

O₃ Air Quality Data Update 2007-2009 Design Values

The following is a brief summary of EPA's 2009 air quality update for 8-hour ozone (O₃) based on air quality monitoring data for the three-year period, 2007-2009. During this 3-year period:

- 14 of the 126 areas originally designated nonattainment for the 8-hour O₃ National Ambient Air Quality Standard (NAAQS) failed to meet the 1997 8-hour O₃ NAAQS (Table 1).
- 2 of the areas originally designated nonattainment had incomplete data (Table 1).
- No additional unclassifiable/attainment areas failed to meet the O₃ NAAQS.

As of September 2, 2010, 79 of the 126 areas originally designated nonattainment for the 8-hour O₃ NAAQS are classified as maintenance areas, meaning they have been redesignated to attainment.

In 1997, EPA established the NAAQS for 8-hour O₃ at 0.08 parts per million (ppm). If the level of the 3-year average of the annual 4th highest daily maximum 8-hour O₃ concentration is greater than 0.08 ppm (0.085 rounds up), then the standard is not met.

On March 12, 2008, EPA revised the 8-hour O₃ standard to be 0.075 parts per million (ppm). If the level of the 3-year average of the annual 4th highest daily maximum 8-hour O₃ concentration is greater than 0.075 ppm, then the standard is not met. County level data based on the 2008 8-Hour O₃ standard are available in the downloadable spreadsheet file.

Air quality data from EPA's Air Quality System (AQS) were used to calculate the 8-hour O₃ design values. The data used in the calculations were obtained from the AQS on May 6, 2010. Detailed 2007-2009 information for all ozone monitors is available in the downloadable spreadsheet file. For more information, please contact:

David Mintz
U.S. Environmental Protection Agency
Air Quality Analysis Group (C304-04)
Research Triangle Park, NC 27711
(919) 541-5224, (919) 541-3613 (FAX)
mintz.david@epa.gov

Table 1. Areas Previously Designated Nonattainment for the 1997 Ozone 8-Hour NAAQS
 AQS Data Query: 9/2/2010 Last Updated: 8/13/2010

| Designated Area | States | EPA Regions | Designation Status ¹ | Classification ¹ | 2007-2009 | Met NAAQS | Clean Data Determination Date |
|---|--------|----------------|------------------------------------|-----------------------------|---|--------------|-------------------------------------|
| | | | | | 8-Hour Design Value (ppm) ^{2,3} | | |
| Albany-Schenectady-Troy, NY | NY | 02 | Nonattainment | Former Subpart 1 | 0.075 | Yes | 3/25/2008 |
| Allegan Co, MI | MI | 05 | Nonattainment | Former Subpart 1 | 0.081 | Yes | |
| Allentown-Bethlehem-Easton, PA | PA | 03 | Maintenance | Former Subpart 1 | 0.076 | Yes | |
| Altoona, PA | PA | 03 | Maintenance | Former Subpart 1 | 0.070 | Yes | |
| Amador and Calaveras Cos (Central Mtn), CA | CA | 09 | Nonattainment | Former Subpart 1 | 0.082 | Yes | |
| Atlanta, GA | GA | 04 | Nonattainment | Subpart 2/Moderate | 0.087 | No | |
| Baltimore, MD | MD | 03 | Nonattainment | Subpart 2/Moderate | 0.087 | No | |
| Baton Rouge, LA | LA | 06 | Nonattainment | Subpart 2/Moderate | 0.080 | Yes | |
| Beaumont-Port Arthur, TX | TX | 06 | Nonattainment | Subpart 2/Moderate | 0.077 | Yes | |
| Benton Harbor, MI | MI | 05 | Maintenance | Former Subpart 1 | 0.076 | Yes | |
| Benzie Co, MI | MI | 05 | Maintenance | Former Subpart 1 | 0.072 | Yes | |
| Berkeley and Jefferson Counties, WV | WV | 03 | Attainment | Former EAC | 0.070 | Yes | |
| Birmingham, AL | AL | 04 | Maintenance | Former Subpart 1 | 0.081 | Yes | |
| Boston-Lawrence-Worcester (E. MA), MA | MA | 01 | Nonattainment | Subpart 2/Moderate | 0.081 | Yes | |
| Boston-Manchester- Portsmouth(SE),NH | NH | 01 | Nonattainment | Subpart 2/Moderate | 0.076 | Yes | 3/18/2008 |
| Buffalo-Niagara Falls, NY | NY | 02 | Nonattainment | Former Subpart 1 | 0.076 | Yes | 1/6/2010 |
| Canton-Massillon, OH | OH | 05 | Maintenance | Former Subpart 1 | 0.075 | footnote 4 | |
| Cass Co, MI | MI | 05 | Maintenance | Subpart 2/Marginal | 0.075 | Yes | |
| Charleston, WV | WV | 03 | Maintenance | Former Subpart 1 | 0.073 | Yes | |
| Charlotte-Gastonia-Rock Hill, NC-SC | NC-SC | 04 | Nonattainment | Subpart 2/Moderate | 0.086 | No | |
| Chattanooga, TN-GA | TN-GA | 04 | Attainment | Former EAC | 0.079 | Yes | |
| Chicago-Gary-Lake County, IL-IN | IL-IN | 05 | Nonattainment | Subpart 2/Moderate | 0.076 | footnote 4 | 4/12/2010 |
| Chico, CA | CA | 09 | Nonattainment | Former Subpart 1 | 0.082 | Yes | |
| Cincinnati-Hamilton, OH-KY-IN | KY-IN | 05,04 | Maintenance | Former Subpart 1 | 0.082 | Yes | 5/11/2010 |
| Clarksville-Hopkinsville, TN-KY | TN-KY | 04 | Maintenance | Former Subpart 1 | 0.075 | Yes | |

