

## **O<sub>3</sub> Air Quality Data Update 2006-2008 Design Values**

The following is a brief summary of EPA's 2008 air quality update for 8-hour ozone (O<sub>3</sub>) based on air quality monitoring data for the three-year period, 2006-2008. During this 3-year period:

- 31 of the 126 areas originally designated nonattainment for the 8-hour O<sub>3</sub> National Ambient Air Quality Standard (NAAQS) failed to meet the 1997 8-hour O<sub>3</sub> NAAQS (Table 1).
- 1 of the areas originally designated nonattainment had incomplete data (Table 1).
- 1 additional unclassifiable/attainment area failed to meet the O<sub>3</sub> NAAQS (Table 2).

As of July 31, 2009, 59 of the 126 areas originally designated nonattainment for the 8-hour O<sub>3</sub> NAAQS are classified as maintenance areas, meaning they have been redesignated to attainment.

In 1997, EPA established the NAAQS for 8-hour O<sub>3</sub> at 0.08 parts per million (ppm). If the level of the 3-year average of the annual 4<sup>th</sup> highest daily maximum 8-hour O<sub>3</sub> 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 O<sub>3</sub> standard to be 0.075 parts per million (ppm). If the level of the 3-year average of the annual 4<sup>th</sup> highest daily maximum 8-hour O<sub>3</sub> concentration is greater than 0.075 ppm, then the standard is not met. County level data based on the 2008 8-Hour O<sub>3</sub> 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 O<sub>3</sub> design values. The data used in the calculations were obtained from the AQS on July 8, 2009. Detailed 2006-2008 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 8-hour O<sub>3</sub> NAAQS**

<u>Designated Nonattainment Area</u>	<u>State</u>	<u>EPA Region</u>	<u>Classification</u>	<u>Designation Status<sup>1</sup></u>	<u>2006-2008 Design Value<sup>2</sup></u>	<u>Met 1997 NAAQS 2006- 2008?<sup>3</sup></u>
Albany-Schenectady-Troy, NY	NY	02	Former Subpart 1	Nonattainment	0.077	Yes
Allegan Co, MI	MI	05	Former Subpart 1	Nonattainment	0.086	No
Allentown-Bethlehem-Easton, PA	PA	03	Former Subpart 1	Maintenance	0.08	Yes
Altoona, PA	PA	03	Former Subpart 1	Maintenance	0.072	Yes
Amador and Calaveras Cos (Central Mtn), CA	CA	09	Former Subpart 1	Nonattainment	0.089	No
Atlanta, GA	GA	04	Subpart 2/Marginal	Nonattainment	0.095	No
Baltimore, MD	MD	03	Subpart 2/Moderate	Nonattainment	0.091	No
Baton Rouge, LA	LA	06	Subpart 2/Marginal	Nonattainment	0.083	Yes
Beaumont-Port Arthur, TX	TX	06	Subpart 2/Marginal	Nonattainment	0.081	Yes
Benton Harbor, MI	MI	05	Former Subpart 1	Maintenance	0.078	Yes
Benzie Co, MI	MI	05	Former Subpart 1	Maintenance	0.076	Yes
Berkeley and Jefferson Counties, WV	WV	03	Former EAC	Attainment	0.074	Yes
Birmingham, AL	AL	04	Former Subpart 1	Maintenance	0.087	No
Boston-Lawrence-Worcester (E. MA), MA	MA	01	Subpart 2/Moderate	Nonattainment	0.083	Yes
Boston-Manchester-Portsmouth(SE),NH	NH	01	Subpart 2/Moderate	Nonattainment	0.079	Yes
Buffalo-Niagara Falls, NY	NY	02	Former Subpart 1	Nonattainment	0.081	Yes
Canton-Massillon, OH	OH	05	Former Subpart 1	Maintenance	0.08	Yes
Cass Co, MI	MI	05	Subpart 2/Marginal	Maintenance	0.075	Yes
Charleston, WV	WV	03	Former Subpart 1	Maintenance	0.078	Yes
Charlotte-Gastonia-Rock Hill, NC-SC	NC-SC	04	Subpart 2/Moderate	Nonattainment	0.094	No
Chattanooga, TN-GA	TN-GA	04	Former EAC	Attainment	0.084	Yes
Chicago-Gary-Lake County, IL-IN	IL-IN	05	Subpart 2/Moderate	Nonattainment	0.078	Yes
Chico, CA	CA	09	Former Subpart 1	Nonattainment	0.085	No
Cincinnati-Hamilton, OH-KY-IN	OH-KY-IN	05,04	Former Subpart 1	Nonattainment	0.085	No
Clarksville-Hopkinsville, TN-KY	TN-KY	04	Former Subpart 1	Maintenance	0.078	Yes
Clearfield and Indiana Cos, PA	PA	03	Former Subpart 1	Maintenance	0.076	Yes
Cleveland-Akron-Lorain, OH	OH	05	Subpart 2/Moderate	Nonattainment	0.084	Yes
Columbia, SC	SC	04	Former EAC	Attainment	0.079	Yes
Columbus, OH	OH	05	Former Subpart 1	Nonattainment	0.084	Yes
Dallas-Fort Worth, TX	TX	06	Subpart 2/Moderate	Nonattainment	0.091	No
Dayton-Springfield, OH	OH	05	Former Subpart 1	Maintenance	0.077	Yes
	CO	08	Former EAC	Nonattainment	0.086	No

