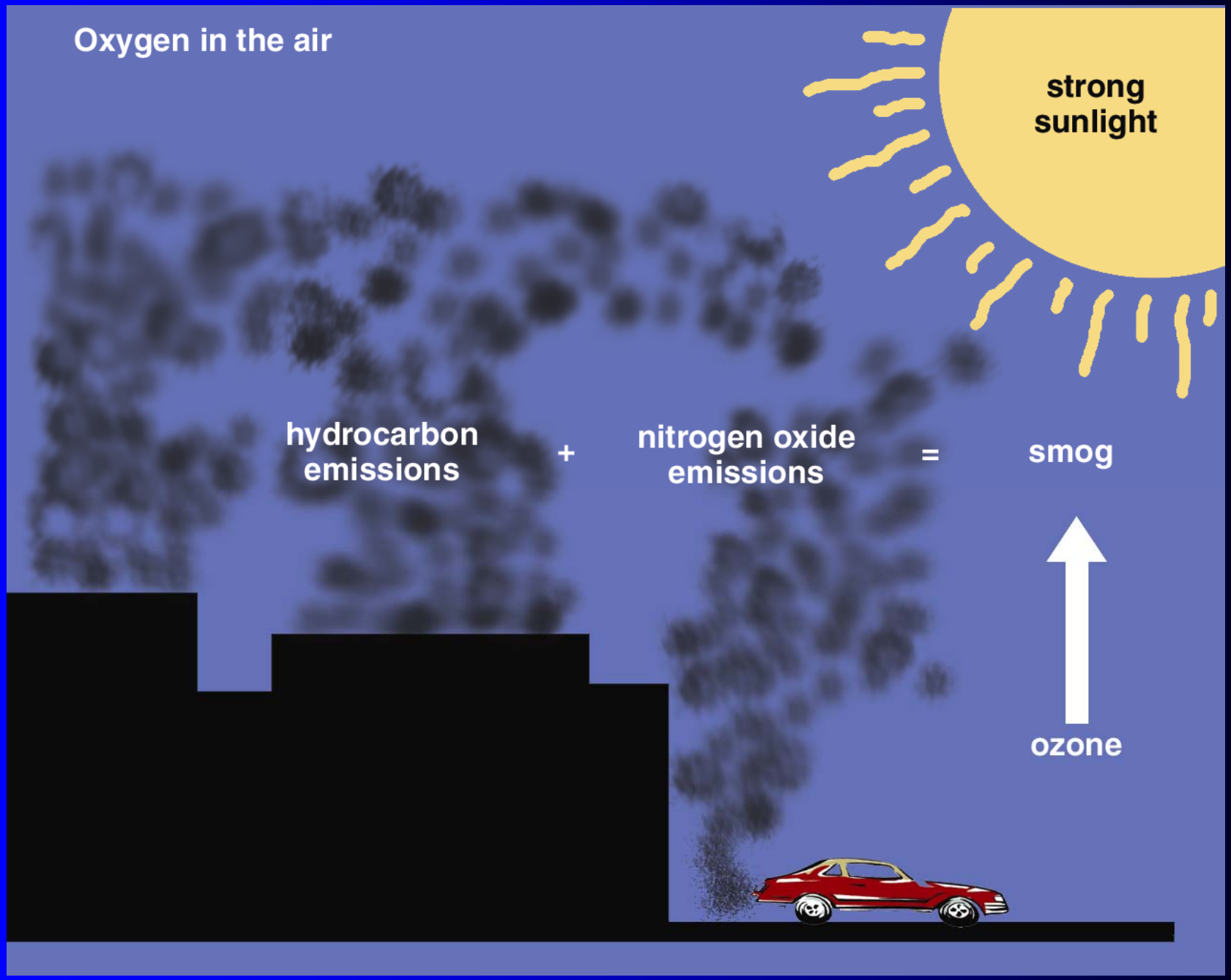
Air Quality Report for St. Louis

Board of Directors

May 27, 2015

EAST-WEST GATEWAY
Council of Governments

Creating Solutions Across Jurisdictional Boundaries


Oxygen in the air
strong sunlight
hydrocarbon emissions
+
nitrogen oxide emissions
=
smog
ozone

Non-Attainment

A geographic area that does not meet the National Ambient Air Quality Standard for ozone.

