Oxygen in the air

hydrocarbon emissions + nitrogen oxide emissions = smog

strong sunlight

ozone
Ozone Data Sharing Project

• Ozone Season - April 1 to October 31
• East-West Gateway acts as a clearinghouse for ozone data
  – 10 monitors in the non-attainment area
• Quality assurance screening
• Prepare reports
2008 Ozone Standard

- 75 parts per billion (ppb)
- Exceedance is when an 8-hour average of values is calculated to be > 75 ppb on any given day
- Violation is when a 3-year average of the 4th highest annual average is calculated to be > 75 ppb
2014 Ozone Season

• 2 Ozone days
• 4 Exceedances
  – 3 on August 4
  – 1 on September 28
## Summer Weather Facts

<table>
<thead>
<tr>
<th>Days with Temperatures</th>
<th>Years</th>
<th></th>
<th></th>
<th>Average Number of Days per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>2013</td>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>90 ° or greater</td>
<td>60</td>
<td>37</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>100° or greater</td>
<td>21</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
1999-2014 Exceedances
2008 8-Hour Ozone Standard

Exceedances

Years

Total Exceedances
5 Yr Running Average


Exceedances

Mobile Sources

Projected Vehicle Emissions

US tons per day

2015 2025 2030

Years

NOx VOC

EAST-WEST GATEWAY
Council of Governments
Creating Solutions Across Boundaries
Daily Vehicle Miles Traveled (VMT) St. Louis Region 1982 - 2011

Miles in millions

Year


0 20 40 60 80

All Roads
TRENDS

• Moderate to Marginal (July 2012)
• Anticipate attainment in 2015
• Data verification
• New ozone standard (December 2014)
October 28, 1938 looking east along Pine from 200 block of N. Tucker
St. Louis Post-Dispatch

October 16, 2013 looking east from SSM St. Mary’s Health Center
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
Compliance with Ozone Standard

• Based on 2012-2014 monitor data
• 2008 Standard – Arnold West, Pacific, Blair St. (City), Wood River and East St. Louis monitors are in compliance*

*Awaiting EPA validation