

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

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Planning and Standards

Office of Air and Radiation

Theme: National Resources and Environment

# Overview

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## Goal Statement

- 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

- 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, 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

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# Goal Structure & 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.
  - 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:**
  - 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.
  - 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);
    - Determining whether an area has attained a NAAQS by the required attainment date;
    - Making findings of failure to submit required SIPs and imposing related CAA sanctions;
    - Reclassifying areas to a higher classification upon failure to attain by the required attainment date and establishing new state plan submission deadlines; and
    - Developing Federal Implementation Plans when states fail to submit complete SIPs, or TIPs in the case of tribes.

*\*Air agencies refer to air pollution control agencies at the state and tribal level.*

# Goal Structure & Strategies, continued

## ○ 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 state 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 will use the deployment of the new EPA Lean Management System (ELMS) to achieve the results set forth in the Strategic Plan. As part of ELMS, EPA will conduct multi-day process improvement events to make significant progress in priority areas identified in the Strategic Plan, including this one.
- Visual management will then be used to ensure that improvements from the events are achieved and sustained over time. Poster boards with regularly updated performance data will serve as visual management for monitoring progress towards meeting the targets in the Strategic Plan, while additional poster boards will track the flow of the work needed to achieve the targets. Managers and staff members will participate in weekly stand-up huddle meetings in front of their visual management boards to discuss the performance and flow of the process.
- In addition, National Programs and Regional Offices will hold monthly business reviews 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 will hold quarterly reviews to monitor overall progress on the agency's Strategic Plan and priority area projects.
- ELMS is designed to make sure that EPA is regularly monitoring progress towards meeting the targets set forth in the Strategic Plan, and taking immediate action if expected performance is off track.

# Summary of Progress – FY 2018 Q1

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- During the first quarter of FY 2018 as expected, no existing nonattainment areas were re-designated to attainment. The overall goal is on track.
- Specific Q1 activities included:
  - EPA Regional offices held calls/meetings with their respective state 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.

# Summary of Progress – FY 2018 Q2

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- During the second quarter of FY 2018, three nonattainment areas were re-designated to attainment:
  - 2008 Lead NAAQS: Chicago, IL
  - 2008 Lead NAAQS: Granite City, IL
  - 2008 Lead NAAQS: Delta, OH
- The Q2 goal was for four areas to be redesignated to attainment. 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 state 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 under Clean Air Act 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, 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.

# 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 Milestone	Milestone Due Date	Milestone Status	Change from last quarter	Owner	Comments
Regional offices hold calls/meetings with their respective state air agencies and discuss planning and redesignation priorities.	Quarterly	Met	No change	OAR/ OAQPS	Regional offices met or exceeded the milestone for Q2 FY18.
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.	Q4 FY18	On-going	No change	OAR/ OAQPS	EPA held a lean event with select state/local air agency participants in mid-February focused on improving the EPA's SIP review process. EPA is now moving forward to implement a visual management system for SIPs and associated standard work. EPA is continuing to track SIP related metrics and make improvements to its internal process as well as how it collaborates with external partners (such as air agencies) to improve the overall process.
Continue to track air quality improvements through collection, analysis, and reporting of monitoring data.	Annual	On-going	No change	OAR/ OAQPS	