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Denver-Boulder-Greeley-Ft Collins-Love., CO						
Detroit-Ann Arbor, MI	MI	05	Subpart 2/Marginal	Maintenance	0.082	Yes
Door Co, WI	WI	05	Former Subpart 1	Nonattainment	0.08	Yes
Erie, PA	PA	03	Former Subpart 1	Maintenance	0.078	Yes
Essex Co (Whiteface Mtn), NY	NY	02	Former Subpart 1	Nonattainment	0.076	Yes
Evansville, IN	IN	05	Former Subpart 1	Maintenance	0.08	Yes
Fayetteville, NC	NC	04	Former EAC	Attainment	0.077	Yes
Flint, MI	MI	05	Former Subpart 1	Maintenance	0.076	Yes
Fort Wayne, IN	IN	05	Former Subpart 1	Maintenance	0.073	Yes
Franklin Co, PA	PA	03	Former Subpart 1	Maintenance	0.072	Yes
Frederick Co, VA	VA	03	Former EAC	Attainment	0.073	Yes
Fredericksburg, VA	VA	03	Subpart 2/Moderate	Maintenance	0.081	Yes
Grand Rapids, MI	MI	05	Former Subpart 1	Maintenance	0.079	Yes
Greater Connecticut, CT	CT	01	Subpart 2/Moderate	Nonattainment	0.087	No
Greene Co, IN	IN	05	Former Subpart 1	Maintenance	0.077	Yes
Greene Co, PA	PA	03	Former Subpart 1	Maintenance	0.076	Yes
Greensboro-Winston Salem-High Point, NC	NC	04	Subpart 2/Marginal/EAC	Attainment	0.082	Yes
Greenville-Spartanburg-Anderson, SC	SC	04	Former EAC	Attainment	0.084	Yes
Hancock, Knox, Lincoln & Waldo Cos, ME	ME	01	Former Subpart 1	Maintenance	0.08	Yes
Harrisburg-Lebanon-Carlisle, PA	PA	03	Former Subpart 1	Maintenance	0.079	Yes
Haywood and Swain Cos (Great Smoky NP), NC	NC	04	Former Subpart 1	Nonattainment	0.077	Yes
Hickory-Morganton-Lenoir, NC	NC	04	Former EAC	Attainment	0.077	Yes
Houston-Galveston-Brazoria, TX	TX	06	Subpart 2/Moderate	Nonattainment	0.091	No
Huntington-Ashland, WV-KY	WV-KY	03,04	Former Subpart 1	Maintenance	0.08	Yes
Huron Co, MI	MI	05	Former Subpart 1	Maintenance	0.074	Yes
Imperial Co, CA	CA	09	Subpart 2/Marginal	Nonattainment	0.082	Yes
Indianapolis, IN	IN	05	Former Subpart 1	Maintenance	0.078	Yes
Jackson Co, IN	IN	05	Former Subpart 1	Maintenance	0.074	Yes
Jamestown, NY	NY	02	Former Subpart 1	Nonattainment	0.084	Yes
Jefferson Co, NY	NY	02	Subpart 2/Moderate	Nonattainment	0.075	Yes
Johnson City-Kingsport-Bristol, TN	TN	04	Former EAC	Attainment	0.081	Yes
Johnstown, PA	PA	03	Former Subpart 1	Maintenance	0.07	Yes