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|---|--------|----------------|------------------------------------|-----------------------------|---|-------------------|-------------------------------------|
| | | | | | 8-Hour Design Value (ppm) ^{2,3} | | |
| Clearfield and Indiana Cos, PA | PA | 03 | Maintenance | Former Subpart 1 | 0.073 | Yes | |
| Cleveland-Akron-Lorain, OH | OH | 05 | Maintenance | Subpart 2/Moderate | 0.080 | Yes | 9/15/2009 |
| Columbia, SC | SC | 04 | Attainment | Former EAC | 0.074 | Yes | |
| Columbus, OH | OH | 05 | Maintenance | Former Subpart 1 | 0.081 | Yes | 9/15/2009 |
| Dallas-Fort Worth, TX | TX | 06 | Nonattainment | Subpart 2/Moderate | 0.086 | No | |
| Dayton-Springfield, OH | OH | 05 | Maintenance | Former Subpart 1 | 0.075 | see footnote 4 | |
| Denver-Boulder-Greeley-Ft Collins- Love., CO | CO | 08 | Nonattainment | Former Subpart 1 | 0.082 | Yes | |
| Detroit-Ann Arbor, MI | MI | 05 | Maintenance | Subpart 2/Marginal | 0.080 | Yes | 6/29/2009 |
| Door Co, WI | WI | 05 | Maintenance | Former Subpart 1 | 0.078 | Yes | |
| Erie, PA | PA | 03 | Maintenance | Former Subpart 1 | 0.075 | Yes see | |
| Essex Co (Whiteface Mtn), NY | NY | 02 | Nonattainment | Former Subpart 1 | 0.076 | footnote 4 | 1/6/2010 |
| Evansville, IN | IN | 05 | Maintenance | Former Subpart 1 | 0.076 | Yes | |
| Fayetteville, NC | NC | 04 | Attainment | Former EAC | 0.074 | Yes | |
| Flint, MI | MI | 05 | Maintenance | Former Subpart 1 | 0.074 | Yes | |
| Fort Wayne, IN | IN | 05 | Maintenance | Former Subpart 1 | 0.071 | Yes | |
| Franklin Co, PA | PA | 03 | Maintenance | Former Subpart 1 | 0.069 | Yes | |
| Frederick Co, VA | VA | 03 | Attainment | Former EAC | 0.069 | Yes | |
| Fredericksburg, VA | VA | 03 | Maintenance | Subpart 2/Moderate | 0.072 | Yes | |
| Grand Rapids, MI | MI | 05 | Maintenance | Former Subpart 1 | 0.075 | Yes see | |
| Greater Connecticut, CT | CT | 01 | Nonattainment | Subpart 2/Moderate | 0.081 | footnote 4 | |
| Greene Co, IN | IN | 05 | Maintenance | Former Subpart 1 | 0.074 | Yes | |
| Greene Co, PA | PA | 03 | Maintenance | Former Subpart 1 | 0.072 | Yes | |
| Greensboro-Winston Salem-High Point, NC | NC | 04 | Attainment | Subpart 2/Marginal/EAC | 0.079 | Yes | |
| Greenville-Spartanburg-Anderson, SC | SC | 04 | Attainment | Former EAC | 0.078 | Yes | |
| Hancock, Knox, Lincoln & Waldo Cos, ME | ME | 01 | Maintenance | Former Subpart 1 | 0.078 | Yes | |

