

FY 2018-2019 Agency Priority Goal Action Plan

Improve Air Quality by Implementing Pollution Control Measures to Reduce the Number of Nonattainment Areas

Goal Leader:

Elizabeth Shaw, Deputy Assistant Administrator, Office of Air and Radiation

Deputy Goal Leader:

Peter Tsirigotis, Director, Office of Air Quality Planning and Standards Office of Air and Radiation



Fiscal Year 2019, Quarter 4

Overview

Goal Statement

o Improve air quality by implementing pollution control measures to reduce the number of nonattainment areas. By September 30, 2019, EPA, in close collaboration with states, will reduce the number of nonattainment areas to 138 from a baseline of 166.

Challenge

- o EPA's authority to approve a state's request to redesignate nonattainment areas hinges on the state meeting the minimum requirements of the Clean Air Act (CAA), which include:
 - A demonstration that the area has air quality that is attaining the National Ambient Air Quality Standards (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.

Opportunity

 A number of nonattainment areas have attained a NAAQS or are close to attaining a NAAQS, which is a key step toward redesignation.

Leadership Structure

Goal Leader:
Elizabeth Shaw
Deputy Assistant
Administrator

Deputy Goal Leader:
Peter Tsirigotis, Director
Office of Air Quality Planning
and Standards

Goal Structure and Strategies

Strategy 1: EPA will work with air agencies* to facilitate submittal of timely and approvable attainment plans (as a means of bringing areas into attainment) and redesignation requests, as appropriate.

- Develop and provide data, analysis, and technical tools and assistance to industries, states, communities, and tribes to meet CAA obligations and other statutory requirements.
- Focus on ways to improve the efficiency and effectiveness of the State Implementation Plan/Tribal Implementation Plan (SIP/TIP) process, including the Agency's own review process, with a goal of maximizing timely processing of state/tribal-requested implementation plan actions.
- o Continue tracking air quality improvements through the collection of monitoring data.

Strategy 2: Through collaboration with state, local and tribal air agencies, EPA will take actions to improve air quality in nonattainment areas so these areas can expeditiously attain the NAAQS. EPA will:

- o Operate effective nationwide and multi-state emissions control programs, including:
 - The acid rain program and the cross-state air pollution rule, which address global, national, and regional air pollutants from the power sector and other large stationary sources;
 - National mobile source emissions standards, which address emissions from highway and off-road vehicles, small engines, locomotives, and marine vessels; and
 - New source performance standards and preconstruction permit review program, which ensure the best demonstrated emission control technologies are installed as industrial infrastructure is modernized.
- o Fulfill its NAAQS implementation oversight role using tools available under the CAA to hold states accountable for fulfilling attainment planning responsibilities. Example actions include:
 - Taking action on state implementation plans (SIPs); and
 - Determining whether an area has attained a NAAQS by the required attainment date.

^{*}Air agencies refer to air pollution control agencies at the state, local and tribal level.

Overview

External Factors

- Under the CAA, states are responsible for initiating the redesignation process, a process that demands time and resources from states which may be limited for such purposes.
- The CAA does not require states to request redesignation, and in some cases states may determine that undertaking the optional process is not a priority.
- Proposed mitigation action: Regular communication between EPA regional offices and air agencies to discuss prioritizing redesignation requests and identifying solutions to challenges/disincentives that may create barriers for states to request redesignation.

EPA Lean Management System (ELMS)

- EPA continues to deploy its new EPA Lean Management System (ELMS) to achieve the results set forth in the Strategic
 Plan. As part of ELMS, EPA has conducted multi-day process improvement events to make significant progress in specific priority areas, including permitting, identified in the Strategic Plan.
- O Visual management is a major aspect of ELMS that is being used to ensure that improvements from the events are achieved and will be sustained over time. Poster boards with regularly updated performance data serve as visual management for monitoring progress towards meeting the targets set forth in the Strategic Plan, while additional poster boards are being used to track the work flow necessary to achieving the targets. Managers and staff have weekly stand-up huddle meetings in front of their visual management boards to discuss the performance and flow of the process.
- O In addition, National Programs and Regional Offices hold Monthly Business Review meetings to go over both the strategic measures tracked on scorecards, and the implementation plans that track progress on Strategic Plan and priority area projects identified for EPA under President Trump's Executive Order on a Comprehensive Plan for Reorganizing the Executive Branch. The Administrator and Chief of Operations hold quarterly performance reviews to monitor overall progress on the agency's Strategic Plan and priority area projects.
- ELMS is designed to ensure that EPA regularly monitors progress toward meeting targets and takes immediate action if expected performance is off track.

