

EPA Reclassification of the Maricopa Eight-Hour Ozone Nonattainment Area to Moderate for the 2008 Ozone Standard



MAG Air Quality Technical Advisory Committee
August 27, 2015

ENVIRONMENTAL PROGRAMS

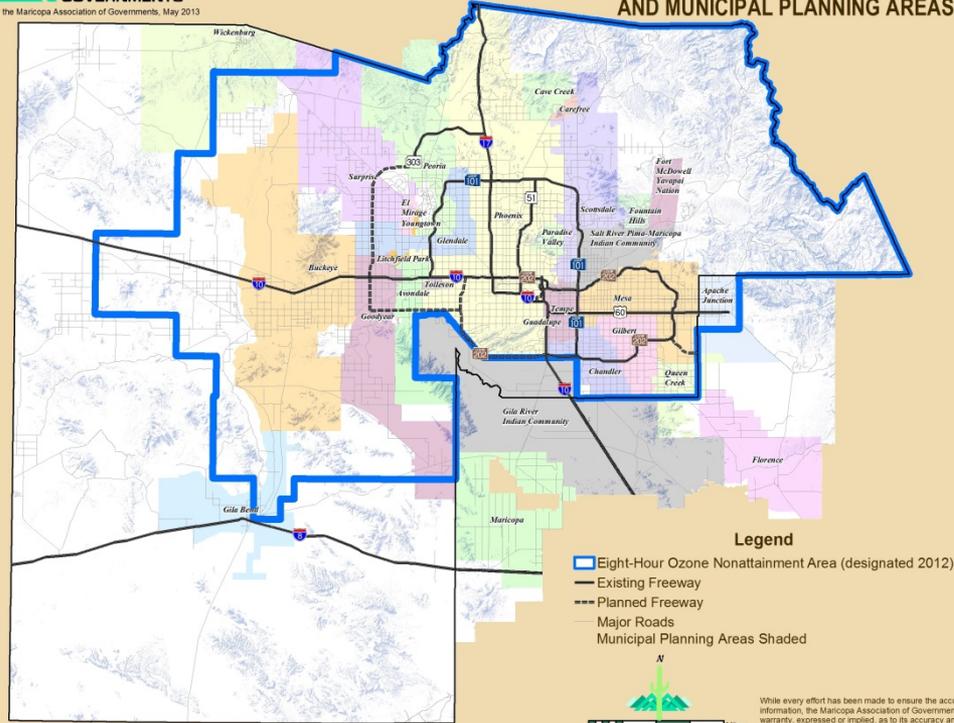
Maricopa Eight-Hour Ozone Nonattainment Area



MARICOPA ASSOCIATION of GOVERNMENTS
Prepared by the Maricopa Association of Governments, May 2013

Figure 1

EIGHT-HOUR OZONE NONATTAINMENT AREA AND MUNICIPAL PLANNING AREAS

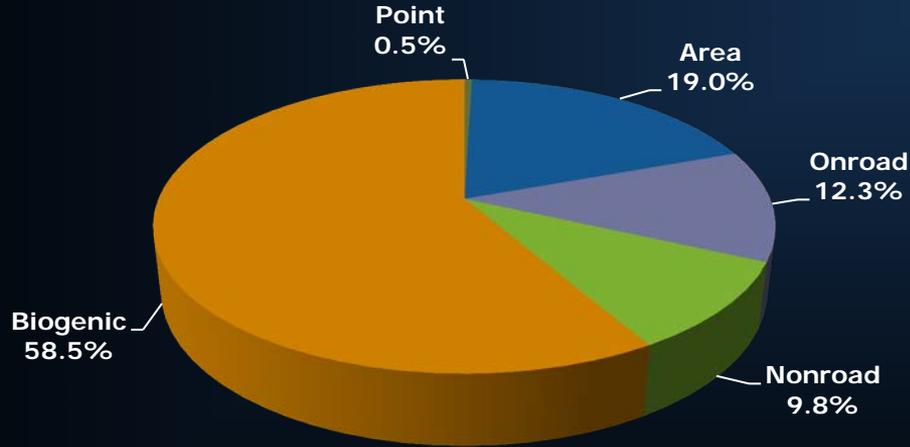


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Draft 2011 Ozone Season-Day VOC Emissions in the Maricopa Nonattainment Area

