

2025 Ozone Season Summary for the Kansas City Region

Summary

The Air Quality Maintenance Area for the Greater Kansas City Region includes Wyandotte and Johnson Counties in Kansas; and Clay, Platte and Jackson Counties in Missouri. From March 1 – March 24, 2025, there have been no Ozone Action Days issued, nor were there any exceedances of the ozone National Ambient Air Quality Standards (NAAQS) at the regional monitors. **Table 1** shows both the number of each forecast by type, and the daily air quality conditions recorded by monitors.

Table 1. Forecast and Monitor Results

	Green	Yellow	Orange	Red
Actual	20	3	0	0
Forecasted	22	1	0	0

2025 Monitor Map

Ozone measurements defining the air quality for the Greater Kansas City Air Quality Maintenance area are made at six monitors. Two additional nearby monitors at Trimble and Leavenworth provide useful forecasting information, and two distant monitors at Chanute and El Dorado offer some forecasting guidance on how pollution is moving into and out of our region. **Map 1** on the next page shows the location of nearby monitors.

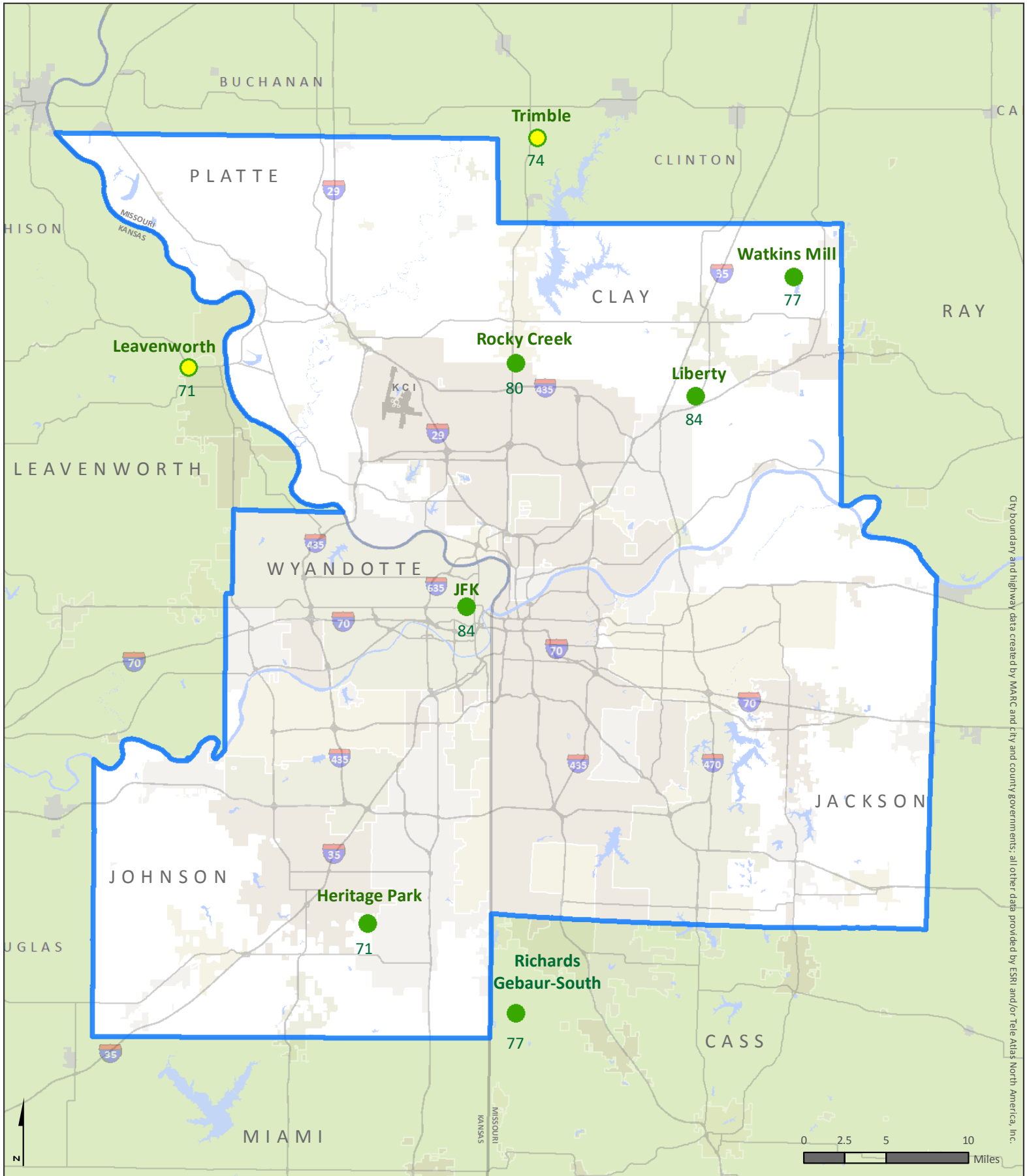
About the Ozone National Ambient Air Quality Standard

