Non-Attainment Areas - National Ambient Air Quality Standard

8-Hour Ozone, 2008 Standard	8-Hour Ozone, 2015 Standard	Lead, 1978 Standard	Lead, 2008 Standard	PM10, 1987 Standard
PM2.5, 1997 Standard	PM2.5, 2006 Standard	PM2.5, 2012 Standard	SO^2, 1971 Standard	SO^2, 2010 Standard
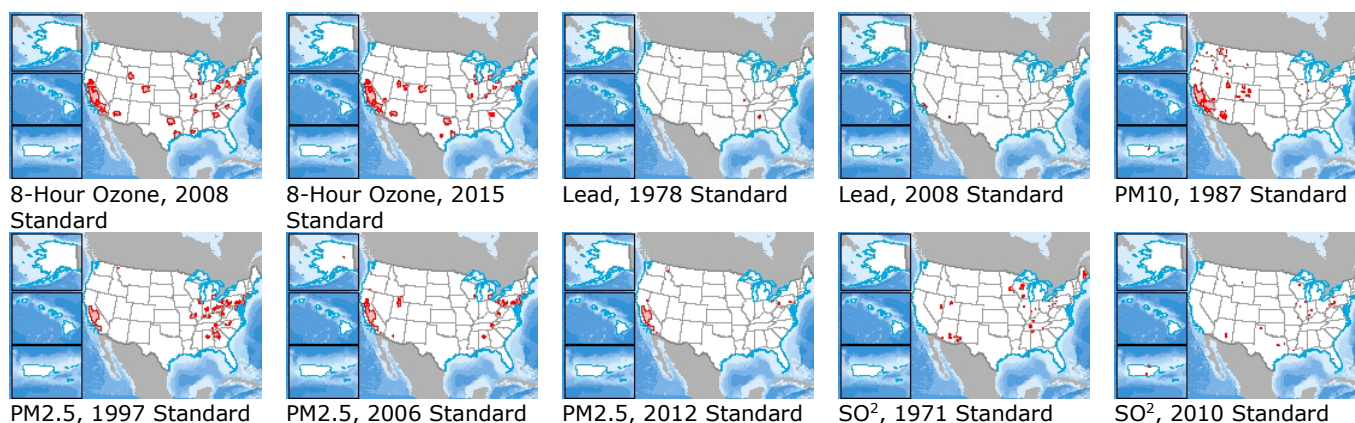
Tags

non-attainment, National Ambient Air Quality Standard, EPA, environmental protection agency, lead, ozone, PM2.5, PM10, SO2

Summary

Nonattainment Areas for Criteria Pollutants (Green Book): Areas of the country that meet or violate air quality standards.

The EPA Green Book provides detailed information about area National Ambient Air Quality Standards (NAAQS) designations, classifications and nonattainment status. Information is current as of the Green Book posted date and is available in reports, maps and data downloads. See https://www.epa.gov/green-book and https://www.epa.gov/green-book/green-book-gis-download for more information.

These metadata are for a set of layers depicting non-attainment areas for different types of pollutants, based on standards at different dates, as follows based on https://www.epa.gov/green-book/green-book-gis-download as of 1/16/2024:

Table 1: Shapefiles Developed as Part of the Nonattainment Area Designation Process

NAAQS	Last Update[1]	Shapefile Containing All Designated Nonattainment Areas	External Data Files with Area Status as of Green Book posting[2]
8-Hour Ozone (2015 Standard)	02/01/2022	Download (file size ~12.3 MB)	Download
8-Hour Ozone (2008 Standard)	6/13/2012	Download (file size ~8.8 MB)	Download
8-Hour Ozone (1997 Standard-revoked 4/6/2015)[3]	9/8/2015	Download (file size ~4.6 MB)	Download
PM-2.5 (2012 Standard)	3/21/2016	Download (file size ~200 KB)	Download
PM-2.5 (2006 Standard)	9/15/2011	Download (file size ~570 KB)	Download
PM-2.5 (1997 Standard)	8/23/2011	Download (file size ~380 KB)	Download
Sulfur Dioxide (2010 Standard)[3]	6/30/2021	Download (file size ~970 KB)	Download
Lead (2008 Standard)[3]	2/7/2017	Download (file size ~130 KB)	Download

[1] Updates are made to the posted Shapefiles to add or adjust area boundaries or make corrections. The "Last Shapefile Update" date indicates when a shapefile was last modified.