- O During the first quarter of FY 2018, no existing nonattainment areas were redesignated to attainment. The overall goal is on track.
- Specific Q1 activities included:
 - EPA Regional offices held calls/meetings with their respective air agencies and discussed planning and redesignation priorities.
 - EPA issued memorandum on "Supplemental Information on the Interstate Transport State Implementation Plan Submission for the 2008 Ozone National Ambient Air Quality Standards under Clean Air Act Section 110(a)(2)(D)(i)(I)."
 - EPA issued Findings of Failure to Submit for 2008 ozone NAAQS nonattainment areas with overdue SIP elements (82 FR 58118; December 11, 2017).
 - EPA continued to operate nationwide and multi-state programs, the acid rain program and the cross-state air pollution rule; national mobile source emissions standards; new source performance standards; and preconstruction permit review program.

- o During the second quarter of FY 2018, three nonattainment areas were redesignated to attainment:
 - 2008 Lead NAAQS: Chicago, IL
 - 2008 Lead NAAQS: Granite City, IL
 - 2008 Lead NAAQS: Delta, OH
- A fourth redesignation was signed on March 29, published in the Federal Register on April 4, 2018, and will be effective May 4, 2018, so the overall APG is on track.
- Specific Q2 activities included:
 - EPA regional offices held calls/meetings with their respective air agencies and discussed planning and redesignation priorities.
 - EPA issued memorandum on "Information on the Interstate Transport State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards (NAAQS) under Clean Air Act (CAA) Section 110(a)(2)(D)(i)(I)" to help states meet their Good Neighbor obligations for the 2015 ozone NAAQS (March 27, 2018).
 - EPA issued Findings of Failure to Submit for 2012 PM2.5 NAAQS Moderate nonattainment areas with overdue SIP elements (83 FR 14759; April 6, 2018). The findings establish a deadline by which states will become subject to sanctions unless they submit plans to address their PM2.5 NAAQS nonattainment areas.
 - EPA continued to operate nationwide and multi-state programs for the acid rain program and the cross-state air pollution rule; national mobile source emissions standards; new source performance standards; and preconstruction permit review program, all of which play a role in reducing emissions of criteria pollutants.

- o During the third quarter of FY 2018, one nonattainment area was redesignated to attainment:
 - 1987 PM₁₀ National Ambient Air Quality Standards (NAAQS): Sheridan County, WY
 - In order to meet the Q3 goal, four nonattainment areas needed to be redesignated to attainment. In Q3, Sheridan County, WY (1987 PM10 NAAQS) was redesignated to attainment. Two additional redesignations (Troy, AL (2008 Lead) and Chico, CA (2006 PM2.5) were signed prior to the end of Q3 and will become effective in Q4.
 - EPA will continue to work with all air agencies with qualifying nonattainment areas to facilitate timely redesignation requests.
- Specific Q3 activities included:
 - EPA regional offices held calls/meetings with their respective air agencies and discussed planning and redesignation priorities.
 - EPA continued to operate nationwide and multi-state programs for the acid rain program and the cross-state air pollution rule; national mobile source emissions standards; new source performance standards; and preconstruction permit review program, all of which play a role in reducing emissions of criteria pollutants.
- o Additional Q3 information related to National Ambient Air Quality Standards (NAAQS) attainment:
 - EPA and the Department of Justice continue to engage with the D.C. Circuit Court of Appeals regarding the timeline for its response regarding the February 2018 decision in South Coast Air Quality Management District v. EPA, No. 15-1115 (D.C. Cir. 2018). This decision could prompt additional work with states regarding redesignation requests.

