Submit (FFS) outstanding interstate transport SIPs that were due October 1, 2018
 - On September 5, 2019, EPA announced its intent to make findings that certain states have failed to submit interstate transport SIPs for the 2015 ozone NAAQS. (see <https://www.epa.gov/airmarkets/interstate-air-pollution-transport>)
 - EPA intends to issue FFS on November 22, 2018
 - SIPs need to be “complete” to be excluded from the FFS



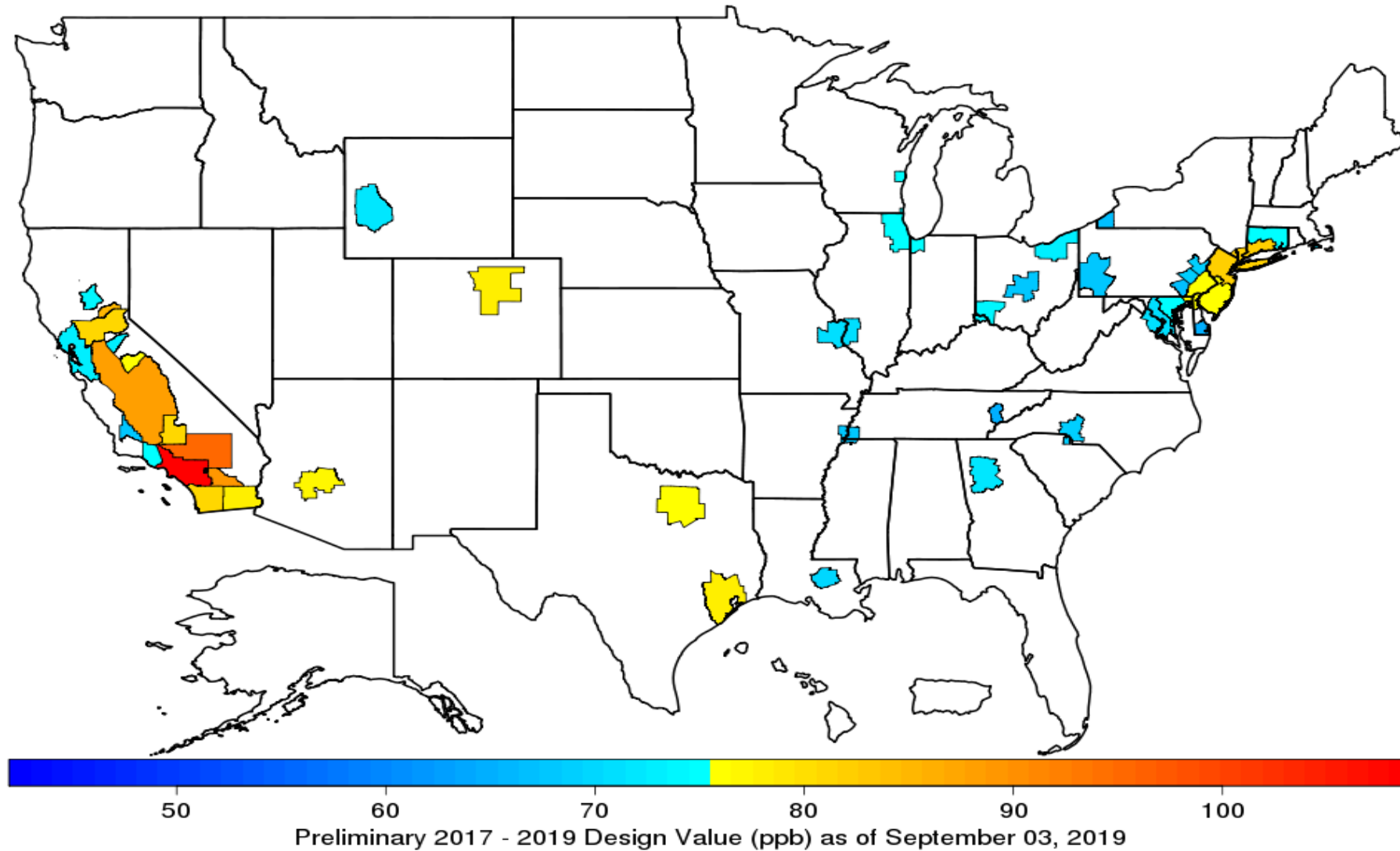
2008 Ozone NAAQS Implementation Update

- Moderate area update
 - Moderate area Determinations of Attainment by the Attainment Date (DAAD) published August 23, 2019 (84 FR 44238), effective September 23, 2019
 - DAAD rule establishes new SIP submittal and RACT implementation deadlines for newly-reclassified Serious areas
 - 1-year attainment date extension for Sheboygan County, WI to July 2019
 - Separate related actions for Denver, CO; Phoenix, AZ; Imperial County, CA; and Kern County, CA
- 2008 Ozone NAAQS Interstate Transport
 - CSAPR Update – September 13, 2019, D.C. Circuit decision on *Wisconsin v. EPA* ruled for EPA on a number of issues but concluded that EPA's interpretation of the Good Neighbor Provision was unreasonable with regard to the timing of upwind emissions reductions. The court remanded the CSAPR Update without vacatur. EPA is currently reviewing the decision and discussing options.
 - CSAPR Closeout - Litigation is pending in the D.C. Circuit. Considering September 13, 2019, *Wisconsin* decision, Court granted EPA's motion to postpone oral arguments, originally scheduled for September 20, 2019.



Preliminary 2017-2019 Design Values for 2008 Ozone Nonattainment Areas

(75 ppb NAAQS)



1997 Ozone NAAQS Implementation Update

- The February 2018 *South Coast II* ruling upheld EPA's general authority to revoke a prior NAAQS with adequate antibacksliding protections ("controls") but reversed several key antibacksliding approaches for the revoked 1997 ozone NAAQS, including:
 - duty to reclassify areas upon failure to timely attain; and
 - "redesignation substitute" mechanisms to terminate antibacksliding controls
 - 2nd 10-year maintenance plans