Volatile Organic Compounds (VOC) Emissions = 599.87 tons/day



Sources

Point: Manufacturing and electrical power generating facilities

Area: Solvents and coatings use, fuel storage and transport, waste treatment and disposal, industrial/chemical processes, residential/industrial fuel combustion and wildfires

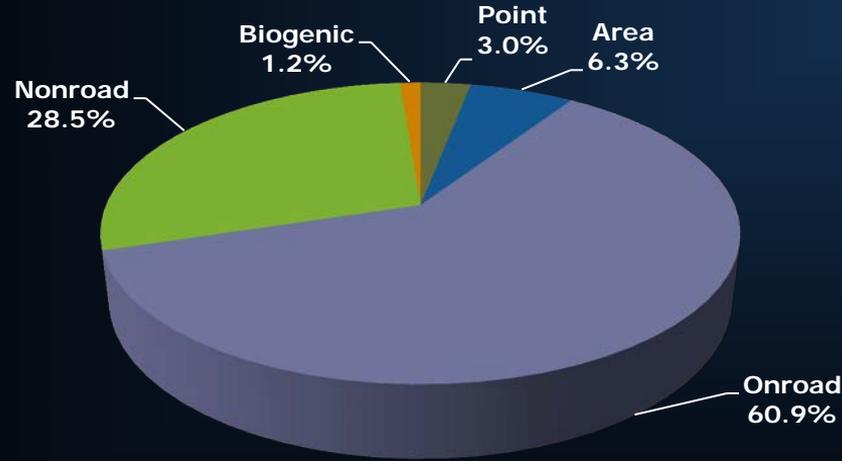
Onroad: Cars and trucks

Nonroad: Commercial, industrial, construction, mining, lawn and garden, farm and recreational equipment, aircraft and locomotives

Biogenic: Natural vegetation

Draft 2011 Ozone Season-Day NO_x Emissions in the Maricopa Nonattainment Area

Nitrogen Oxides (NO_x) Emissions = 253.86 tons/day



Sources

Point: Manufacturing and electrical power generating facilities

Area: Waste treatment and disposal, industrial/chemical processes, residential/industrial fuel combustion and wildfires

Onroad: Cars and trucks

Nonroad: Commercial, industrial, construction, mining, lawn and garden, farm and recreational equipment, aircraft and locomotives

Biogenic: Natural vegetation

Ozone

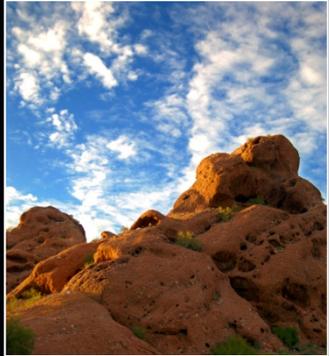
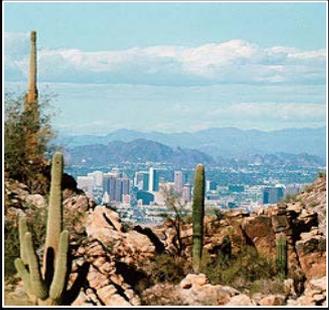
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- **No violations of the one-hour ozone standard since 1996.**
- **In June 2005, EPA redesignated the Maricopa County Nonattainment Area to attainment status for the 1-hour standard.**
- **No violations of the eight-hour standard of 0.08 parts per million (ppm) since 2004.**
- **MAG 2009 Eight-Hour Ozone Maintenance Plan demonstrates that the standard of 0.08 ppm will continue to be met through 2025.**