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Kalamazoo-Battle Creek, MI	MI	05	Former Subpart 1	Maintenance	0.073	Yes
Kent and Queen Anne's Cos, MD	MD	03	Subpart 2/Marginal	Maintenance	0.083	Yes
Kern Co (Eastern Kern), CA	CA	09	Former Subpart 1	Nonattainment	0.086	No
Kewaunee Co, WI	WI	05	Former Subpart 1	Maintenance	0.075	Yes
Knoxville, TN	TN	04	Former Subpart 1	Nonattainment	0.088	No
La Porte, IN	IN	05	Subpart 2/Marginal	Maintenance	0.069	Yes
Lancaster, PA	PA	03	Subpart 2/Marginal	Maintenance	0.082	Yes
Lansing-East Lansing, MI	MI	05	Former Subpart 1	Maintenance	0.073	Yes
Las Vegas, NV	NV	09	Former Subpart 1	Nonattainment	0.082	Yes
Lima, OH	OH	05	Former Subpart 1	Maintenance	0.073	Yes
Los Angeles South Coast Air Basin, CA	CA	09	Subpart 2/Severe <sup>17</sup>	Nonattainment	0.119	No
Los Angeles-San Bernardino Cos(W Mojave),CA	CA	09	Subpart 2/Moderate	Nonattainment	0.104	No
Louisville, KY-IN	KY-IN	04,05	Former Subpart 1	Maintenance	0.081	Yes
Macon, GA	GA	04	Former Subpart 1	Maintenance	0.08	Yes
Madison and Page Cos (Shenandoah NP), VA	VA	03	Former Subpart 1	Maintenance	0.075	Yes
Manitowoc Co, WI	WI	05	Former Subpart 1	Nonattainment	0.075	Yes
Mariposa and Tuolumne Cos (Southern Mtn),CA	CA	09	Former Subpart 1	Nonattainment	0.088	No
Mason Co, MI	MI	05	Former Subpart 1	Maintenance	0.075	Yes
Memphis, TN-AR	TN-AR	04,06	Subpart 2/Marginal	Nonattainment	0.082	Yes
Milwaukee-Racine, WI	WI	05	Subpart 2/Moderate	Nonattainment	0.078	Yes
Muncie, IN	IN	05	Former Subpart 1	Maintenance	0.071	Yes
Murray Co (Chattahoochee Nat Forest), GA	GA	04	Former Subpart 1	Maintenance	0.078	Yes
Muskegon, MI	MI	05	Subpart 2/Marginal	Maintenance	0.082	Yes
Nashville, TN	TN	04	Former EAC	Attainment	0.084	Yes
Nevada Co. (Western Part), CA	CA	09	Former Subpart 1	Nonattainment	0.091	No
New York-N. New Jersey-Long Island,NY-NJ- CT	NY-NJ-CT	02,01	Subpart 2/Moderate	Nonattainment	0.089	No
Norfolk-Virginia Beach-Newport News (HR),VA	VA	03	Subpart 2/Marginal	Maintenance	0.077	Yes
Parkersburg-Marietta, WV-OH	WV-OH	03,05	Former Subpart 1	Maintenance	0.081	Yes
Philadelphia-Wilmin-Atlantic Ci,PA-NJ-MD-DE	PA-NJ-MD- DE	03,02	Subpart 2/Moderate	Nonattainment	0.092	No
Phoenix-Mesa, AZ	AZ	09	Former Subpart 1	Nonattainment	0.081	Yes
Pittsburgh-Beaver Valley, PA	PA	03	Former Subpart 1	Nonattainment	0.086	No
Portland, ME	ME	01	Subpart 2/Marginal	Maintenance	0.076	Yes