- The ruling held that to remove antibacksliding requirements, areas that were designated nonattainment for the 1997 NAAQS at time of revocation needed to meet all redesignation requirements under CAA section 107(d)(3). Recent related proposed approvals include:
 - Houston-Galveston-Brazoria, TX area (84 FR 22093; 5/16/19)
 - Dallas-Fort Worth, TX area (84 FR 29471; 6/24/19)
- EPA provided "Resource Document" to assist states with preparing second 175A maintenance plans, including "limited maintenance plans." <https://www.epa.gov/ground-level-ozone-pollution/1997-ozone-national-ambient-air-quality-standards-naaqs-nonattainment>



2010 SO₂ NAAQS Implementation Update

- **Approved attainment plans:** Currently, 15 SIPs for the initial 29 Round 1 nonattainment areas have been approved. HQ is working with affected Regional Offices and states on addressing approvability issues for the remaining SIPs.
- **Mandatory duty deadline lawsuit:**
 - The Center for Biological Diversity, Center for Environmental Health and the Sierra Club (CBD) filed suit in the Northern District of California on June 14, 2018 (amended on December 17, 2018) to compel EPA to act on several SIPs submitted for Round 1 areas. The lawsuit also sought to compel EPA to issue findings of failure to submit (FFS) for several nonattainment areas designated in Round 2 or for the 1971 SO₂ NAAQS.
 - On September 4, 2019, EPA published in the Federal Register a proposal notice under CAA section 113(g) for 30-day public comment on a draft consent decree (CD) with the CBD which calls for EPA to:
 - › Take action on 12 submitted Round 1 SIPs by October 2020 (including one by April 2020).
 - › Issue Findings of Failure to Submit (FFS), which EPA has already completed on September 9, 2019 (two areas).
- **Interstate transport:** EPA continues to make good progress approving submitting SO₂ interstate transport SIPs and continues to work with states to submit approvable SIPs addressing the good neighbor provision.



Round 4 SO₂ NAAQS Area Designations

- EPA must designate all remaining portions of the U.S. by December 31, 2020.
- Round 4 Process Guidance Memo issued September 5, 2019.