OZONE NON-ATTAINMENT AREA CLASSIFICATION				
Marginal - 36	Moderate - 3	Serious - 2	Severe - 2	Extreme - 2

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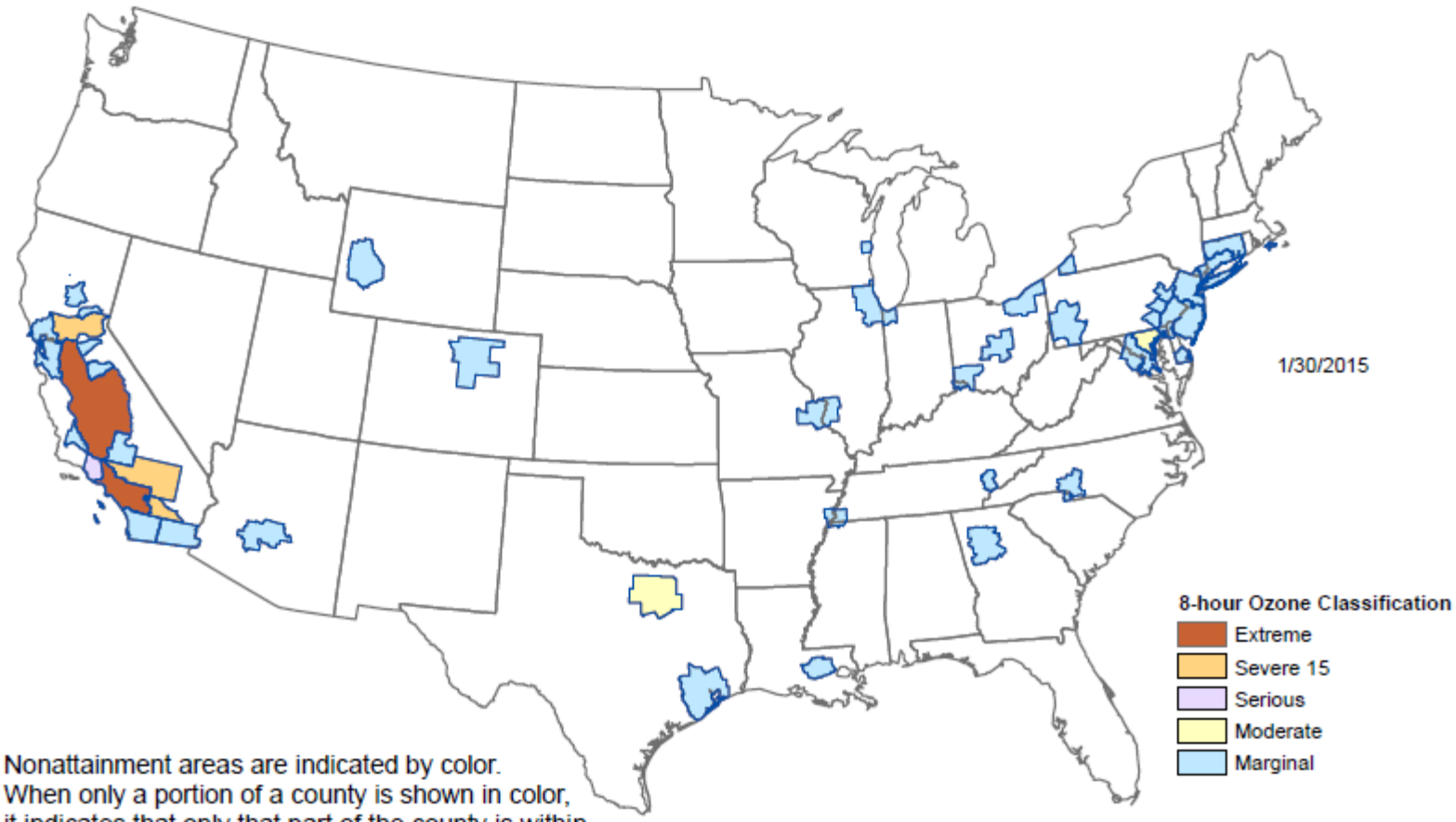
8-Hour Ozone Nonattainment Areas (2008 Standard)



Nonattainment areas are indicated by color.
When only a portion of a county is shown in color, it indicates that only that part of the county is within a nonattainment area boundary.