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Poughkeepsie, NY	NY	02	Subpart 2/Moderate	Nonattainment	0.08	Yes
Providence (All RI), RI	RI	01	Subpart 2/Moderate	Nonattainment	0.082	Yes
Raleigh-Durham-Chapel Hill, NC	NC	04	Former Subpart 1	Maintenance	0.08	Yes
Reading, PA	PA	03	Former Subpart 1	Maintenance		Incomplete
Richmond-Petersburg, VA	VA	03	Subpart 2/Marginal	Maintenance	0.085	No
Riverside Co, (Coachella Valley), CA	CA	09	Subpart 2/Serious	Nonattainment	0.097	No
Roanoke, VA	VA	03	Former EAC	Attainment	0.074	Yes
Rochester, NY	NY	02	Former Subpart 1	Nonattainment	0.08	Yes
Rocky Mount, NC	NC	04	Former Subpart 1	Maintenance	0.076	Yes
Sacramento Metro, CA	CA	09	Subpart 2/Serious	Nonattainment	0.102	No
San Antonio, TX	TX	06	Former EAC	Attainment	0.078	Yes
San Diego, CA	CA	09	Former Subpart 1	Nonattainment	0.092	No
San Francisco Bay Area, CA	CA	09	Subpart 2/Marginal	Nonattainment	0.081	Yes
San Joaquin Valley, CA	CA	09	Subpart 2/Serious	Nonattainment	0.108	No
Scranton-Wilkes-Barre, PA	PA	03	Former Subpart 1	Maintenance	0.076	Yes
Sheboygan, WI	WI	05	Subpart 2/Moderate	Nonattainment	0.082	Yes
South Bend-Elkhart, IN	IN	05	Former Subpart 1	Maintenance	0.073	Yes
Springfield (Western MA), MA	MA	01	Subpart 2/Moderate	Nonattainment	0.088	No
St Louis, MO-IL	MO-IL	07,05	Subpart 2/Moderate	Nonattainment	0.085	No
State College, PA	PA	03	Former Subpart 1	Maintenance	0.075	Yes
Steubenville-Weirton, OH-WV	OH-WV	05,03	Former Subpart 1	Maintenance	0.077	Yes
Sutter Co (Sutter Buttes), CA	CA	09	Former Subpart 1	Nonattainment	0.085	No
Terre Haute, IN	IN	05	Former Subpart 1	Maintenance	0.07	Yes
Tioga Co, PA	PA	03	Former Subpart 1	Maintenance	0.073	Yes
Toledo, OH	OH	05	Former Subpart 1	Maintenance	0.075	Yes
Ventura Co, CA	CA	09	Subpart 2/Moderate	Nonattainment	0.088	No
Washington Co (Hagerstown), MD	MD	03	Former EAC	Attainment	0.078	Yes
Washington, DC-MD-VA	DC-MD-VA	03	Subpart 2/Moderate	Nonattainment	0.087	No
Wheeling, WV-OH	WV-OH	03,05	Former Subpart 1	Maintenance	0.077	Yes
York, PA	PA	03	Former Subpart 1	Maintenance	0.08	Yes
Youngstown-Warren-Sharon, OH-PA	OH-PA	05,03	Former Subpart 1	Maintenance	0.081	Yes

Notes:

1. Status as of July 8, 2009.

2. The air quality design value for the 8-hour O<sub>3</sub> NAAQS is the 3-year average of the annual 4th highest daily maximum 8-hour O<sub>3</sub> concentration.

3. The "Meets NAAQS" is based on monitors with complete data for the current period. There may be monitors which violated in a previous period with incomplete data for this period.

- The level of the 1997 8-hour ozone (O<sub>3</sub>) National Ambient Air Quality Standard (NAAQS) is 0.08 parts per million (ppm).
- The 1997 8-hour O<sub>3</sub> NAAQS is not met when the 8-hour O<sub>3</sub> design value is greater than 0.08 ppm (0.085 ppm rounds up).
- Data that have been flagged for exceptional events, for which documentation has been submitted and approved by the EPA (AQS concurrence field set to 'Y'), if any, were excluded from the design value calculations. In several situations, submitted documentation is still under review and as such, revisions to design values are possible.

**Table 2. Additional areas failing to meet the 1997 O<sub>3</sub> NAAQS in 2006-2008.**

<u>State</u>	<u>County</u>	<u>EPA Region</u>	<u>Site</u>	<u>POC</u>	<u>2006-2008 Design Value<sup>1</sup></u>	<u>CBSA</u>
California	Tehama	09	061030004	1	0.085	Red Bluff, CA

Notes:

1. The air quality design value for the 8-hour O<sub>3</sub> NAAQS is the 3-year average of the annual 4th highest daily maximum 8-hour O<sub>3</sub> concentration.

- The level of the 1997 8-hour ozone (O<sub>3</sub>) National Ambient Air Quality Standard (NAAQS) is 0.08 parts per million (ppm).
- The 1997 8-hour O<sub>3</sub> NAAQS is not met when the 8-hour O<sub>3</sub> design value is greater than 0.08 ppm (0.085 ppm rounds up).
- Data that have been flagged for exceptional events, for which documentation has been submitted and approved by the EPA (AQSCONCURRENCE field set to 'Y'), if any, were excluded from the design value calculations. In several situations, submitted documentation is still under review and as such, revisions to design values are possible.