[2] External Data Files contain the nonattainment/maintenance status and classification at the time of the Green Book posting. External Data Files can be linked to the shapefiles through the composID field in each file and are provided in spreadsheet (xls) and xbase (dbf) formats compressed into one file. Multi-state nonattainment areas are not considered maintenance areas until all states in the area have been redesignated.

[3] Not included in GEM.

Table 2: Shapefiles Developed from Part 81 Table Descriptions

NAAQS	Last Shapefile Update[1]	Shapefile Containing All Designated Nonattainment Areas	External Data Files with Area Status as of Green Book posting[2]
1-Hour Ozone (1979 Standard-revoked 6/15/2005) Classified areas only[3]	12/05/2013	Download (file size ~11 MB)	Download
PM-10 (1987 Standard)	12/05/2013	Download (file size ~1.1 MB)	Download
Sulfur Dioxide (1971 Standard)	12/05/2013	Download (file size ~320 KB)	Download
Lead (1978 Standard)	12/04/2013	Download (file size ~30 KB)	Download
Carbon Monoxide (1971 Standard)[3]	12/04/2013	Download (file size ~1.3 MB)	Download
Nitrogen Dioxide (1971 Standard)[3]	12/04/2013	Download (file size ~70 KB)	Download

[1] Updates are made to the posted Shapefiles to add or adjust area boundaries. The "Last Shapefile Update" date indicates when a shapefile was last modified.

[2] External Data Files contain the nonattainment/maintenance status and classification at the time of the Green Book posting. External Data Files can be linked to the shapefiles through the composID field in each file and are provided in spreadsheet (xls) and xbase (dbf) formats compressed into one file. Multi-state nonattainment areas are not considered maintenance areas until all states in the area have been redesignated.

[3] Not included in GEM.

Description

Nonattainment Areas for Criteria Pollutants (Green Book): Areas of the country that meet or violate air quality standards.

Credits

Environmental Protection Agency

Use limitations
There are no access and use limitations for this item.

Extent
West -118.942974 **East** -66.656317
North 44.848088 **South** 18.416049

Scale Range
Maximum (zoomed in) 1:50,000
Minimum (zoomed out) 1:20,000,000

Topics and Keywords

THEMES OR CATEGORIES OF THE RESOURCE climatologyMeteorologyAtmosphere, environment, transportation
* CONTENT TYPE Downloadable Data
EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION No

Citation

TITLE Non-Attainment Area - National Ambient Air Quality Standard
PUBLICATION DATE 2017-02-07
PRESENTATION FORMATS digital map
OTHER CITATION DETAILS
    Publication dates vary depending on the pollutant and the date of the associated standard.

Citation Contacts
RESPONSIBLE PARTY
ORGANIZATION'S NAME   Environmental Protection Agency
CONTACT'S ROLE   originator

Resource Details
DATASET LANGUAGES   English (UNITED STATES)
DATASET CHARACTER SET   utf8 - 8 bit UCS Transfer Format
STATUS   completed
SPATIAL REPRESENTATION TYPE   vector
PROCESSING ENVIRONMENT   Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 3; ESRI ArcCatalog 9.2.6.1500
CREDITS
   Environmental Protection Agency

Note: Information below this point is based on Lead, 2008 Standard data. The other layers generally follow the same pattern.