Milestone	Date
States and tribes certify 2019 SO ₂ monitoring data	No later than May 1, 2020
States and tribes may submit updated recommendations and supporting information for area designations to EPA*	No later than May 1, 2020
States submit exceptional events demonstrations for event-influenced SO ₂ monitoring data from 2017-2019	No later than May 1, 2020
EPA notifies states and tribes concerning any intended modifications to their recommendations (120-day letters)	On or about August 13, 2020
EPA publishes public notice of state and tribal recommendations and EPA's intended modifications, initiating a 30-day public comment period	On or about August 26, 2020 (No later than 120 days prior to final designations)
End of 30-day public comment period	On or about September 25, 2020
In response to EPA's intended designations, states and tribes submit additional information, if desired, to demonstrate why EPA's proposed modification in the 120-day letter to the state's recommended designation or boundary is inappropriate	No later than October 16, 2020
EPA signs notice promulgating final SO ₂ area designations for Round 4	On or about December 17, 2020 (No later than December 31, 2020)

* For any remaining undesignated area (i.e., those areas that installed and began operating EPA-approved SO₂ monitoring networks pursuant to the DRR and that have not been previously designated).



Lead (Pb) NAAQS Implementation Update

- Of the 22 areas designated nonattainment for the 2008 Pb NAAQS, 11 have been redesignated to attainment
- All areas have fulfilled attainment planning requirements
- Current focus:
 - Remaining redesignations
 - Monitor removal issues



Exceptional Events Update

- EPA has concurred on 30 state demonstrations that were submitted since EPA revised the Exceptional Events Rule in September 2016
- We continue developing new guidance documents to help right-size demonstrations and facilitate the exceptional events process – Thank you for feedback on drafts!
 - **Stratospheric Ozone Intrusion Guidance – Released November 2018**
 - **Updated High Wind Dust Event Guidance – Released April 4, 2019**
 - **Clarification Memo on Data Modification – Released April 4, 2019**
 - **Prescribed Fire Guidance – Released August 9, 2019**
- EPA's exceptional events webpage provides key resources, including example demonstrations for Ozone and PM, and will continue to be updated as new materials become available

<https://www.epa.gov/air-quality-analysis/treatment-air-quality-data-influenced-exceptional-events>



Regional Haze Program

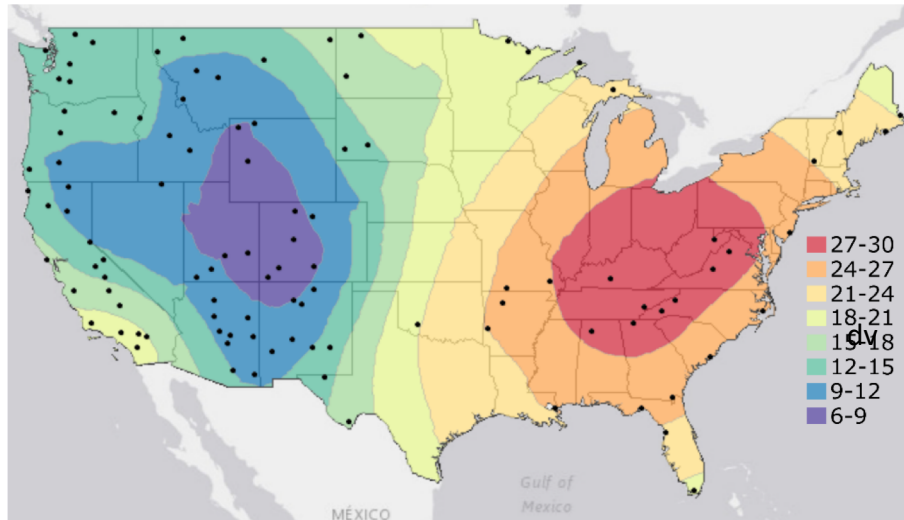
- “Regional haze” is defined at 40 CFR 51.301 as “visibility impairment that is caused by the emission of air pollutants from numerous anthropogenic sources located over a wide geographic area.”
- The Regional Haze Rule (RHR or Rule) requires states to submit a series of State Implementation Plans (SIPs) to protect visibility in Class I areas and governs states’ obligations and EPA’s review of periodic SIPs developed for the second and subsequent implementation periods.
- In January 2017, EPA issued a final rule updating the regional haze program, including revising portions of the visibility protection rule promulgated in 1980 and the Regional Haze Rule promulgated in 1999.