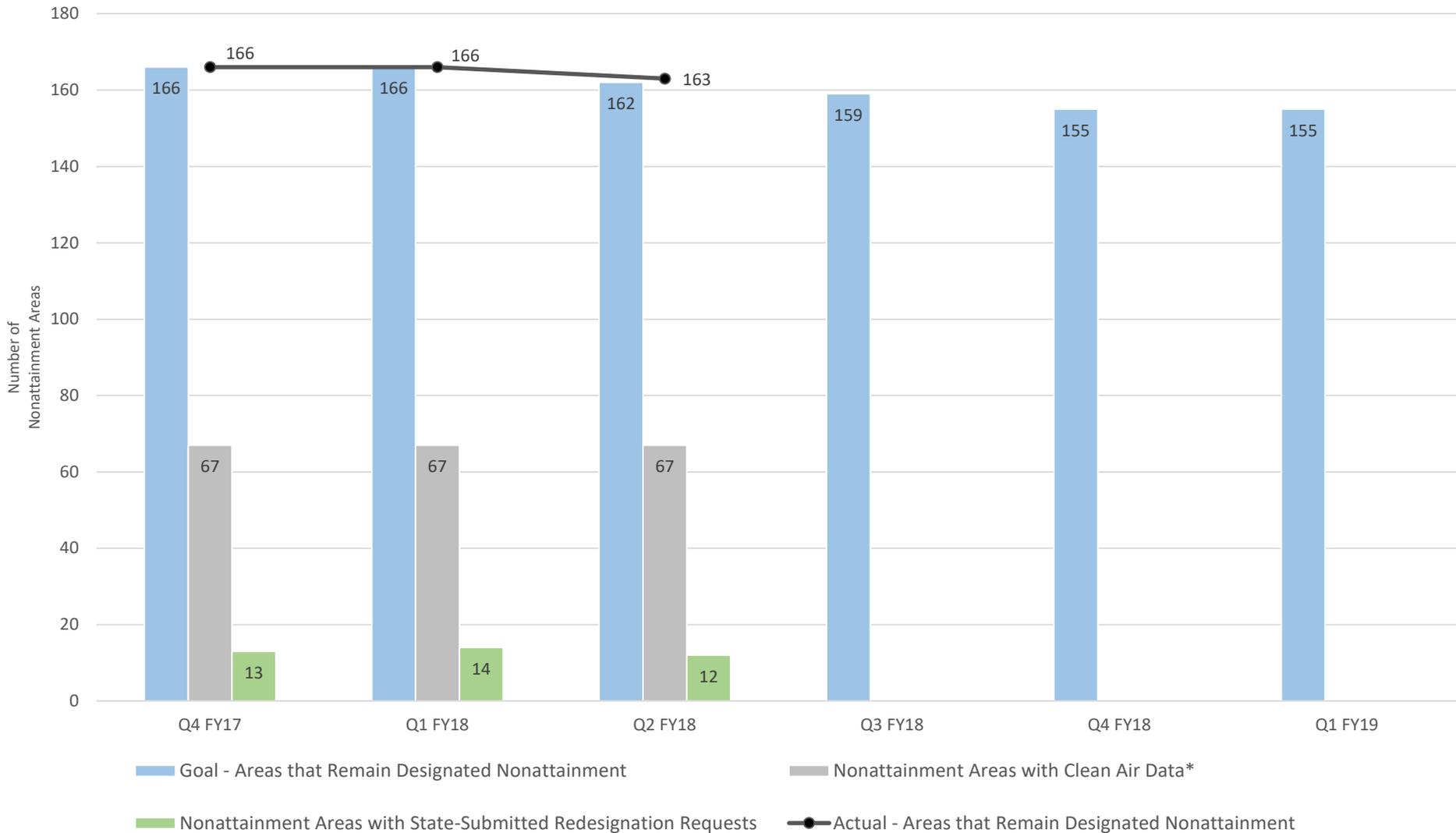
# Key Milestones

- **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 Milestone	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 the following guidance document(s):  Information on the Interstate Transport State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards under Clean Air Act Section 110(a)(2)(D)(i)(I) <a href="https://www.epa.gov/airmarkets/march-2018-memo-and-supplemental-information-regarding-interstate-transport-sips-2015">https://www.epa.gov/airmarkets/march-2018-memo-and-supplemental-information-regarding-interstate-transport-sips-2015</a>
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	
Take appropriate oversight actions required by the Clean Air Act (as necessary).	Quarterly	Met	No change	OAR/ OAQPS	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).

