



Region 5 Air Quality

Status and Implementation of Ozone and PM2.5 National Ambient Air Quality Standards

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National Ambient Air Quality Standards (NAAQS), Designations, and State Implementation Plans (SIPs)



National Ambient Air Quality Standards (NAAQS)

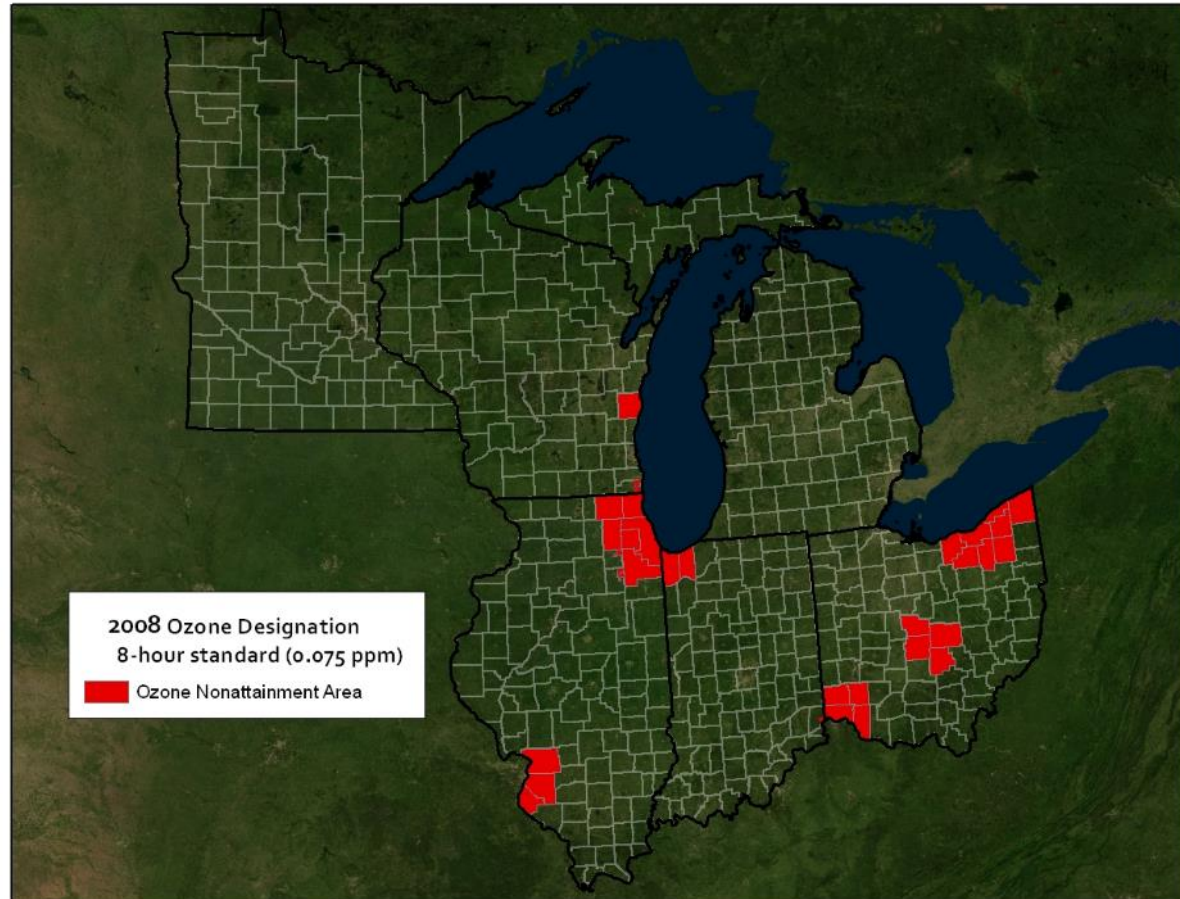
- Ozone
- Particulate Matter (PM₁₀, PM_{2.5})
- Sulfur Dioxide
- Lead
- Carbon Monoxide
- Nitrogen Dioxide



Region 5

2008 Ozone Nonattainment Areas

2008 ozone NAAQS = 0.075 ppm (75 ppb)



Have come into attainment and been **redesignated**

- Cleveland
- Columbus
- Cincinnati
- St. Louis

Did not reach attainment by attainment date and were bumped up to classification of **“moderate” nonattainment**

- Chicago
- Sheboygan

Did not reach attainment by attainment date and proposed to be bumped up to **“serious” nonattainment**

- Chicago
- Sheboygan qualified for and requested a 1-year extension, but preliminary data show that Sheboygan did not attain by the 1-year extension date and would need to be bumped up to serious