St. Louis Ozone History

Year	Action
1991	Moderate Non-Attainment for 1979 1-Hour Ozone Standard
2002	Designated Attainment for 1979 1-Hour Ozone Standard
2004	Moderate Non-Attainment for 1997 8-Hour Ozone Standard, including Jersey County IL
June 2012	Illinois Counties Designated Attainment for 1997 8-Hour Ozone Standard
July 2012	Marginal Non-Attainment for 2008 8-Hour Ozone Standard
February 2015	Missouri Counties Designated Attainment for 1997 8-Hour Ozone Standard

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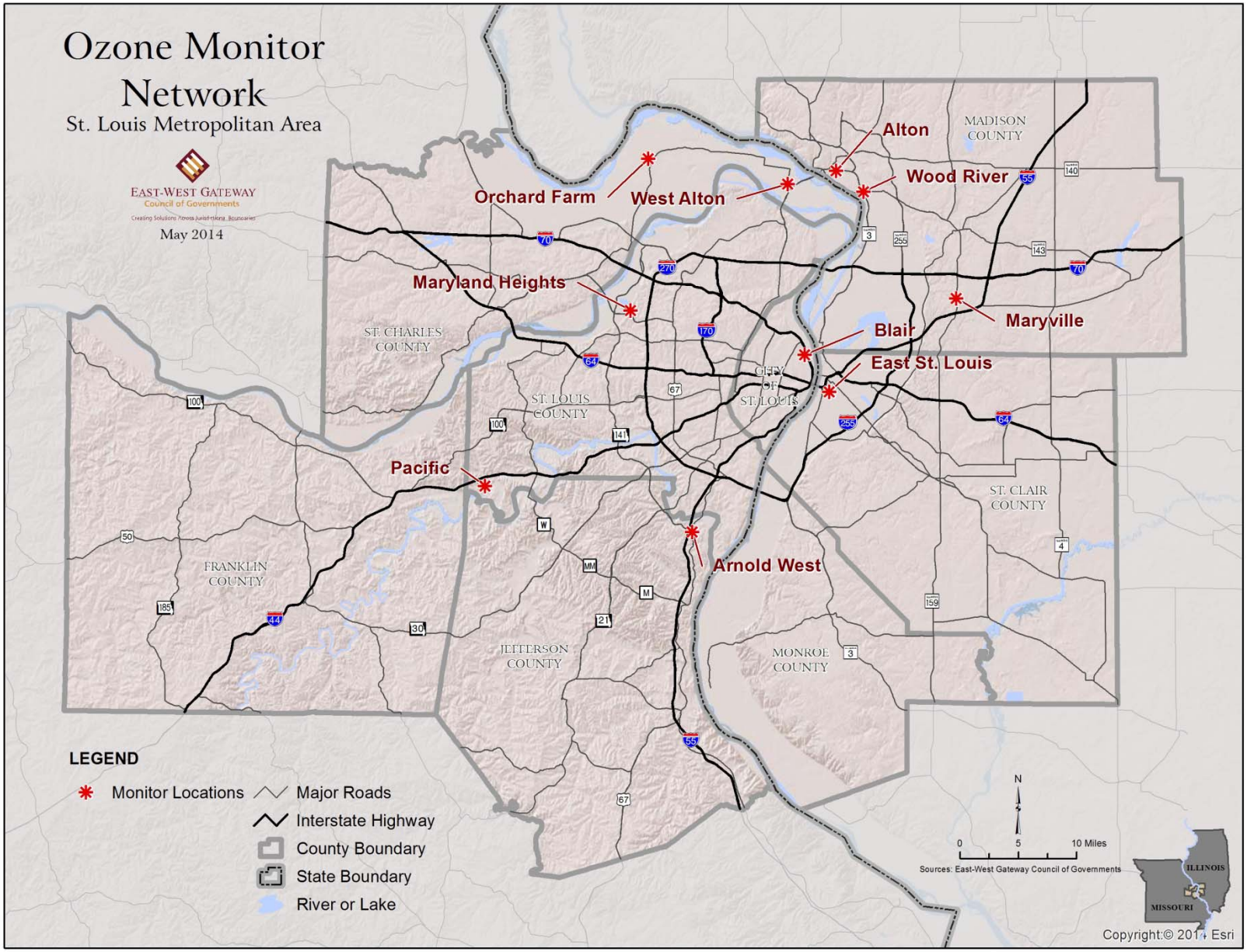
2008 Ozone Standard