- o During the fourth quarter of FY 2018, 3 nonattainment areas were redesignated to attainment:
 - Troy, AL (2008 Lead)
 - Chico, CA (2006 PM2.5)
 - St. Louis-St. Charles-Farmington, MO-IL (2008 Ozone)
 - MO part redesignated FY 2018 Q4; IL part redesignated FY 2018 Q2
 - EPA will continue to work with all air agencies with qualifying nonattainment areas to facilitate timely redesignation requests.
- Specific Q4 activities included:
 - EPA Regional offices held calls/meetings with their respective air agencies and discussed planning and redesignation priorities.
 - EPA continued to operate nationwide and multi-state programs for the acid rain program and the cross-state air pollution rule; national mobile source emissions standards; new source performance standards; and preconstruction permit review program, all of which play a role in reducing emissions of criteria pollutants.
- o Additional Q4 information related to National Ambient Air Quality Standards (NAAQS) attainment:
 - The D.C. Circuit Court of Appeals denied EPA's request for rehearing regarding the February 2018 decision in South Coast Air Quality Management District v. EPA, No. 15-1115 (D.C. Cir. 2018). The result of the final decision is that states responsible for 35 areas designated nonattainment for the 1997 ozone NAAQS must do additional work to qualify these areas for redesignation.
- Overall in FY 2018, EPA took final action on state requests to redesignate 11 areas to attainment. The effective date for all but four of the areas occurred by September 30, 2018. Looking ahead, EPA is reviewing its projections for FY 2019.

Summary of Progress – FY 2019 Q1 and Q2

- o During the first two quarters of FY 2019, all or portions of 5 nonattainment areas were redesignated to attainment:
 - Tampa, FL (2008 Lead)
 - Shoshone County; City of Pinehurst, ID (1987 PM-10)
 - Shoshone County; Pinehurst Expansion Area, ID (1987 PM-10)
 - Pottawattamie County, IA (2008 Lead)
- o The fifth area action was for:
 - St. Louis, MO-IL (1997 PM-2.5)
 - Missouri portion: redesignated in August 2018; IL portion: redesignation proposed on 3/21/2019
- o Specific Q1 and Q2 activities included:
 - EPA Regional offices held calls/meetings with their respective air agencies and discussed planning and redesignation priorities.
 - EPA continued to operate nationwide and multi-state programs for the acid rain program and the cross-state air pollution rule; national mobile source emissions standards; new source performance standards; and preconstruction permit review program, all of which play a role in reducing emissions of criteria pollutants.
- o Additional Q1 and Q2 information related to National Ambient Air Quality Standards (NAAQS) implementation:
 - In Q1 and Q2, OAQPS issued the following guidance document to assist states with consideration of air quality data affected by exceptional events in NAAQS implementation efforts:
 - "Guidance on the Preparation of Exceptional Events Demonstrations for Stratospheric Ozone Intrusions (November 2018)."
- EPA will continue to work with all air agencies with qualifying nonattainment areas to facilitate timely redesignation requests.

- o During the third quarter of FY 2019, 5 nonattainment areas were redesignated to attainment.
 - PM-10 (1987) Missoula county, Missoula, and Vicinity, MT
 - PM-2.5 (2012) Cleveland, OH
 - PM-2.5 (1997) St. Louis, MO-IL
 - SO2 (2010) Lake County, OH and
 - SO2 (2010) Nassau County, FL
 - Note MD and VA portions of the Washington, DC-MD-VA 2008 Ozone area were redesignated in Q3. The redesignation for the DC portion will be effective on 8/15/2019, and the redesignation for the entire area will be counted in Q4.
- Specific Q3 activities included:
 - EPA Regional offices held calls/meetings with their respective air agencies and discussed planning and redesignation priorities.
 - EPA continued to operate nationwide and multi-state programs for the acid rain program and the cross-state air pollution rule; national mobile source emissions standards; new source performance standards; and preconstruction permit review program, all of which play a role in reducing emissions of criteria pollutants.
- Additional implementation efforts for the National Ambient Air Quality Standards (NAAQS):
 - In Q3, OAQPS issued several guidance documents and a clarification memo.
 - "Guidance on the Preparation of Demonstrations in Support of Requests to Exclude Air Quality Data Influenced by High Wind Dust Events Under the 2016 Exceptional Events Rule (April 2019)."
 - "Clarification Memo on Additional Methods, Determinations and Analyses to Modify Air Quality Beyond Exceptional Events (April 2019)."
 - On 5/30/2019, OAR issued "Fine Particulate Matter (PM2.5) Precursor Demonstration Guidance." This
 guidance provides recommendations for state, local and tribal agencies preparing optional demonstrations
 to show that a particular PM2.5 precursor pollutant should be considered insignificant for attainment
 planning or nonattainment new source review program purposes.