EPA Proposed Reclassification

- **August 19, 2015- EPA notice proposing actions for 36 Marginal nonattainment areas for the 2008 ozone standard (0.075 parts per million).**
- **The Maricopa Eight-Hour Ozone Nonattainment Area did not meet the standard by the July 20, 2015 attainment date and did not qualify for a one year extension of the attainment date.**
- **EPA proposing to reclassify the region from Marginal to Moderate.**



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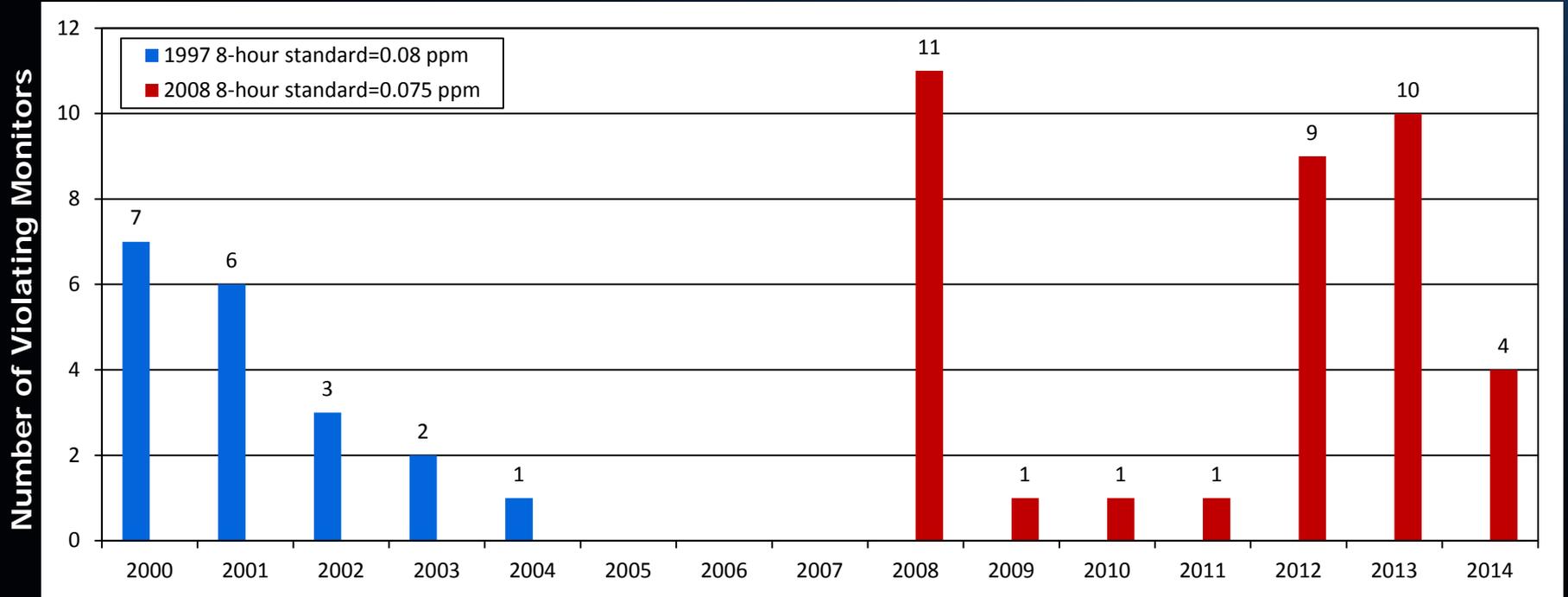
Clean Air Act Ozone Nonattainment Area Requirements by Classification



