

O₃ Air Quality Data Update 2004-2006 Design Values

The following is a brief summary of EPA's 2006 air quality update for the 8-hour ozone (O₃) air quality monitoring data for the three year period, 2004-2006. During this current three year period,

- 35 of the 126 areas originally designated nonattainment for the 8-hour O₃ National Ambient Air Quality Standard (NAAQS) failed to meet the NAAQS in 2004-2006 (Table 1).
- 2 of the areas originally designated nonattainment have incomplete data.
- As of August 13, 2007, 43 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.
- 1 additional unclassifiable/attainment area failed to meet the O₃ NAAQS in 2004-2006 (Table 2).

The EPA set the 8-hour O₃ standard 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.

Air quality data from EPA's Air Quality System (AQS) were used to calculate design values. The specific calculation is explained in the notes. The data used for these calculations were obtained from AQS on July 11, 2007. Detailed 2004-2006 information for all ozone monitors is available in the downloadable spreadsheet file. For more information concerning these data contact:

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Table 1. Areas previously designated nonattainment for the 8-hour O₃ NAAQS

Nonattainment Area	State	Region	Classification	Status	2004-2006	Meet NAAQS 2004-2006?
					Design Value ¹	
Albany-Schenectady-Troy, NY	NY	02	Subpart 1/Basic	Nonattainment	0.078	Yes
Allegan Co, MI	MI	05	Subpart 1/Basic	Nonattainment	0.088	No
Allentown-Bethlehem-Easton, PA	PA	03	Subpart 1/Basic	Nonattainment	0.084	Yes
Altoona, PA	PA	03	Subpart 1/Basic	Maintenance	0.073	Yes
Amador and Calaveras Cos (Central Mtn), CA	CA	09	Subpart 1/Basic	Nonattainment	0.093	No
Atlanta, GA	GA	04	Subpart 2/Marginal	Nonattainment	0.091	No
Baltimore, MD	MD	03	Subpart 2/Moderate	Nonattainment	0.093	No
Baton Rouge, LA	LA	06	Subpart 2/Marginal	Nonattainment	0.091	No
Beaumont-Port Arthur, TX	TX	06	Subpart 2/Marginal	Nonattainment	0.085	No
Benton Harbor, MI	MI	05	Subpart 1/Basic	Maintenance	0.079	Yes
Benzie Co, MI	MI	05	Subpart 1/Basic	Maintenance	0.08	Yes
Berkeley and Jefferson Counties, WV	WV	03	Subpart 1/EAC	Nonattainment	0.074	Yes
Birmingham, AL	AL	04	Subpart 1/Basic	Maintenance	0.085	No
Boston-Lawrence-Worcester (E. MA), MA	MA	01	Subpart 2/Moderate	Nonattainment	0.084	Yes
Boston-Manchester-Portsmouth(SE),NH	NH	01	Subpart 2/Moderate	Nonattainment	0.078	Yes