Summary of Progress – FY 2019 Q3 (continued)

- Regional office and headquarters staff continue early engagement efforts with air agencies pursuant to the
 "2015 Ozone NAAQS Quick Start Guide for Early Engagement between EPA and Air Agencies" (Feb. 2019).
 This checklist lays out a sample timeline of key milestones intended to help EPA and state and local air
 agencies collaborate early and throughout the SIP development process for the 2015 8-hour ozone
 standard.
- EPA will continue to work with all air agencies with qualifying nonattainment areas to facilitate timely redesignation requests.
- Based on additional analysis and discussions that the Regions held with air agencies in FY 2018, OAR expects to miss the FY 2019 target of 138.
- EPA is currently undertaking an analysis to project progress towards its long-term performance goal by updating the anticipated submittal timing for redesignation requests for areas that qualify for redesignation.
- o There are several reasons the targets for redesignating areas may have changed:
 - Attaining air quality in nonattainment areas serves as the foundation for redesignation. As air quality improves (or degrades), the opportunity for an area to qualify for redesignation can change. If air quality data issues arise (e.g., data is found to be invalid or incomplete), the state or EPA may not be able to determine whether an area qualifies for redesignation.
 - States must submit a redesignation request and maintenance plan to EPA in order for the agency to review and approve a request for redesignating an area to attainment. State priorities change over time, and the anticipated submittal dates for redesignation requests for areas that qualify for redesignation may subsequently change.
 - Some redesignation requests/maintenance plans implicate certain Agency policies that may be under review or revision. EPA action to approve those requests/plans have been (or may be) put on hold while the underlying policies/issues are worked out.
 - Court decisions can also impact redesignations.

- o EPA took final effective action on state requests to redesignate 3 nonattainment areas to attainment. The effective date for these 3 areas occurred in FY 2019.
 - SO2 (2010) Terre Haute, IN;
 - Ozone-8Hr (2008) Washington, DC-MD-VA (remaining DC portion of multi-state area); and
 - SO2 (2010) Central New Hampshire, NH
- EPA took final action on state requests to redesignate 4 nonattainment areas to attainment and the effective date for those 4 areas occurred in the first month of FY 2020.
 - Lead (1978) Lewis & Clark County (part); City of East Helena and vicinity, MT;
 - SO2 (1971), East Helena Area, MT;
 - PM-2.5 (2012) Delaware County, PA; and
 - PM-2.5 (2012) Lebanon County, PA

- o As expected and noted in the FY 2019 Q3 update, EPA missed the APG target of 138 remaining nonattainment areas by nine areas (the APG target was based on projections prior to FY 2018 i.e., during CY 2017).
 - Based on discussions with state air agencies over the past year, EPA projected 146 of the 166 nonattainment areas would remain at the end of FY 2019 (166 is the baseline number of nonattainment areas that was defined in EPA's Strategic Plan in the beginning of FY 2018).
 - At the end of FY 2019, 147 areas remained in nonattainment.
 - Looking ahead, EPA projects redesignating a total of 13 nonattainment areas by the end of FY 2020 (including four that recently became effective in October), which should reduce the remaining amount of nonattainment areas to 134 by September 2020.
- o With regard to the goal of taking timely actions on SIPs, all EPA Regional Offices and OAQPS are now using visual management to track work flow of SIPs.
- Early engagement on SIPs under development is another key component of ensuring that EPA can take timely action on SIPs once they are formally submitted. Through regular meetings with EPA Regional Offices and at national level meetings, EPA is encouraging air agencies to engage with EPA early during SIP development.
- o This focus on early engagement will be reflected in a SIP Lean Guide, which provides a suggested timeline for state engagement with EPA during SIP development.
- O With regard to the goal of eliminating the SIP backlog, EPA is working with air agencies to encourage withdrawal of certain SIPs including those that are superseded or no longer needed, as well as some SIPs that may be disapprovable or need substantial revision by states before EPA can take approval action on the SIP.

Key Milestones

Strategy 1: EPA will work with air agencies to facilitate submittal of timely and approvable attainment plans (as a means of bringing areas into attainment) and redesignation requests, as appropriate.