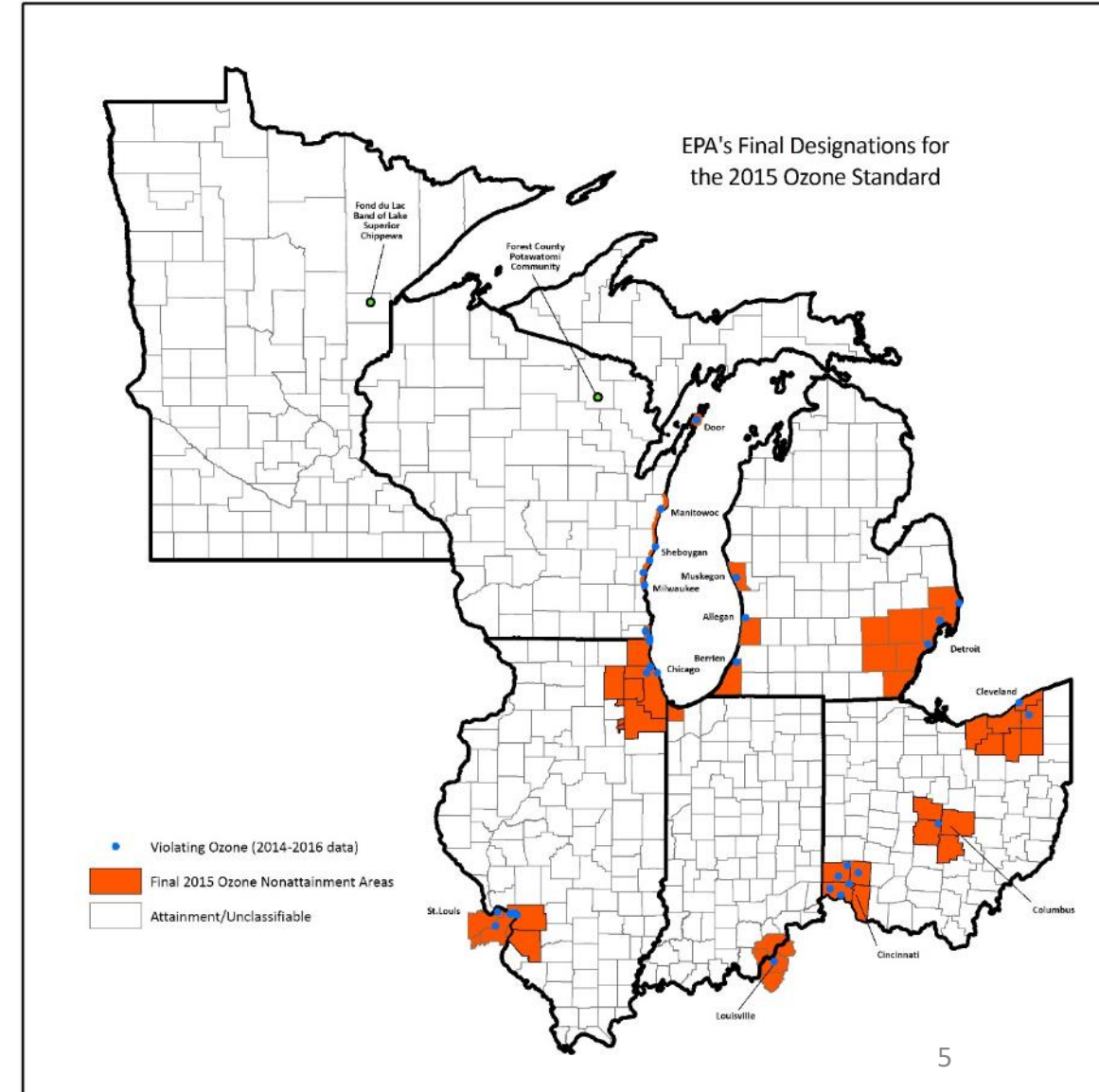


Region 5

2015 Ozone Nonattainment Areas

14 areas in Region 5 are “marginal” nonattainment

- Chicago IL/IN/WI
- Northwest Milwaukee/Ozaukee County Shoreline WI
- Sheboygan County (partial) WI
- Manitowoc County (partial) WI
- Door County (partial; Rural Transport Area) WI
- St. Louis IL/MO
- Allegan County (partial) MI
- Berrien County MI
- Muskegon County (partial) MI
- Detroit MI
- Cleveland OH
- Columbus OH
- Cincinnati OH
- Louisville IN/KY



Ozone SIP Requirements

All areas

- Infrastructure, including good neighbor transport SIPS – 3 years after promulgation of standard, i.e., October 1, 2018.