- 75 parts per billion (ppb)
- Exceedance is when an 8-hour average of values at a monitor is calculated to be > 75 ppb on any given day
- Violation is when a 3-year average of the 4th highest annual average at a monitor is calculated to be > 75 ppb

Ozone Data Sharing Project

- Ozone Season - April 1 to October 31
- East-West Gateway acts as a clearinghouse for ozone data
- Initial quality assurance screening
- Prepare reports


Ozone Monitor Network
St. Louis Metropolitan Area
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Council of Governments
May 2014
Alton
Wood River
Orchard Farm
West Alton
Maryland Heights
Maryville
Blair
East St. Louis
Pacific
Arnold West
MADISON COUNTY
ST. CHARLES COUNTY
ST. LOUIS COUNTY
CITY OF ST. LOUIS
ST. CLAIR COUNTY
FRANKLIN COUNTY
JEFFERSON COUNTY
MONROE COUNTY
LEGEND
Monitor Locations
Major Roads
Interstate Highway
County Boundary
State Boundary
River or Lake
N
0
5
10 Miles
Sources: East-West Gateway Council of Governments
ILLINOIS
MISSOURI
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2014 Ozone Season

- 2 Ozone Days and 4 Exceedances
- August 4
  - West Alton MO
  - Alton IL
  - Wood River IL
- September 28
  - Arnold West MO

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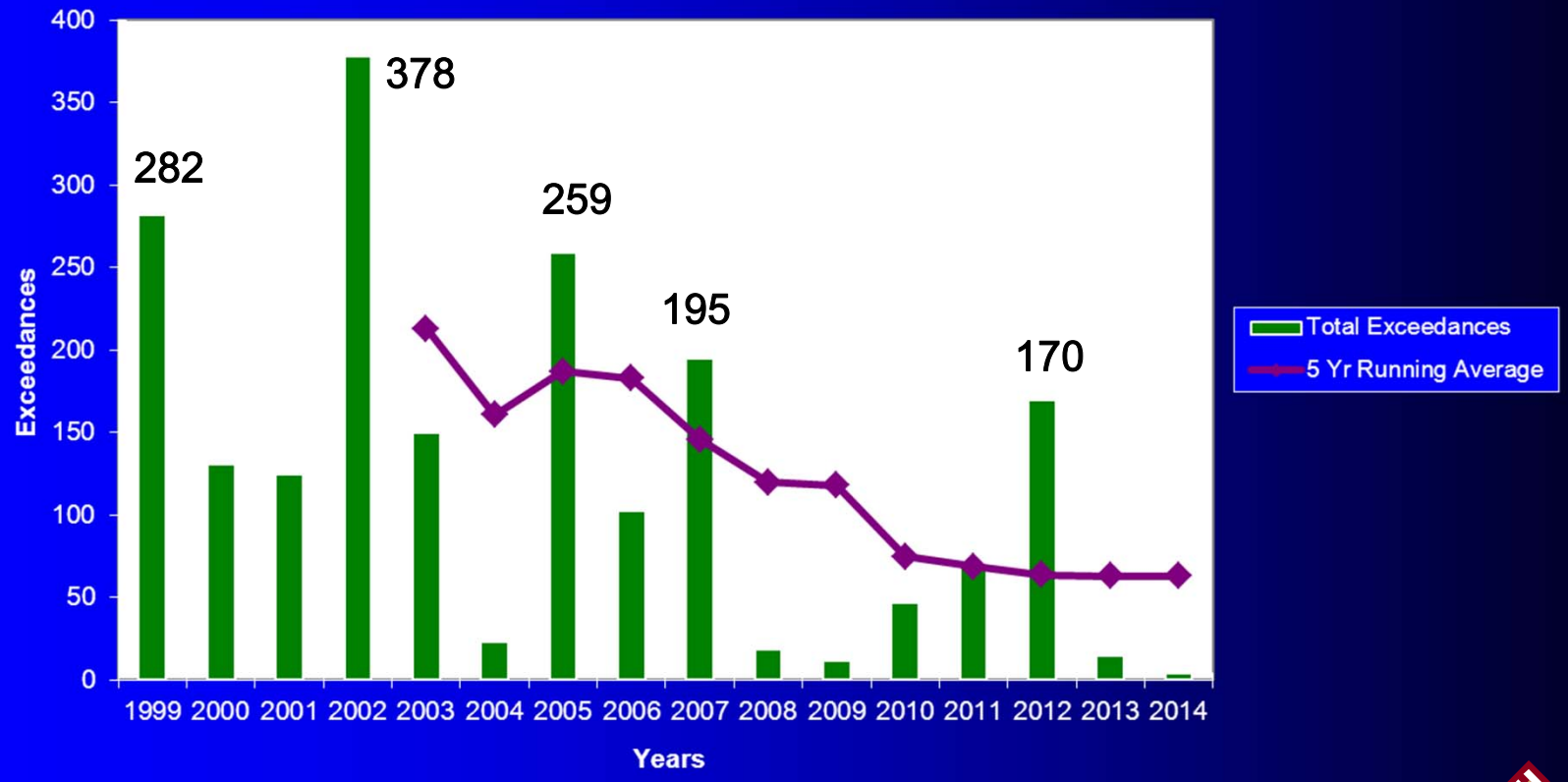
1999-2014 Exceedances
2008 8-Hour Ozone Standard