ARCGIS ITEM PROPERTIES
   * NAME   naaqs_nonattainment_lead_08std_170207_v1
   * SIZE   0.000
      * ACCESS PROTOCOL   Local Area Network

Extents

EXTENT
GEOGRAPHIC EXTENT
BOUNDING RECTANGLE
   EXTENT TYPE   Extent used for searching
   * WEST LONGITUDE   -118.942974
   * EAST LONGITUDE   -66.656317

   * NORTH LATITUDE   44.848088
   * SOUTH LATITUDE   18.416049
   * EXTENT CONTAINS THE RESOURCE   Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM
   * WEST LONGITUDE   -13240671.299118
   * EAST LONGITUDE   -7420147.261541
   * SOUTH LATITUDE   2086304.270149
   * NORTH LATITUDE   5597637.671291
   * EXTENT CONTAINS THE RESOURCE   Yes

Resource Points of Contact

POINT OF CONTACT
   ORGANIZATION'S NAME   Environmental Protection Agency
   CONTACT'S ROLE   originator

Resource Maintenance

RESOURCE MAINTENANCE
   UPDATE FREQUENCY   unknown

Spatial Reference

ArcGIS coordinate system
* **Type** Projected
* **Geographic coordinate reference** GCS_WGS_1984
* **Projection** WGS_1984_Web_Mercator_Auxiliary_Sphere
* **Coordinate reference details**
  Projected coordinate system
    Well-known identifier 102100
    X origin -22041258.62706707
    Y origin -33265068.604224768
    XY scale 135385249.94349548
    Z origin -100000
    Z scale 10000
    M origin -100000
    M scale 10000
    XY tolerance 0.001
    Z tolerance 0.001
    M tolerance 0.001
    High precision true
    Latest well-known identifier 3857
    Well-known text PROJCS["WGS_1984_Web_Mercator_Auxiliary_Sphere",GEOGCS
    ["GCS_WGS_1984",DATUM["D_WGS_1984",SPHEROID
    ["WGS_1984",6378137.0,298.257223563]],PRIMEM["Greenwich",0.0],UNIT
    ["Degree",0.0174532925199433]],PROJECTION["Mercator_Auxiliary_Sphere"],PARAMETER
    ["False_Easting",0.0],PARAMETER["False_Northing",0.0],PARAMETER
    ["Central_Meridian",0.0],PARAMETER["Standard_Parallel_1",0.0],PARAMETER
    ["Auxiliary_Sphere_Type",0.0],UNIT["Meter",1.0],AUTHORITY["EPSG",3857]]

Reference system identifier
  Value 0

* **Codespace** EPSG
* **Version** 8.8(9.3.1.2)

Spatial Data Properties
Vector
* **Level of topology for this dataset** geometry only
  Geometric objects
    Feature class name naaqs_nonattainment_lead_08std_170207_v1
    * **Object type** composite

ArcGIS Feature Class Properties
  Feature class name naaqs_nonattainment_lead_08std_170207_v1
    * **Feature type** Simple
    * **Geometry type** Polygon
    * **Has topology** FALSE
    * **Feature count** 22
    * **Spatial index** TRUE
    * **Linear referencing** FALSE

Distribution

Distributor
  Available format
    Name Shapefile

Fields

DETAILS FOR OBJECT naaqs_nonattainment_lead_08std_170207_v1
* **TYPE** Feature Class
* **ROW COUNT** 22

DEFINITION
2008 Lead NAAQS Nonattainment Areas

DEFINITION SOURCE
EPA OAQPS

FIELD OBJECTID
* **ALIAS** OBJECTID
* **DATA TYPE** OID
* **WIDTH** 4
* **PRECISION** 0
* **SCALE** 0
* **FIELD DESCRIPTION**
  Internal feature number.

* **DESCRIPTION SOURCE**
  Esri

* **DESCRIPTION OF VALUES**
  Sequential unique whole numbers that are automatically generated.

FIELD Shape
* **ALIAS** Shape
* **DATA TYPE** Geometry
* **WIDTH** 0
* **PRECISION** 0
* **SCALE** 0

FIELD DESCRIPTION
Feature geometry.

DESCRIPTION SOURCE
ESRI

DESCRIPTION OF VALUES
Coordinates defining the features.