First Planning Period: Visibility is Improving

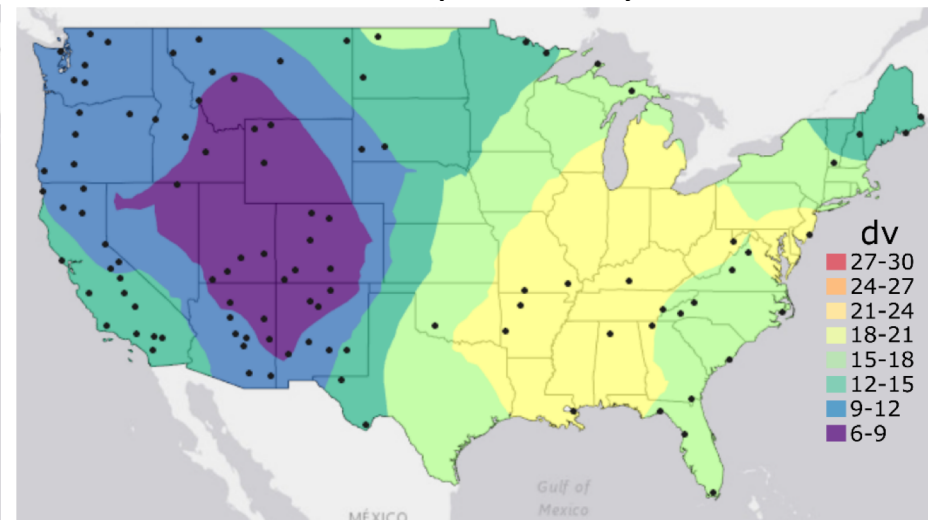
2000-2004

Visibility (dv) on 20% most
impaired days



2013-2017

Visibility (dv) on 20% most
impaired days



- The National Park Service estimates that as of mid-2014, emission controls established under the first planning period led to approximately 500,000 tons/year of SO₂ and 300,000 tons/year of NO_x reductions
- EPA estimates that visibility has improved significantly with the average visual range increased by 20 – 30 miles in Class I areas

Regional Haze: Ongoing Work

- Moving forward as described in the September 11, 2018, Regional Haze Reform Roadmap and supporting states for the second and future implementation periods:
 - 2018 Technical Guidance on Tracking Visibility Progress (completed Dec. 2018)
 - Guidance on Regional Haze State Implementation Plans for the Second Implementation Period (completed August 2019)
 - 2028 Modeling including estimates of U.S. and international source contributions for Class I Areas (completed September 2019)
- Second planning period SIPs due by July 31, 2021
- EPA remains engaged in SIP development
 - Some states plan to submit in 2019
 - We encourage early engagement on all SIPs
 - Regional Offices are available for questions or preliminary feedback
 - We are participating in the CenSARA Regional Haze National Meeting, October 28-30 in St. Louis, MO



NAAQS Implementation Milestones (August 2019)

Pollutant	Final NAAQS Signature	Nonattainment Designations Effective	Infrastructure SIP Due	Attainment Plans Due	Attainment Date
PM _{2.5} (2006)	Oct 2006	Dec 2009	Oct 2009	Dec 2014	Dec 2015 (Moderate) Dec 2019 (Serious)
Pb (2008)	Oct 2008	Dec 2010-2011	Oct 2011	June 2012-2013	Dec 2015-2019
PM _{2.5} (2012)	Dec 2012	Apr 2015	Dec 2015	Oct 2016 (Moderate)	Dec 2021 (Moderate) Dec 2025 (Serious)
NO ₂ (2010) (primary)	Jan 2010	Feb 2012	Jan 2013	N/A	N/A
SO ₂ (2010) (primary)	June 2010	Oct 2013, Sept 2016, Apr 2018 (early 2021)	June 2013	Apr 2015, Mar 2018, Oct 2019 (mid 2022)	Oct 2018, Sept 2021, Apr 2023 (early 2026)
Ozone (2008)	Mar 2008	July 2012	Mar 2011	July 2015-2016*	July 2021-2032
Ozone (2015)	Oct 2015	Aug 3, 2018 (Sep 24, 2018 for San Antonio, TX)	Oct 2018	Aug 2021-2022	Aug 2021-2038

* January 2017 for areas reclassified from Marginal to Moderate. August 2020 for areas reclassified from Moderate to Serious.

** for areas classified from Serious to Extreme



Questions and Comments