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Summer Weather Facts

Days with Temperatures	Years			Average Number of Days per Year
	2012	2013	2014	
90 ^{0} or greater	60	37	34	36
100^{0} or greater	21	2	1	2

National Weather Service

Trends

- Moderate to Marginal – July 2012
- Anticipate attainment in 2015
- Revised ozone standard October 2015

Then and Now

October 28, 1938 looking east along
Pine from 200 block of N. Tucker
St. Louis Post-Dispatch

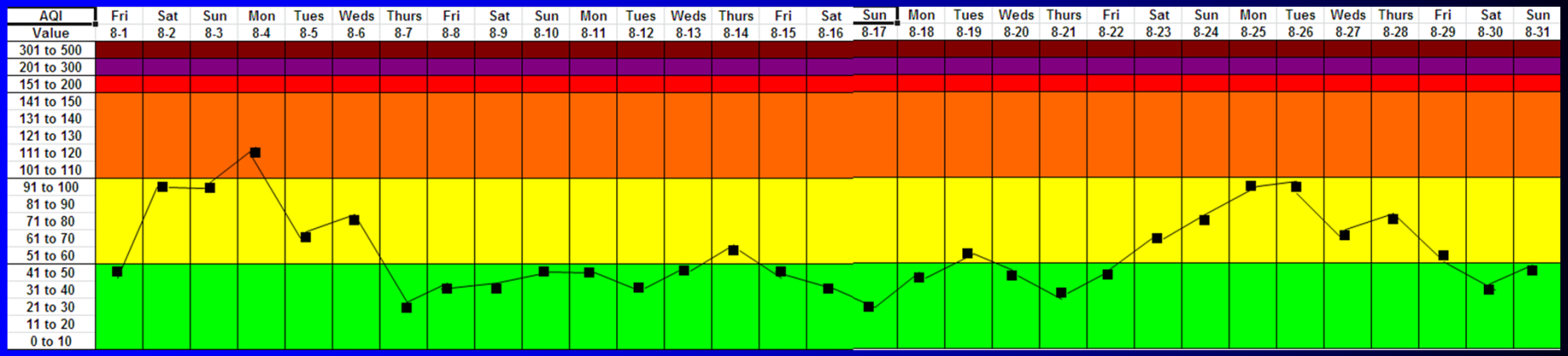
April 29, 2015 looking east from
SSM St. Mary's Health Center
in Richmond Heights
MDNR Visual Air Pollution Camera

For Additional Information

On-line Air Quality Resource Center

www.ewgateway.org/environment/aq/aq.htm

August 2014 AQI Calendar



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