# Key Indicators

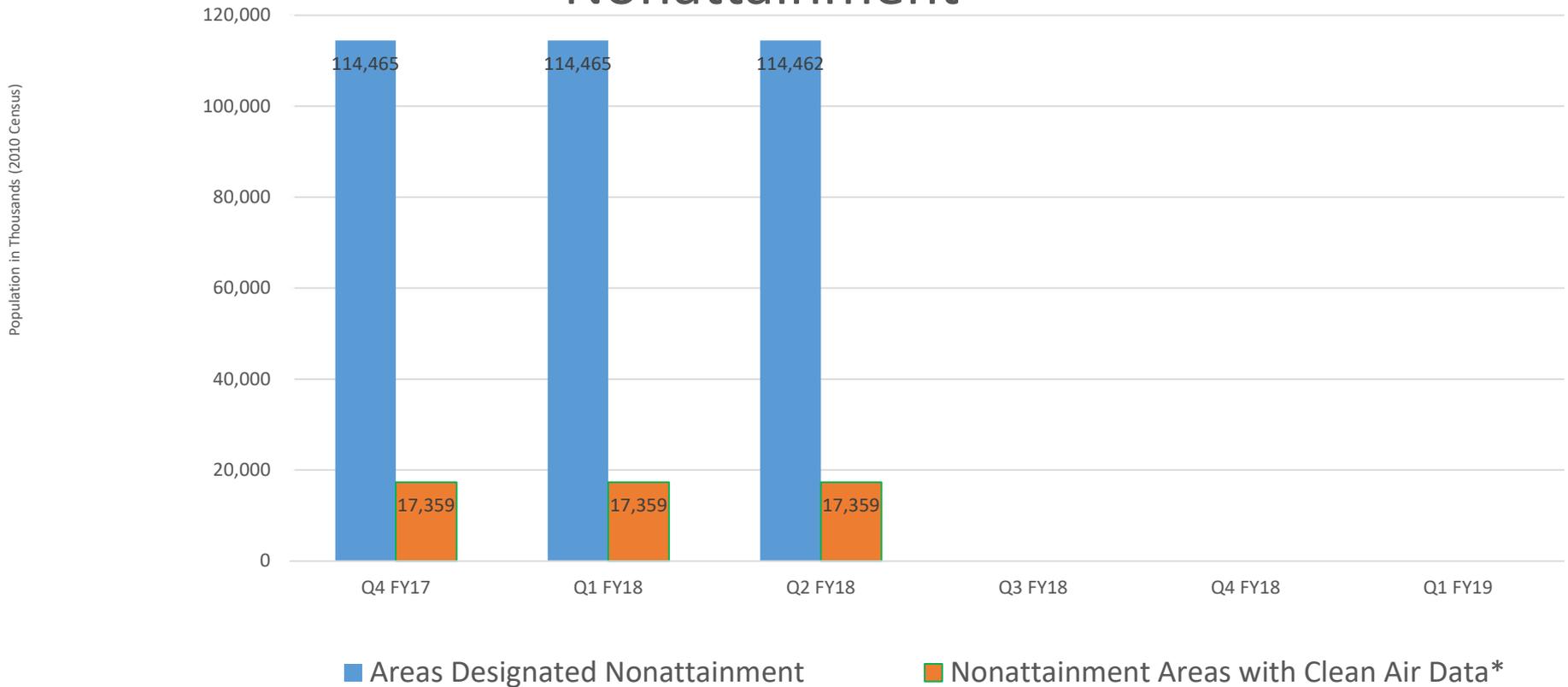
## Reduce Number of Nonattainment Areas



\*Clean air data is a key step to redesignation to attainment and occurs when an area's air quality attains the federal standard.