The current national standard for ground-level ozone is 70 ppb averaged over eight hours. To promote public awareness, EPA has created the Air Quality Index (AQI); a tool that associates colors and health messages with ranges of various air pollutant concentrations. **Table 2** shows the ozone concentrations associated with each AQI color.

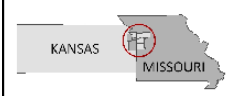
Table 2. Air Quality Index under the 2015 Ozone Standard

Category	AQI Value	2015 8-hour ozone (ppb)
Good (Green)	0 – 50	0 – 54
Moderate (Yellow)	51 – 100	55 – 70
Unhealthy for Sensitive Groups (Orange)	101 – 150	71 – 85
Unhealthy (Red)	151 – 200	86 – 105
Very Unhealthy (Purple)	201 – 300	106 – 200
Hazardous (Maroon)	301 – 500	> 200

Air Quality Monitoring Stations



City boundary and highway data created by MARC and city and county governments; all other data provided by ESRI and/or Tele Atlas North America, Inc.



- in area monitor
- out of area monitor

 Air Quality Maintenance Area

Number = 3-yr Average of Annual AQI

Note: Monitor stations not shown above - El Dorado Springs & Chanute



Kansas City Ozone Design Values, 2010 – 2025

An individual daily 8-hr exceedance of the eight-hour ozone standard at a monitored location does not necessarily result in a violating monitor. Compliance with the eight-hour ozone standard is based on the three-year average of the fourth-highest ozone reading from each monitor. Given the nature of its importance, this critical value – called the “Design Value,” is also shown on **Map 1** alongside the region’s ozone monitors.

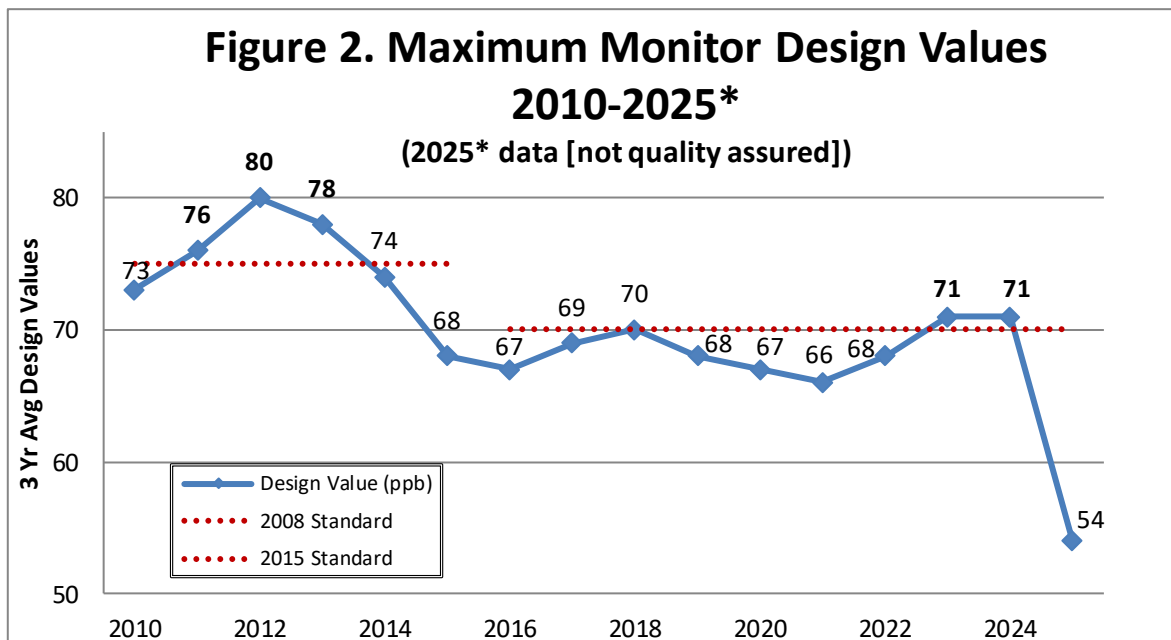
Under the current eight-hour ozone standard, **violations** only occur when the three-year average based design value for any individual regional monitor is 71 ppb or higher. **Table 3** displays the critical fourth-highest eight-hour readings of the 2025 season.