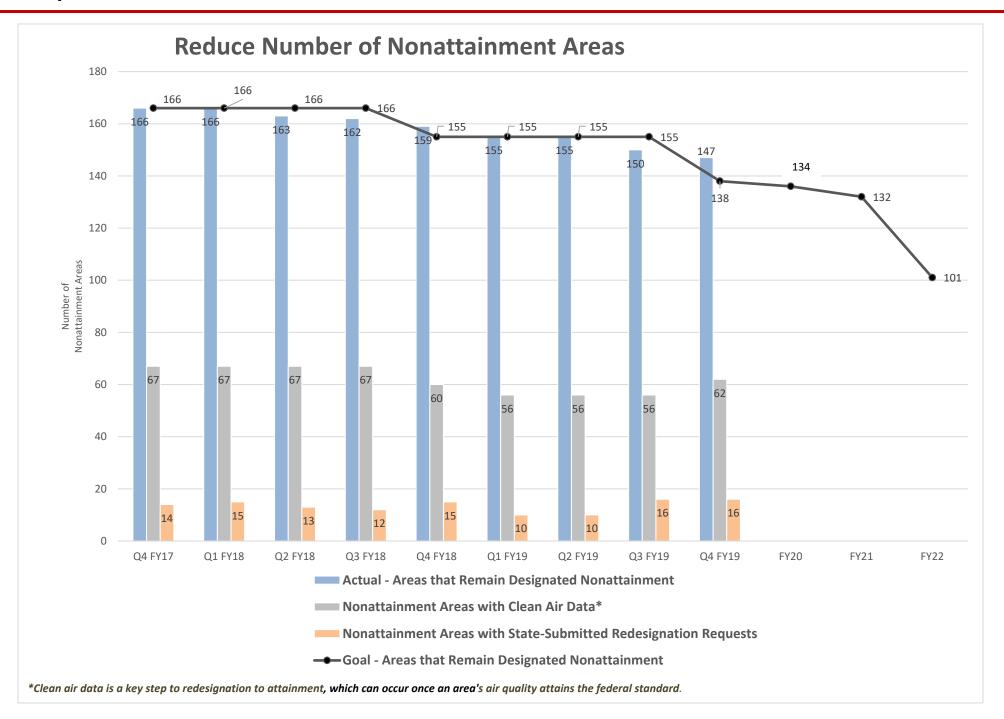
| Milestone Summary | | | | | | | | | |
|--|-----------------------|---------------------|--------------------------------|-----------|---|--|--|--|--|
| Key Milestones | Milestone Due Date | Milestone Status | Change from last quarter | Owner | Comments | | | | |
| Regional offices hold calls/meetings with their respective air agencies and discuss planning and redesignation priorities. | Quarterly | Met | No change | OAR/OAQPS | Regional offices met or exceeded the milestone for Q4. | | | | |
| Improve the efficiency and effectiveness of the SIP/TIP process, including the Agency's own review process, with a goal of maximizing timely processing of state/tribal-requested implementation plan actions. | Quarterly | On-going | No change | OAR/OAQPS | Regional and headquarters offices continue to implement visual management systems and standard work products originally launched in FY 2018 to meet the objectives of the EPA Lean Management System (ELMS). Where applicable, selected Agency air program executives began incorporating SIP-related ELMS project goals into their FY 2019 annual performance plans. | | | | |
| Continue to track air quality improvements through collection, analysis, and reporting of monitoring data. | Annual | On-going | No change | OAR/OAQPS | In July 2019, EPA released its annual report on air quality, <i>Our Nation's Air: Status and Trends Through 2018</i> , which documents the improvements in air quality across the United States over more than 45 years. This report highlights that, between 1970 and 2018, the combined emissions of six key pollutants dropped by 74%, while the U.S. economy grew more than three times (https://www.epa.gov/air-trends). | | | | |

Key Milestones (Continued)

Strategy 2: Through collaboration with state, local and tribal air agencies, EPA will take actions to improve air quality in nonattainment areas so these areas can expeditiously attain the NAAQS.

