

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:

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Table 1. Areas Previously Designated Nonattainment for the 1997 Ozone 8-Hour NAAQS
 AQS Data Query: 5/6/2010 Last Updated: 12/3/2010

Designated Area	States	EPA Regions	Designation Status ¹	Classification ¹	2007-2009		Clean Data Determination Date
					8-Hour Design Value (ppm) ^{2,3}	Met NAAQS	
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	see 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	see footnote 4	4/12/2010
Chico, CA	CA	09	Nonattainment	Former Subpart 1	0.082	Yes	
Cincinnati-Hamilton, OH-KY-IN	OH- 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	
Clearfield and Indiana Cos, PA	PA	03	Maintenance	Former Subpart 1	0.073	Yes	

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					8-Hour Design Value (ppm) ^{2,3}		
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	
Essex Co (Whiteface Mtn), NY	NY	02	Nonattainment	Former Subpart 1	0.076	see 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	
Greater Connecticut, CT	CT	01	Nonattainment	Subpart 2/Moderate	0.081	see 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	
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	

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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 Mojave),CA	CA	09	Nonattainment	Subpart 2/Moderate	0.100	No	
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	

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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 WV-	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	
Phoenix-Mesa, AZ	AZ	09	Nonattainment	Former Subpart 1	0.076	Yes	
Pittsburgh-Beaver Valley, PA	PA	03	Nonattainment	Former Subpart 1	0.082	Yes	
Portland, ME	ME	01	Maintenance	Subpart 2/Marginal	0.074	Yes	
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

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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	
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	WV-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.

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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.