Marginal – attainment date 3 years after designation

- Emission inventory
- Emission statements
- Nonattainment New Source Review (NSR), 1.1 to 1 offsets
- Major source threshold 100 tpy

Moderate – attainment date 6 years after designation

- VOC and NO_x Reasonably Available Control Technology (RACT)
- 15% Reasonable further progress (RFP) plan
- Basic Vehicle Inspection and Maintenance (I/M)
- Nonattainment NSR, 1.15 to 1 offsets
- Major source threshold 100 tpy
- Modeled attainment demonstration

Serious – attainment date 9 years after designation

- 3% annual RFP until attainment
- Enhanced I/M and enhanced monitoring
- Nonattainment NSR revisions and 1.2:1 offsets
- Major source threshold 50 tpy (affects RACT and nonattainment NSR)

2015 Ozone NAAQS

October 1, 2015

Finalized new health-based standard at 0.070 ppm (70 ppb)

April 30, 2018

EPA designates most of the nonattainment areas for this standard (**Effective August 3, 2018**)

October 1, 2018

2015 Ozone NAAQS state infrastructure SIPs including interstate transport due

December 18, 2018

2015 Ozone NAAQS SIP Requirements Rule (83 FR 62998)

August 3, 2020

Marginal area SIP requirements due 2 years after designation (inventory, emissions statements, NSR offsets 1.1 to 1)

August 3, 2021

Marginal attainment date

2008 Ozone NAAQS

March 27, 2008

Finalized new health-based standard at 0.075 ppm (75 ppb)

July 20, 2012

2008 NAAQS ozone designations effective

July 20, 2015

Marginal attainment date

July 20, 2018

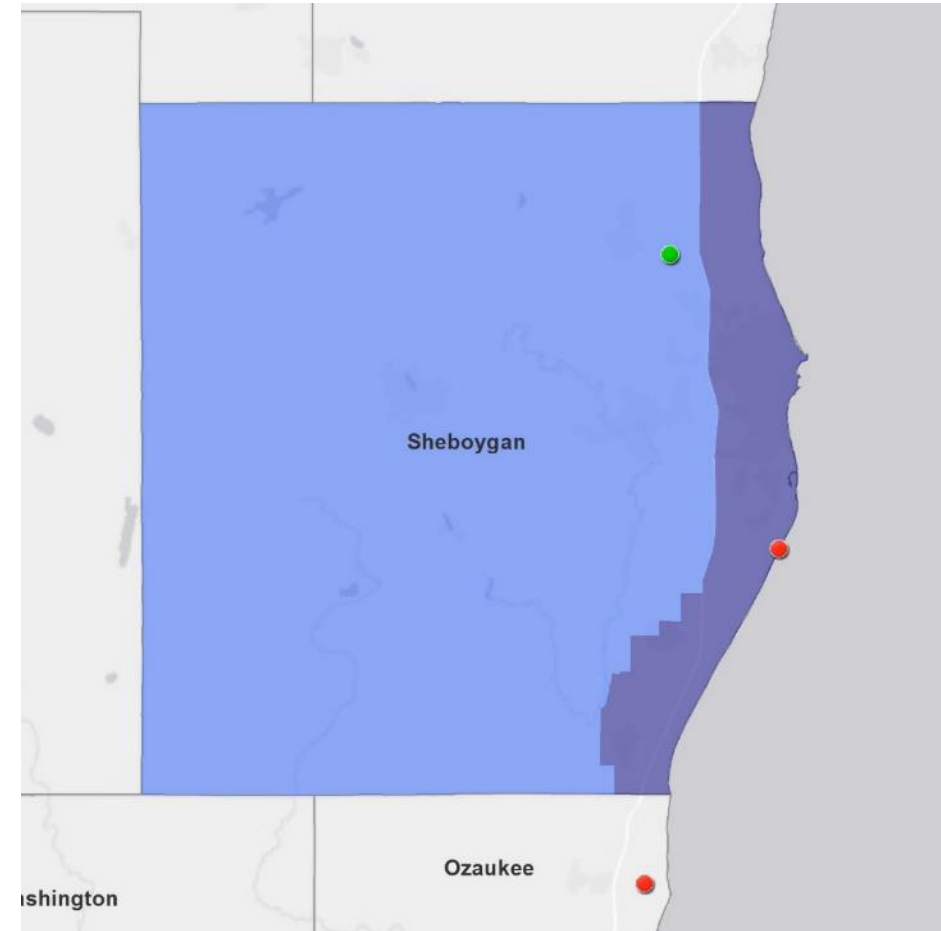
Moderate attainment date

July 20, 2021

Serious attainment date

Revision of Nonattainment Designation for Sheboygan, WI area

- On February 15, 2019, EPA proposed to split the Sheboygan nonattainment area for the 1997 and 2008 ozone NAAQS into two separate areas
- EPA plans to finalize this summer
- This split would allow the separate Inland Sheboygan area to attain the standards before the separate Shoreline Sheboygan area