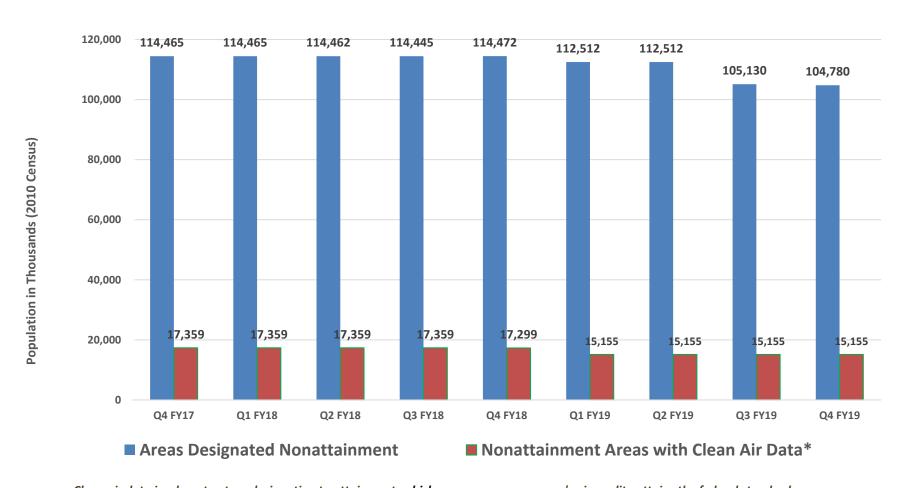
| Milestone Summary | | | | | | | | | |
|---|-----------------------|---------------------|--------------------------------|---------------|---|--|--|--|--|
| Key Milestones | Milestone Due Date | Milestone Status | Change from last quarter | Owner | Comments | | | | |
| Provide tools and guidance documents (as necessary). | Quarterly | Met | No change | OAR/ OAQPS | EPA issued two guidances and one technical support document to assist states as they develop plans to attain/maintain air quality and comply with regional haze obligations: Prescribed Fire on Wildland that May Influence Ozone and Particulate Matter Concentrations (8/2019). Guidance on Regional Haze State Implementation Plans for the Second Planning Period (8/2019). Modeling data and associated technical support document for the EPA's updated 2028 visibility air quality modeling (9/2019). Other related work: Continued communications with air agencies regarding withdrawal of certain SIP submittals in the backlog. | | | | |
| Operate nationwide and multi-state programs, the acid rain program and the cross-state air pollution rule; national mobile source emissions standards; new source performance standards; and preconstruction permit review program. | Quarterly | Met | No change | OAR | Regional and headquarters offices continue nationwide and multi-state program operations for the acid rain program and the cross-state air pollution rule; national mobile source emissions standards; new source performance standards; and preconstruction permit review program. | | | | |
| Take appropriate oversight actions required by the Clean Air Act (as necessary). | Quarterly | Met | No change | OAR/ OAQPS | Regional and headquarters offices continue to work with states on the development of NAAQS attainment plans and review and approval of such plans. | | | | |

Key Indicators



Key Indicators (continued)

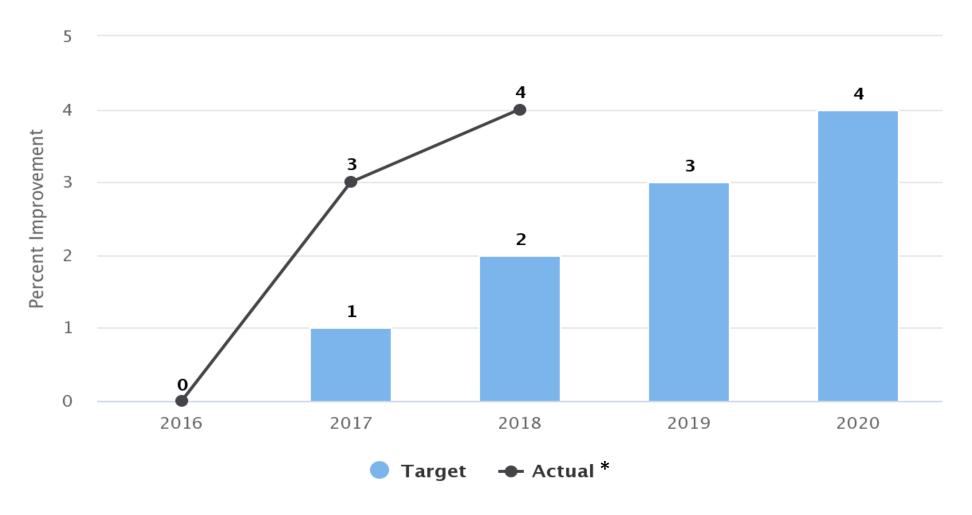
Population Living in Areas Designated Nonattainment – Projections at end of FY19