Table 3. 2025 Fourth-High Values That Would Trigger a Violation (70-ppb is the current standard)

Missouri	8-Hr Value (ppb)	Kansas	8-Hr Value (ppb)
<i>Design Value Level</i>	70	<i>NAAQS Level</i>	70
Liberty	68	JFK (KCK)	69
Watkins Mill	74	Heritage Park	81
Rocky Creek	71	Leavenworth	79
Richards Gebauer	78		
Trimble	74		

*Bold text indicates the tentative monitor that exceeded the 2025 critical value.

If a monitor reaches their critical value, it causes a violation of the overall design value once averaged with the previous two years. **Figure 2** shows the trendline of design values of the fourth-high eight-hour readings, from 2010 to 2025. For reference of recent historical trends, **Appendix A** on the next page contains both the fourth-high eight-hour readings as well as the design values for years from 2019 – 2025.



Appendix A. Fourth-High Readings and Design Values, 2017-2025

Fourth-High Eight-Hour Values

Design Values

<i>Missouri</i>	19	20	21	22	23	24	25		19-21	20-22	21-23	22-24	23-25
Liberty	63	65	64	69	74	71	52		64	66	69	71	65
Watkins Mill	63	65	65	66	71	68	52		64	65	67	68	63
Rocky Creek	62	65	71	69	74	68	52		66	68	71	70	64
Richards Gebauer	64	58	63	63	73	62	54		61	61	66	66	63
Trimble	62	63	63	65	76	63	49		62	63	68	68	62
<i>Kansas</i>													
JFK (KCK)	58	63	70	64	77	67	52		63	65	70	69	65
Heritage Park	54	55	64	63	73	61	52		57	60	66	65	61
Leavenworth	61	59	63	61	74	62	50		61	61	66	65	61

*The 2025 eight-hour monitored ozone readings have not been quality assured and may contain errors. Readings in **bold red** represent design values above the 70-ppb standard.

Appendix B summarizes the SkyCasts and highest daily eight-hour monitor ozone readings for the entire 2025 ozone season. It includes all days that were forecasted to be a yellow or Ozone Action day or had a maximum eight-hour ozone reading greater than or equal to 55 ppb. *Green SkyCast days with maximum eight-hour ozone values less than 55ppb—days that were accurately forecasted to be green—will not be listed.*

Appendix B. Summary of SkyCasts and Daily Maximum Eight-hour Ozone Values March 1 – October 31, 2025

Date	Daily Max 8-Hr Value (ppb)*	Monitor(s) Recording Max Value	SkyCast	Date	Daily Max 8-Hr Value (ppb)*	Monitor(s) Recording Max Value	SkyCast
March							
3/11	58	Rocky Creek, Richards Gebauer	Green				
3/12	62	Heritage Park	Green				
3/13	62	Rocky Creek	Yellow				

*The 2025 eight-hour monitored ozone readings have not been quality assured and may contain errors. Readings in **bold** represent eight-hour peak concentrations above the 70 ppb standard.