Particulate Matter Nonattainment and Maintenance Areas

1997 annual PM_{2.5} standard = 15 $\mu\text{g}/\text{m}^3$
2006 24-hour PM_{2.5} standard = 35 $\mu\text{g}/\text{m}^3$
2012 annual PM_{2.5} standard = 12 $\mu\text{g}/\text{m}^3$

Region 5

1997 PM Nonattainment Areas

1997 annual PM_{2.5} standard = 15 µg/m³

Fourteen areas have come into attainment and been **redesignated**

- Canton-Massillon, OH
- Chicago-Gary-Lake County, IL-IN
- Cincinnati-Hamilton, OH-KY-IN
- Cleveland-Akron-Lorain, OH
- Columbus, OH
- Dayton-Springfield, OH
- Detroit-Ann Arbor, MI
- Evansville, IN
- Huntington-Ashland, WV-KY-OH
- Indianapolis, IN
- Louisville, KY-IN
- Parkersburg-Marietta, WV-OH
- Steubenville-Weirton, OH-WV
- Wheeling, WV-OH

One area did not reach attainment by attainment date and was bumped up to classification of **“moderate” nonattainment**;

EPA proposed redesignation on March 21, 2019

- St. Louis, MO-IL

Region 5

2006 PM Nonattainment Areas

2006 24-hour PM_{2.5} standard = 35 µg/m³

All five areas have come into attainment and been **redesignated**

- Canton-Massillon, OH
- Cleveland-Akron-Lorain, OH
- Detroit-Ann Arbor, MI
- Milwaukee-Racine, WI
- Steubenville-Weirton, OH-WV



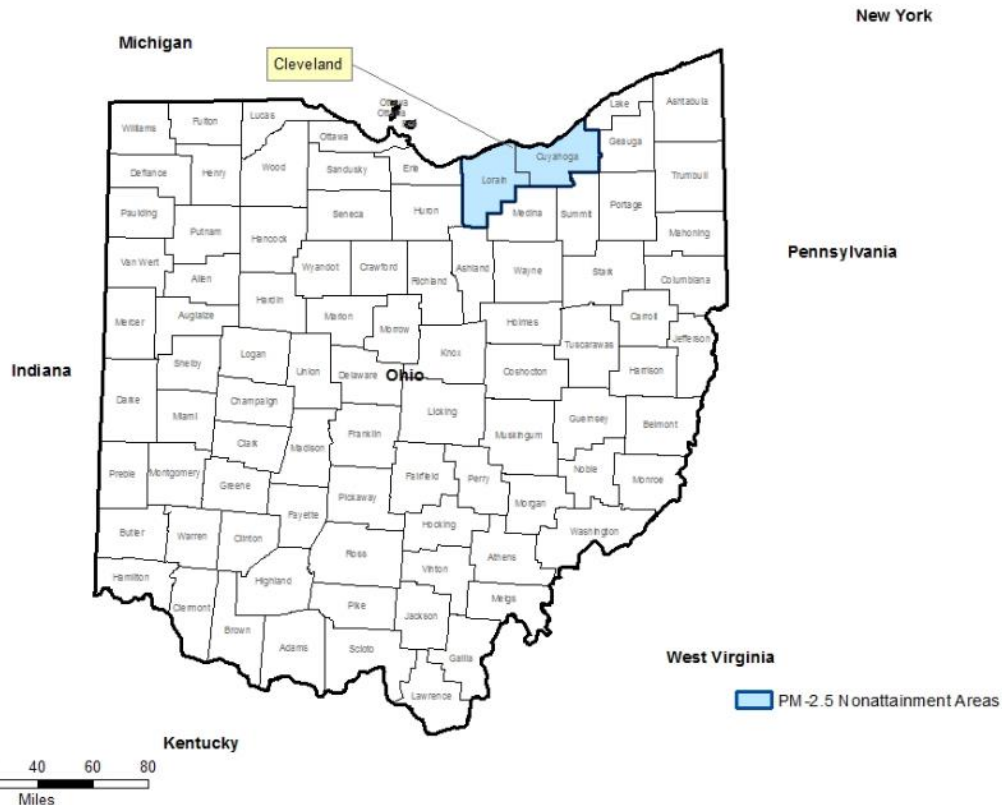
Region 5

2012 PM Nonattainment Areas

2012 annual PM_{2.5} standard = 12 µg/m³

Ohio PM-2.5 Nonattainment Areas (2012 Standard)

03/31/2018



One area was designated as **nonattainment**;
EPA finalized redesignation on April 12, 2019

- Cleveland, OH

Four states or areas designated as **unclassifiable**

- St. Louis, MO-IL
- Louisville, KY-IN
- Chicago, IL-IN
- Entire state of Illinois