FIELD COMPOSID
* **ALIAS** Composite ID
* **DATA TYPE** String
* **WIDTH** 50
* **PRECISION** 0
* **SCALE** 0

FIELD DESCRIPTION
A unique ID associated with the nonattainment or maintenance area for a specific pollutant standard. The Composid format includes the pollutant, year of the standard, and a short areaname indicator.

DESCRIPTION SOURCE
Geographic Strategies Group

FIELD STATE
* ALIAS   State
* DATA TYPE   String
* WIDTH   2
* PRECISION   0
* SCALE   0
FIELD DESCRIPTION
State Abbreviation for States containing nonattainment area

DESCRIPTION SOURCE
ESRI

FIELD NAME
* ALIAS   Name
* DATA TYPE   String
* WIDTH   20
* PRECISION   0
* SCALE   0
FIELD DESCRIPTION
Nonattainment Area county name(s)

FIELD AREA_NAME
* ALIAS   Area Name
* DATA TYPE   String
* WIDTH   150
* PRECISION   0
* SCALE   0
FIELD DESCRIPTION
2008 Lead NAAQS Nonattainment Area Names

DESCRIPTION SOURCE
Bureau of the Census - 2000 Census Municipal Boundaries,
CAL-Atlas Geospatial Clearinghouse - ARB basins districts counties,
ESRI - 2008 Detailed County Boundaries,
Illinois Environmental Protection Agency - 2009 Municipalities in Illinois,
MapInfo Streetworks - 1996,
Missouri Department of Natural Resources (MoDNR),
Division of Geology and Land Survey (DGLS) - Public Land Survey,
Ohio Department of Transportation - Townships,
Pennsylvania Department of Transportation - 2004 Pennsylvania Municipality Boundaries

FIELD Shape_Length
* ALIAS   Shape_Length
* DATA TYPE   Double
* WIDTH   8
* PRECISION   0
* SCALE   0
* FIELD DESCRIPTION
Length of feature in internal units.

* DESCRIPTION SOURCE
Esri

* DESCRIPTION OF VALUES
Positive real numbers that are automatically generated.

FIELD Shape_Area
* ALIAS   Shape_Area
* DATA TYPE   Double
* WIDTH   8
* PRECISION   0
* SCALE   0
* FIELD DESCRIPTION
   Area of feature in internal units squared.

* DESCRIPTION SOURCE
   Esri

* DESCRIPTION OF VALUES
   Positive real numbers that are automatically generated.

OVERVIEW DESCRIPTION
   ENTITY AND ATTRIBUTE OVERVIEW
      2008 Lead NAAQS Nonattainment Areas-2010 designations

   ENTITY AND ATTRIBUTE DETAIL CITATION
      EPA OAQPS

Metadata Details

METADATA LANGUAGE   English (UNITED STATES)
METADATA CHARACTER SET   utf8 - 8 bit UCS Transfer Format
SCOPE OF THE DATA DESCRIBED BY THE METADATA   dataset
SCOPE NAME   dataset
LAST UPDATE   2011-03-02

ARCGIS METADATA PROPERTIES
   METADATA FORMAT   ArcGIS 1.0
   METADATA STYLE   FGDC CSDGM Metadata
   STANDARD OR PROFILE USED TO EDIT METADATA   FGDC

   CREATED IN ARCGIS FOR THE ITEM   2024-01-10
   LAST MODIFIED IN ARCGIS FOR THE ITEM   2024-01-16

   AUTOMATIC UPDATES
      HAVE BEEN PERFORMED   Yes
      LAST UPDATE   2024-01-16

   ITEM LOCATION HISTORY
      ITEM COPIED OR MOVED   2015-01-27
         FROM   L:\SOFTWARE\ARCMAP\Pollutants\Pb_NAA_2008
         TO   \\dhm-fs1\library\SOFTWARE\ARCMAP\Pollutants\PB_2008\Pb_NAA_2008Copy

Metadata Contacts

METADATA CONTACT
   ORGANIZATION'S NAME   Environmental Protection Agency
   CONTACT'S ROLE   originator

Metadata Maintenance
MAINTENANCE
   UPDATE FREQUENCY   unknown