		NSR offset ratio	Major source threshold	
EXTREME (20 years to attain)	TRAFFIC CONGESTION CONTROLS (if appropriate)	1.5 : 1 Extreme	10	
	CLEAN FUELS REQUIREMENT FOR BOILERS			
SEVERE (15/17 years to attain)	PENALTY FEE PROGRAM FOR MAJOR SOURCES	1.3 : 1 Severe	25	
	LOW VOC REFORMULATED GAS (as appropriate)			
	VMT GROWTH DEMONSTRATION (& TCMs if needed)			
SERIOUS (9 years to attain)	VMT DEMONSTRATION (& TCMs if needed)	1.2 : 1 Serious	50	
	NSR REQUIREMENTS FOR EXISTING SOURCE MODS			
	ENHANCED MONITORING PLAN			CLEAN FUELS PROGRAM (if applicable)
	MODELED DEMO OF ATTAINMENT			MILESTONE DEMONSTRATIONS and CONTINGENCY MEASURES FOR RFP
	3% ANNUAL RFP UNTIL ATTAINMENT			ENHANCED I/M for larger population areas
	CONTINGENCY MEASURES FOR FAILURE TO ATTAIN			
	Stage II Gasoline Vapor Recovery			BASIC VEHICLE I/M for larger population areas
MODERATE (6 years to attain)	15% VOC ROP or 15% VOC/NOx RFP (OVER 6 YEARS)	1.15 : 1 Moderate	100	
	VOC/NOx RACT for MAJOR/CTG SOURCES			ATTAINMENT DEMONSTRATION
	TRANSPORTATION CONFORMITY DEMONSTRATION (MVEBs)			
MARGINAL (3 years to attain)	NONATTAINMENT NEW SOURCE REVIEW PROGRAM	1.1 : 1 Marginal	100	
	MAJOR SOURCE EMISSION STATEMENTS			
	BASELINE EMISSION INVENTORY (EI)			PERIODIC EMISSION INVENTORY UPDATES

Eight-Hour Ozone Monitoring Data

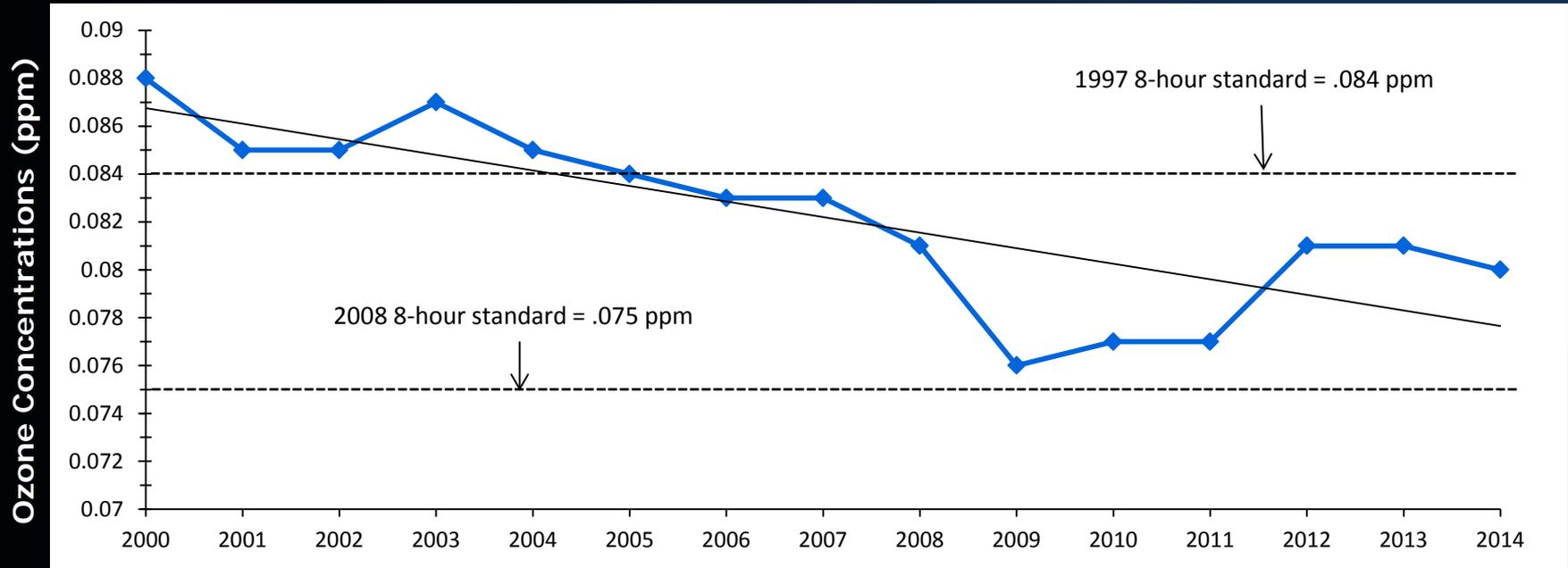
Number of Monitors Violating the Eight-Hour Ozone Standards in the Maricopa Nonattainment Area