Buffalo-Niagara Falls, NY	NY	02	Subpart 1/Basic	Nonattainment	0.083	Yes
Canton-Massillon, OH	OH	05	Subpart 1/Basic	Maintenance	0.079	Yes
Cass Co, MI	MI	05	Subpart 2/Marginal	Maintenance	0.078	Yes
Charleston, WV	WV	03	Subpart 1/Basic	Maintenance	0.075	Yes
Charlotte-Gastonia-Rock Hill, NC-SC	NC-SC	04	Subpart 2/Moderate	Nonattainment	0.088	No
Chattanooga, TN-GA	TN-GA	04	Subpart 1/EAC	Nonattainment	0.08	Yes
Chicago-Gary-Lake County, IL-IN	IL-IN	05	Subpart 2/Moderate	Nonattainment	0.083	Yes
Chico, CA	CA	09	Subpart 1/Basic	Nonattainment	0.084	Yes
Cincinnati-Hamilton, OH-KY-IN	OH-KY-IN	05,04	Subpart 1/Basic	Nonattainment	0.086	No
Clarksville-Hopkinsville, TN-KY	TN-KY	04	Subpart 1/Basic	Maintenance	0.076	Yes
Clearfield and Indiana Cos, PA	PA	03	Subpart 1/Basic	Nonattainment	0.077	Yes
Cleveland-Akron-Lorain, OH	OH	05	Subpart 2/Moderate	Nonattainment	0.086	No
Columbia, SC	SC	04	Subpart 1/EAC	Nonattainment	0.082	Yes
Columbus, OH	OH	05	Subpart 1/Basic	Nonattainment	0.084	Yes
Dallas-Fort Worth, TX	TX	06	Subpart 2/Moderate	Nonattainment	0.096	No
Dayton-Springfield, OH	OH	05	Subpart 1/Basic	Maintenance	0.08	Yes
Denver-Boulder-Greeley-Ft Collins-Love., CO	CO	08	Subpart 1/EAC	Nonattainment	0.081	Yes
Detroit-Ann Arbor, MI	MI	05	Subpart 2/Marginal	Nonattainment	0.082	Yes
Door Co, WI	WI	05	Subpart 1/Basic	Nonattainment	0.086	No
Erie, PA	PA	03	Subpart 1/Basic	Nonattainment	0.079	Yes
Essex Co (Whiteface Mtn), NY	NY	02	Subpart 1/Basic	Nonattainment		Incomplete
Evansville, IN	IN	05	Subpart 1/Basic	Maintenance	0.077	Yes
Fayetteville, NC	NC	04	Subpart 1/EAC	Nonattainment	0.08	Yes
Flint, MI	MI	05	Subpart 1/Basic	Maintenance	0.077	Yes
Fort Wayne, IN	IN	05	Subpart 1/Basic	Maintenance	0.077	Yes
Franklin Co, PA	PA	03	Subpart 1/Basic	Maintenance	0.07	Yes
Frederick Co, VA	VA	03	Subpart 1/EAC	Nonattainment	0.071	Yes
Fredericksburg, VA	VA	03	Subpart 2/Moderate	Maintenance	0.081	Yes
Grand Rapids, MI	MI	05	Subpart 1/Basic	Maintenance	0.079	Yes
Greater Connecticut, CT	CT	01	Subpart 2/Moderate	Nonattainment	0.089	No
Greene Co, IN	IN	05	Subpart 1/Basic	Maintenance	0.076	Yes
Greene Co, PA	PA	03	Subpart 1/Basic	Nonattainment	0.079	Yes
Greensboro-Winston Salem-High Point, NC	NC	04	Subpart 2/Marginal/EAC	Nonattainment	0.08	Yes
Greenville-Spartanburg-Anderson, SC	SC	04	Subpart 1/EAC	Nonattainment	0.083	Yes
Hancock, Knox, Lincoln & Waldo Cos, ME	ME	01	Subpart 1/Basic	Maintenance	0.081	Yes