# Key Indicators

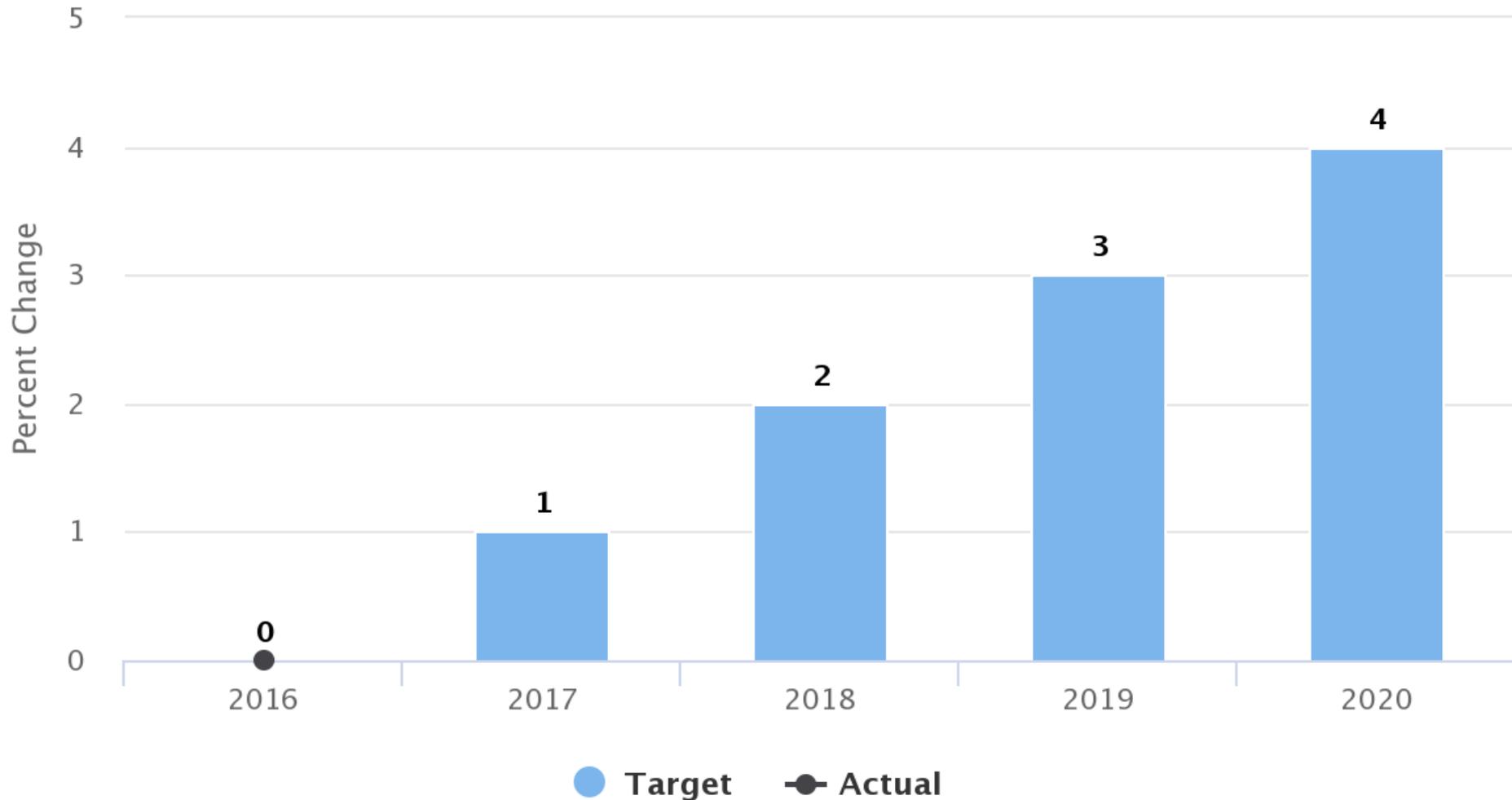
## Population Living in Areas Designated Nonattainment



*\*Clean air data is a key step to redesignation to attainment and occurs when an area's air quality attains the federal standard.*