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|--|-----------|-------------|---------------------------------|-----------------------------|--|----------------|-------------------------------|
| | | | | | 8-Hour Design Value (ppm) ^{2,3} | | |
| Harrisburg-Lebanon-Carlisle, PA | PA | 03 | Maintenance | Former Subpart 1 | 0.074 | Yes | |
| Haywood and Swain Cos (Great Smoky NP), NC | NC | 04 | Maintenance | Former Subpart 1 | 0.074 | Yes | |
| Hickory-Morganton-Lenoir, NC | NC | 04 | Attainment | Former EAC | 0.073 | Yes | |
| Houston-Galveston-Brazoria, TX | TX | 06 | Nonattainment | Subpart 2/Severe 15 | 0.084 | see footnote 4 | |
| Huntington-Ashland, WV-KY | WV- KY | 03,04 | Maintenance | Former Subpart 1 | 0.073 | Yes | |
| Huron Co, MI | MI | 05 | Maintenance | Former Subpart 1 | 0.072 | Yes | |
| Imperial Co, CA | CA | 09 | Nonattainment | Subpart 2/Moderate | 0.083 | Yes | 1/4/2010 |
| Indianapolis, IN | IN | 05 | Maintenance | Former Subpart 1 | 0.077 | Yes | |
| Jackson Co, IN | IN | 05 | Maintenance | Former Subpart 1 | 0.070 | Yes | |
| Jamestown, NY | NY | 02 | Nonattainment | Former Subpart 1 | 0.079 | Yes | 1/6/2010 |
| Jefferson Co, NY | NY | 02 | Nonattainment | Subpart 2/Moderate | 0.074 | Yes | 3/25/2008 |
| Johnson City-Kingsport-Bristol, TN | TN | 04 | Attainment | Former EAC | 0.076 | Yes | |
| Johnstown, PA | PA | 03 | Maintenance | Former Subpart 1 | 0.067 | Yes | |
| Kalamazoo-Battle Creek, MI | MI | 05 | Maintenance | Former Subpart 1 | 0.074 | Yes | |
| Kent and Queen Anne's Cos, MD | MD | 03 | Maintenance | Subpart 2/Marginal | 0.078 | Yes | |
| Kern Co (Eastern Kern), CA | CA | 09 | Nonattainment | Former Subpart 1 | 0.084 | Yes | |
| Kewaunee Co, WI | WI | 05 | Maintenance | Former Subpart 1 | 0.073 | Yes | |
| Knoxville, TN | TN | 04 | Nonattainment | Former Subpart 1 | 0.082 | see footnote 4 | |
| La Porte, IN | IN | 05 | Maintenance | Subpart 2/Marginal | 0.068 | Yes | |
| Lancaster, PA | PA | 03 | Maintenance | Subpart 2/Marginal | 0.077 | Yes | |
| Lansing-East Lansing, MI | MI | 05 | Maintenance | Former Subpart 1 | 0.073 | Yes | |
| Las Vegas, NV | NV | 09 | Nonattainment | Former Subpart 1 | 0.078 | Yes | |
| Lima, OH | OH | 05 | Maintenance | Former Subpart 1 | Incomplete | Incomplete | |
| Los Angeles South Coast Air Basin, CA | CA | 09 | Nonattainment | Subpart 2/Extreme | 0.118 | No | |
| Los Angeles-San Bernardino Cos(W | CA | 09 | Nonattainment | Subpart 2/Moderate | 0.100 | No | |