Table 1. Areas previously designated nonattainment for the 8-hour O₃ NAAQS

Nonattainment Area	State	Region	Classification	Status	2004-2006	Meet NAAQS 2004-2006?
					Design Value ¹	
Harrisburg-Lebanon-Carlisle, PA	PA	03	Subpart 1/Basic	Maintenance	0.079	Yes
Haywood and Swain Cos (Great Smoky NP), NC	NC	04	Subpart 1/Basic	Nonattainment	0.076	Yes
Hickory-Morganton-Lenoir, NC	NC	04	Subpart 1/EAC	Nonattainment	0.075	Yes
Houston-Galveston-Brazoria, TX	TX	06	Subpart 2/Moderate	Nonattainment	0.103	No
Huntington-Ashland, WV-KY	WV-KY	03,04	Subpart 1/Basic	Nonattainment	0.076	Yes
Huron Co, MI	MI	05	Subpart 1/Basic	Maintenance	0.072	Yes
Imperial Co, CA	CA	09	Subpart 2/Marginal	Nonattainment	0.085	No
Indianapolis, IN	IN	05	Subpart 1/Basic	Nonattainment	0.079	Yes
Jackson Co, IN	IN	05	Subpart 1/Basic	Maintenance	0.073	Yes
Jamestown, NY	NY	02	Subpart 1/Basic	Nonattainment	0.086	No
Jefferson Co, NY	NY	02	Subpart 2/Moderate	Nonattainment	0.075	Yes
Johnson City-Kingsport-Bristol, TN	TN	04	Subpart 1/EAC	Nonattainment	0.079	Yes
Johnstown, PA	PA	03	Subpart 1/Basic	Maintenance	0.073	Yes
Kalamazoo-Battle Creek, MI	MI	05	Subpart 1/Basic	Maintenance	0.072	Yes
Kent and Queen Anne's Cos, MD	MD	03	Subpart 2/Marginal	Maintenance	0.081	Yes
Kern Co (Eastern Kern), CA	CA	09	Subpart 1/Basic	Nonattainment	0.086	No
Kewaunee Co, WI	WI	05	Subpart 1/Basic	Nonattainment	0.079	Yes
Knoxville, TN	TN	04	Subpart 1/Basic	Nonattainment	0.084	Yes
La Porte, IN	IN	05	Subpart 2/Marginal	Maintenance	0.076	Yes
Lancaster, PA	PA	03	Subpart 2/Marginal	Maintenance	0.083	Yes
Lansing-East Lansing, MI	MI	05	Subpart 1/Basic	Maintenance	0.073	Yes
Las Vegas, NV	NV	09	Subpart 1/Basic	Nonattainment	0.083	Yes
Lima, OH	OH	05	Subpart 1/Basic	Maintenance	0.077	Yes
Los Angeles South Coast Air Basin, CA	CA	09	Subpart 2/Severe ¹⁷	Nonattainment	0.121	No
Los Angeles-San Bernardino Cos(W Mojave),CA	CA	09	Subpart 2/Moderate	Nonattainment	0.103	No
Louisville, KY-IN	KY-IN	04,05	Subpart 1/Basic	Maintenance	0.082	Yes
Macon, GA	GA	04	Subpart 1/Basic	Nonattainment	0.081	Yes
Madison and Page Cos (Shenandoah NP), VA	VA	03	Subpart 1/Basic	Maintenance	0.077	Yes
Manitowoc Co, WI	WI	05	Subpart 1/Basic	Nonattainment	0.082	Yes
Mariposa and Tuolumne Cos (Southern Mtn),CA	CA	09	Subpart 1/Basic	Nonattainment	0.086	No
Mason Co, MI	MI	05	Subpart 1/Basic	Maintenance	0.077	Yes
Memphis, TN-AR	TN-AR	04,06	Subpart 2/Marginal	Nonattainment	0.087	No
Milwaukee-Racine, WI	WI	05	Subpart 2/Moderate	Nonattainment	0.083	Yes
Muncie, IN	IN	05	Subpart 1/Basic	Maintenance	0.074	Yes
Murray Co (Chattahoochee Nat Forest), GA	GA	04	Subpart 1/Basic	Nonattainment	0.076	Yes
Muskegon, MI	MI	05	Subpart 2/Marginal	Maintenance	0.083	Yes
Nashville, TN	TN	04	Subpart 1/EAC	Nonattainment	0.083	Yes
Nevada Co. (Western Part), CA	CA	09	Subpart 1/Basic	Nonattainment	0.096	No
New York-N. New Jersey-Long Island,NY-NJ-CT	NY-NJ-CT	02,01	Subpart 2/Moderate	Nonattainment	0.092	No
Norfolk-Virginia Beach-Newport News (HR),VA	VA	03	Subpart 2/Marginal	Maintenance	0.076	Yes
Parkersburg-Marietta, WV-OH	WV-OH	03,05	Subpart 1/Basic	Maintenance	0.082	Yes
Philadelphia-Wilmin-Atlantic Ci,PA-NJ-MD-DE	PA-NJ-MD-DE	03,02	Subpart 2/Moderate	Nonattainment	0.093	No
Phoenix-Mesa, AZ	AZ	09	Subpart 1/Basic	Nonattainment	0.083	Yes
Pittsburgh-Beaver Valley, PA	PA	03	Subpart 1/Basic	Nonattainment	0.083	Yes
Portland, ME	ME	01	Subpart 2/Marginal	Maintenance	0.074	Yes
Poughkeepsie, NY	NY	02	Subpart 2/Moderate	Nonattainment	0.084	Yes
Providence (All RI), RI	RI	01	Subpart 2/Moderate	Nonattainment	0.085	No
Raleigh-Durham-Chapel Hill, NC	NC	04	Subpart 1/Basic	Nonattainment	0.08	Yes
Reading, PA	PA	03	Subpart 1/Basic	Nonattainment		Incomplete
Richmond-Petersburg, VA	VA	03	Subpart 2/Marginal	Maintenance	0.081	Yes