# Key Indicators

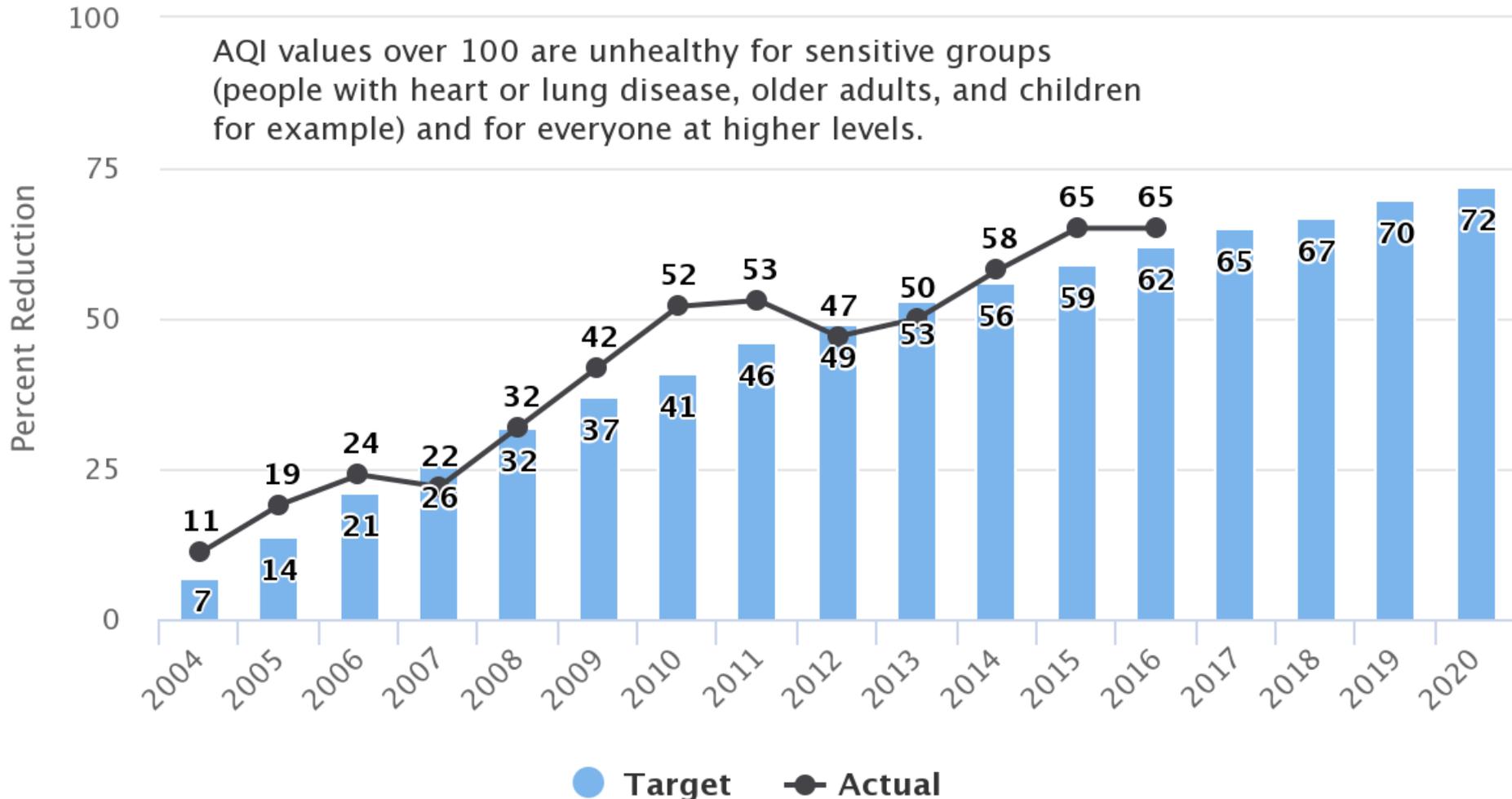
## Percent of Measured Air Quality Improvement in Counties Not Meeting the NAAQS from a 2016 Baseline



\*Data for the "actual" update is available August of the following year.

# Key Indicators

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



\*Data for the "actual" update is available August of the following year. Cumulative percent reduction is calculated from the baseline year 2003.

# Data Accuracy and Reliability

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## Measurement and Baseline:

- The nonattainment area metric will track the status of the baseline of 166 areas designated nonattainment for non-revoked 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 will rely on data from EPA's Air Quality System and other information.

## Data Sources:

- The EPA Green Book, a public accessible website - <https://www.epa.gov/green-book>
- Federal Register notices documenting EPA final action on state re-designation 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.
- 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

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## 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)
- Regional offices
- State, local, and tribal air agencies (S/L/T)

### **Program Activities:**

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

### **Regulations:**

- EPA regulations addressing NAAQS and NAAQS implementation include 40 CFR Parts 49 thru 99
- 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)
- International pollution management treaties – Department of State

# Additional Information, continued

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## **Stakeholder / Congressional Consultations**

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