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|---|-------------|-------------|---------------------------------|-----------------------------|--|----------------|-------------------------------|
| Mojave),CA | | | | | | | |
| Louisville, KY-IN | KY-IN | 04,05 | Maintenance | Former Subpart 1 | 0.079 | Yes | |
| Macon, GA | GA | 04 | Maintenance | Former Subpart 1 | 0.076 | Yes | |
| Madison and Page Cos (Shenandoah NP), VA | VA | 03 | Maintenance | Former Subpart 1 | 0.073 | Yes | |
| Manitowoc Co, WI | WI | 05 | Maintenance | Former Subpart 1 | 0.075 | Yes | |
| Mariposa and Tuolumne Cos (Southern Mtn),CA | CA | 09 | Nonattainment | Former Subpart 1 | 0.086 | No | |
| Mason Co, MI | MI | 05 | Maintenance | Former Subpart 1 | 0.073 | Yes | |
| Memphis, TN-AR | TN-AR | 04,06 | Maintenance | Subpart 2/Moderate | 0.078 | Yes | |
| Milwaukee-Racine, WI | WI | 05 | Nonattainment | Subpart 2/Moderate | 0.076 | see footnote 4 | |
| Muncie, IN | IN | 05 | Maintenance | Former Subpart 1 | 0.069 | Yes | |
| Murray Co (Chattahoochee Nat Forest), GA | GA | 04 | Maintenance | Former Subpart 1 | 0.076 | Yes | |
| Muskegon, MI | MI | 05 | Maintenance | Subpart 2/Marginal | 0.077 | Yes | |
| Nashville, TN | TN | 04 | Attainment | Former EAC | 0.078 | Yes | |
| Nevada Co. (Western Part), CA | CA | 09 | Nonattainment | Former Subpart 1 | 0.087 | No | |
| New York-N. New Jersey-Long Island,NY-NJ-CT | NY-NJ-CT | 02,01 | Nonattainment | Subpart 2/Moderate | 0.084 | see footnote 4 | |
| Norfolk-Virginia Beach-Newport News (HR),VA | VA | 03 | Maintenance | Subpart 2/Marginal | 0.073 | Yes | |
| Parkersburg-Marietta, WV-OH | OH | 03,05 | Maintenance | Former Subpart 1 | 0.077 | Yes | |
| Philadelphia-Wilmin-Atlantic Ci,PA-NJ-MD-DE | PA-NJ-MD-DE | 03,02 | Nonattainment | Subpart 2/Moderate | 0.088 | No | see |
| Phoenix-Mesa, AZ | AZ | 09 | Nonattainment | Former Subpart 1 | 0.076 | see footnote 4 | |
| Pittsburgh-Beaver Valley, PA | PA | 03 | Nonattainment | Former Subpart 1 | 0.082 | see footnote 4 | |
| Portland, ME | ME | 01 | Maintenance | Subpart 2/Marginal | 0.074 | Yes | |