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

Key Indicators (continued)

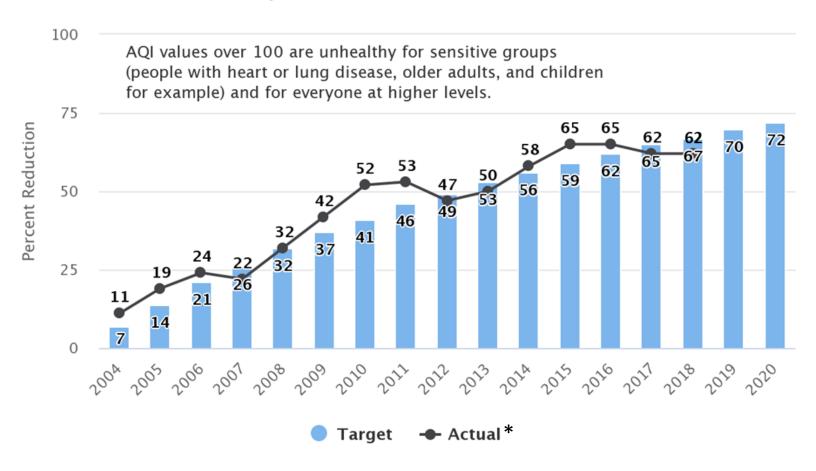
Percent of Measured Air Quality Improvement in Counties Not Meeting the NAAQS from a 2016 Baseline



^{*}Data for the "actual" update are available August of the following year.

Key Indicators (continued)

Cumulative percent reduction in the number of days with Air Quality Index (AQI) values over 100



^{*}Data for the "actual" update are available August of the following year. Cumulative percent reduction is calculated from the baseline year 2003. This includes both nonattainment and attainment areas, and may include days with AQI values over 100 due to wildfires or other exceptional events.

Data Accuracy and Reliability

Measurement and Baseline

O The nonattainment area metric will track the status of 166 areas designated nonattainment for non-revoked National Ambient Air Quality Standards (NAAQS) at the end of FY 2017 (9/30/2017). New areas designated nonattainment after 10/1/2017 will not be added to the baseline. The other air quality indicators rely on data from EPA's Air Quality System and other information.

Data Sources

- o The EPA Green Book, a public accessible website https://www.epa.gov/green-book
- o Federal Register notices documenting EPA final action on state redesignation requests.

Methodology

- EPA's monthly Green Book publication includes a summary of nonattainment areas, taking into account all final redesignation actions published in the Federal Register.
- o Prior to publishing a new monthly Green Book report, an EPA contractor runs a quality assurance check.
- A Data Quality Record has been developed for the strategic measure associated with this Agency Priority Goal: https://www.epa.gov/sites/production/files/2018-05/documents/dqr-1-1-nonattainment-areas.pdf.

Additional Information – Contributing Programs

Organizations

- Office of Air and Radiation (OAR)
 - Office of Air Quality Planning and Standards (OAQPS)
 - Office of Transportation and Air Quality (OTAQ)
 - Office of Atmospheric Programs (OAP)
- o Regional offices
- State, local, and tribal air agencies (S/L/T)

Program Activities

- o S/L/T develop State/Tribal Implementation Plans
- o EPA develops regulations and guidance, as necessary, to facilitate S/L/T implementation
- o EPA provides technical assistance and tools, as necessary, to facilitate S/L/T implementation

Regulations

- o EPA regulations addressing NAAQS and NAAQS implementation include 40 CFR Parts 49 thru 99
- o Air quality management and emissions limiting regulations established by other federal and state agencies, as applicable

Policies

 EPA and S/L/T policies related to NAAQS implementation (e.g., Procedures for Processing Requests to Redesignate Areas to Attainment, etc.)

Other Federal Activities

- Transportation conformity DOT/FHWA (Federal Highway Administration)
- Fire management USDA (U.S. Forest Service), DOI (Park Service)
- o International pollution management treaties Department of State

Stakeholder / Congressional Consultations

 The nonattainment redesignation process is a federal and state partnership; EPA works with states and tribes to establish priorities including redesignations