Source: EPA Air Quality System.

Eight-Hour Ozone Monitoring Data

Highest 3-Year Average of the 4th Highest 8-Hour Ozone Concentration in the Maricopa Nonattainment Area



Notes:

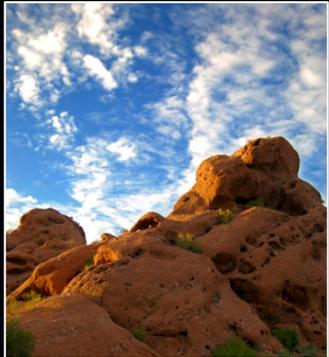
- To attain the eight-hour ozone standard, the 3 year average of the 4th highest daily maximum 8-hour concentration at each monitor per year must not exceed the standard.
- Due to mathematical rounding, values greater than or equal to .085 ppm are necessary to exceed the .08 ppm eight-hour ozone standard.
- Sources: 2000-2008: MAG Eight-Hour Ozone Redesignation Request and Maintenance Plan for the Maricopa Nonattainment Area, February 2009; 2009-2014: EPA Air Quality System.



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Moderate Area Requirements

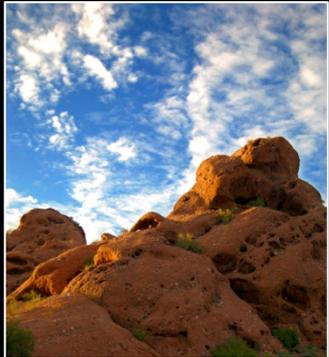
- Moderate Area Plan due January 1, 2017.
- Plan is required to demonstrate at least a 15 percent reduction in volatile organic compound emissions over a six year period (2012-2017).
- Attainment date-July 20, 2018.
- Since the attainment date is in the middle of the summer ozone season, the plan is required to demonstrate attainment in the prior 2017 ozone season.
- Region will need three years of clean data at the monitors in 2017 to meet the standard.



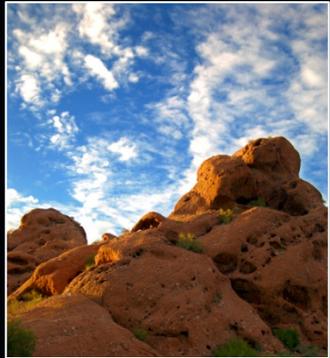
Moderate Area Requirements (continued)

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- Reasonably available control technology.
- Reasonably available control measures.
- New source review.
- Emissions inventories.
- Contingency measures.
- Motor Vehicle Emissions Budgets.
- Off-set requirement for major industries (1.15 to 1).



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Next Steps

- **Apply the benefits of federal control measures first (e.g., Tier 3 vehicle tailpipe standards and cleaner fuels).**
- **Determine if additional measures are needed.**
- **Prepare exceptional event documentation as needed (wildfires).**
- **Obtain three years of clean data at the air quality monitors (2015, 2016, 2017).**
- **Apply for a one year extension of the attainment date if needed and the region qualifies.**



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**For more information
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