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|--------------------------------------|--------|-------------|---------------------------------|-----------------------------|--|----------------|-------------------------------|
| | | | | | 8-Hour Design Value (ppm) ^{2,3} | | |
| Poughkeepsie, NY | NY | 02 | Nonattainment | Subpart 2/Moderate | 0.078 | Yes | 1/6/2010 |
| Providence (All RI), RI | RI | 01 | Nonattainment | Subpart 2/Moderate | 0.077 | Yes | 7/6/2010 |
| Raleigh-Durham-Chapel Hill, NC | NC | 04 | Maintenance | Former Subpart 1 | 0.077 | see footnote 4 | |
| Reading, PA | PA | 03 | Maintenance | Former Subpart 1 | Incomplete | Incomplete | |
| Richmond-Petersburg, VA | VA | 03 | Maintenance | Subpart 2/Marginal | 0.078 | Yes | |
| Riverside Co, (Coachella Valley), CA | CA | 09 | Nonattainment | Subpart 2/Severe 15 | 0.096 | No | |
| Roanoke, VA | VA | 03 | Attainment | Former EAC | 0.070 | Yes | |
| Rochester, NY | NY | 02 | Nonattainment | Former Subpart 1 | 0.072 | Yes | 3/25/2008 |
| Rocky Mount, NC | NC | 04 | Maintenance | Former Subpart 1 | 0.073 | Yes | |
| Sacramento Metro, CA | CA | 09 | Nonattainment | Subpart 2/Severe 15 | 0.100 | No | |
| San Antonio, TX | TX | 06 | Attainment | Former EAC | 0.074 | Yes | |
| San Diego, CA | CA | 09 | Nonattainment | Former Subpart 1 | 0.089 | No | |
| San Francisco Bay Area, CA | CA | 09 | Nonattainment | Subpart 2/Marginal | 0.078 | Yes | |
| San Joaquin Valley, CA | CA | 09 | Nonattainment | Subpart 2/Extreme | 0.105 | No | |
| Scranton-Wilkes-Barre, PA | PA | 03 | Maintenance | Former Subpart 1 | 0.071 | Yes | |
| Sheboygan, WI | WI | 05 | Nonattainment | Subpart 2/Moderate | 0.079 | see footnote 4 | |
| South Bend-Elkhart, IN | IN | 05 | Maintenance | Former Subpart 1 | 0.071 | Yes | |
| Springfield (Western MA), MA | MA | 01 | Nonattainment | Subpart 2/Moderate | 0.084 | see footnote 4 | |
| St Louis, MO-IL | MO-IL | 07,05 | Nonattainment | Subpart 2/Moderate | 0.078 | see footnote 4 | |
| State College, PA | PA | 03 | Maintenance | Former Subpart 1 | 0.070 | Yes | |
| Steubenville-Weirton, OH-WV | OH-WV | 05,03 | Maintenance | Former Subpart 1 | 0.074 | Yes | |
| Sutter Co (Sutter Buttes), CA | CA | 09 | Nonattainment | Former Subpart 1 | 0.079 | Yes | |
| Terre Haute, IN | IN | 05 | Maintenance | Former Subpart 1 | 0.066 | Yes | |
| Tioga Co, PA | PA | 03 | Maintenance | Former Subpart 1 | 0.070 | Yes | |
| Toledo, OH | OH | 05 | Maintenance | Former Subpart 1 | 0.074 | Yes | |

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|---------------------------------|--------------|-------------|---------------------------------|-----------------------------|--|-------------------|-------------------------------|
| Ventura Co, CA | CA | 09 | Nonattainment | Subpart 2/Serious | 0.087 | No | |
| Washington Co (Hagerstown), MD | MD | 03 | Attainment | Former EAC | 0.073 | Yes | |
| Washington, DC-MD-VA | DC- MD-VA | 03 | Nonattainment | Subpart 2/Moderate | 0.080 | see footnote 4 | |
| Wheeling, WV-OH | OH | 03,05 | Maintenance | Former Subpart 1 | 0.074 | Yes | |
| York, PA | PA | 03 | Maintenance | Former Subpart 1 | 0.077 | Yes | |
| Youngstown-Warren-Sharon, OH-PA | OH-PA | 05,03 | Maintenance | Former Subpart 1 | 0.077 | Yes | |

Notes:

1. Area designation status as of September 2, 2010.

2. The level of the 1997 8-hour NAAQS for ozone is 0.08 parts per million (ppm). The design value for the ozone 8-hour NAAQS is the 3-year average of the annual fourth-highest daily maximum 8-hour ozone concentration.

3. The design values shown here are computed for the latest design value period using Federal Reference Method or equivalent data reported by States, Tribes, and local agencies to EPA's Air Quality System (AQS) as of May 6, 2010. Concentrations flagged by States, Tribes, and local agencies as exceptional events (e.g., high winds, wildfires, volcanic eruptions, construction) and concurred by the associated EPA Regional Office are not included in the calculation of these design values.

4. One or more sites in this area has violated the NAAQS prior to 2007-2009 and does not have a valid 2007-2009 design value(s). Although a 2007-2009 area-level design value is shown, the design value shown may not represent the worst 2007-2009 air quality in the area. Consequently, we have not used it to indicate "yes" or "no" in the Met NAAQS column.