Table 1. Areas previously designated nonattainment for the 8-hour O₃ NAAQS

Nonattainment Area	State	Region	Classification	Status	2004-2006	Meet NAAQS 2004-2006?
					Design Value ¹	
Riverside Co, (Coachella Valley), CA	CA	09	Subpart 2/Serious	Nonattainment	0.102	No
Roanoke, VA	VA	03	Subpart 1/EAC	Nonattainment	0.074	Yes
Rochester, NY	NY	02	Subpart 1/Basic	Nonattainment	0.072	Yes
Rocky Mount, NC	NC	04	Subpart 1/Basic	Maintenance	0.075	Yes
Sacramento Metro, CA	CA	09	Subpart 2/Serious	Nonattainment	0.097	No
San Antonio, TX	TX	06	Subpart 1/EAC	Nonattainment	0.087	No
San Diego, CA	CA	09	Subpart 1/Basic	Nonattainment	0.088	No
San Francisco Bay Area, CA	CA	09	Subpart 2/Marginal	Nonattainment	0.08	Yes
San Joaquin Valley, CA	CA	09	Subpart 2/Serious	Nonattainment	0.11	No
Scranton-Wilkes-Barre, PA	PA	03	Subpart 1/Basic	Nonattainment	0.075	Yes
Sheboygan, WI	WI	05	Subpart 2/Moderate	Nonattainment	0.086	No
South Bend-Elkhart, IN	IN	05	Subpart 1/Basic	Maintenance	0.077	Yes
Springfield (Western MA), MA	MA	01	Subpart 2/Moderate	Nonattainment	0.086	No
St Louis, MO-IL	MO-IL	07,05	Subpart 2/Moderate	Nonattainment	0.086	No
State College, PA	PA	03	Subpart 1/Basic	Nonattainment	0.078	Yes
Steubenville-Weirton, OH-WV	OH-WV	05,03	Subpart 1/Basic	Maintenance	0.078	Yes
Sutter Co (Sutter Buttes), CA	CA	09	Subpart 1/Basic	Nonattainment	0.082	Yes
Terre Haute, IN	IN	05	Subpart 1/Basic	Maintenance	0.073	Yes
Tioga Co, PA	PA	03	Subpart 1/Basic	Maintenance	0.077	Yes
Toledo, OH	OH	05	Subpart 1/Basic	Maintenance	0.079	Yes
Ventura Co, CA	CA	09	Subpart 2/Moderate	Nonattainment	0.09	No
Washington Co (Hagerstown), MD	MD	03	Subpart 1/EAC	Nonattainment	0.078	Yes
Washington, DC-MD-VA	DC-MD-VA	03	Subpart 2/Moderate	Nonattainment	0.091	No
Wheeling, WV-OH	WV-OH	03,05	Subpart 1/Basic	Maintenance	0.077	Yes
York, PA	PA	03	Subpart 1/Basic	Nonattainment	0.081	Yes
Youngstown-Warren-Sharon, OH-PA	OH-PA	05,03	Subpart 1/Basic	Nonattainment	0.083	Yes

Notes:

1. The air quality design value for the 8-hour O₃ NAAQS is the 3-year average of the annual 4th highest daily maximum 8-hour O₃ concentration.

- The level of the 8-hour ozone (O₃) National Ambient Air Quality Standard (NAAQS) is 0.08 parts per million (ppm).
- The 8-hour O₃ NAAQS is not met when the 8-hour O₃ design value is greater than 0.08 ppm (0.085 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'), were excluded from the design value calculations.

Table 2. Additional areas failing to meet the O₃ NAAQS in 2004-2006.

			2004-2006
State	County	Region	Design Value¹
Texas	Gregg	06	0.085

- Notes:
- The air quality design value for the 8-hour O₃ NAAQS is the 3-year average of the annual 4th highest daily maximum 8-hour O₃ concentration.
 - The level of the 8-hour ozone (O₃) National Ambient Air Quality Standard (NAAQS) is 0.08 parts per million (ppm).
 - The 8-hour O₃ NAAQS is not met when the 8-hour O₃ design value is greater than 0.08 ppm (85 ppb 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'), were excluded from the design value calculations.