

# OZONE SEASON SUMMARY 2024

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MWAQC-TAC  
July 23, 2024

# Peak 8-Hour Average Ozone Levels (ppb)

March 2024						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
25	26	27	28	29	01	02
					44	39
03	04	05	06	07	08	09
42	44	30	24	39	38	39
10	11	12	13	14	15	16
40	46	54	57	63	54	47
17	18	19	20	21	22	23
48	43	42	52	44	42	42
24	25	26	27	28	29	30
46	48	42	31	46	55	53
31						
52						

April 2024						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31	01	02	03	04	05	06
	43	44	43	40	42	43
07	08	09	10	11	12	13
48	51	60	58	44	50	52
14	15	16	17	18	19	20
58	60	60	51	50	38	53
21	22	23	24	25	26	27
40	51	56	58	41	44	41
28	29	30				
53	60	59				

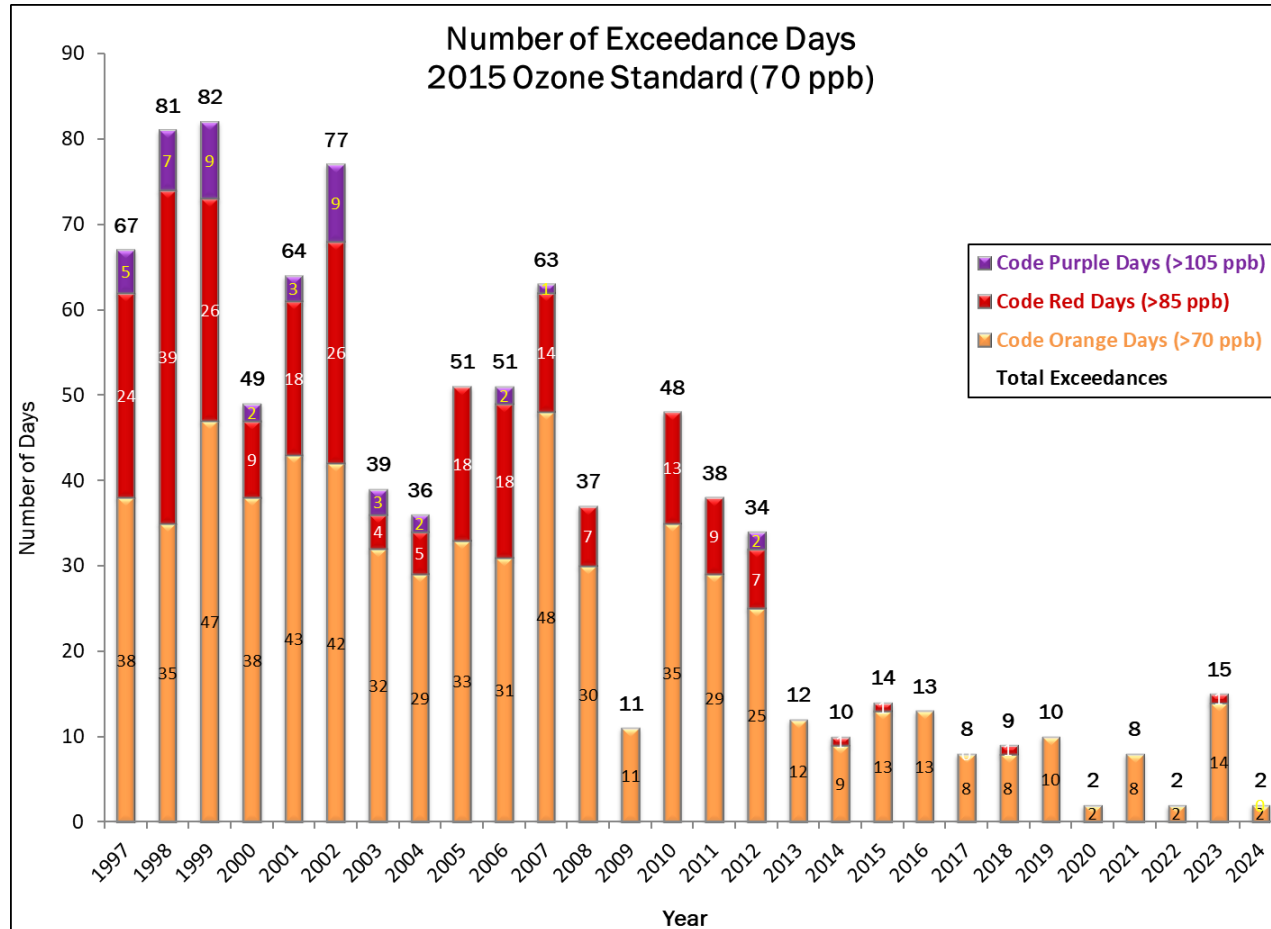
May 2024						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	01	02	03	04
			62	70	52	32
05	06	07	08	09	10	11
31	34	46	52	49	41	42
12	13	14	15	16	17	18
41	51	47	47	46	41	39
19	20	21	22	23	24	25
47	52	58	62	57	70	68
26	27	28	29	30	31	
63	37	55	49	49	53	

June 2024						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	31	01
						67
02	03	04	05	06	07	08
54	52	66	43	48	55	56
09	10	11	12	13	14	15
51	55	43	58	65	72	55
16	17	18	19	20	21	22
60	67	63	66	61	67	76
23	24	25	26	27	28	29
49	53	55	68	67	55	53
30						
51						

July 2024						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	01	02	03	04	05	06
	39	52	57	58	54	55
07	08	09	10	11	12	13
62	70	59	45	67	47	55
14	15	16	17	18	19	20
62	65	60	69	53		
21	22	23	24	25	26	27
28	29	30	31			

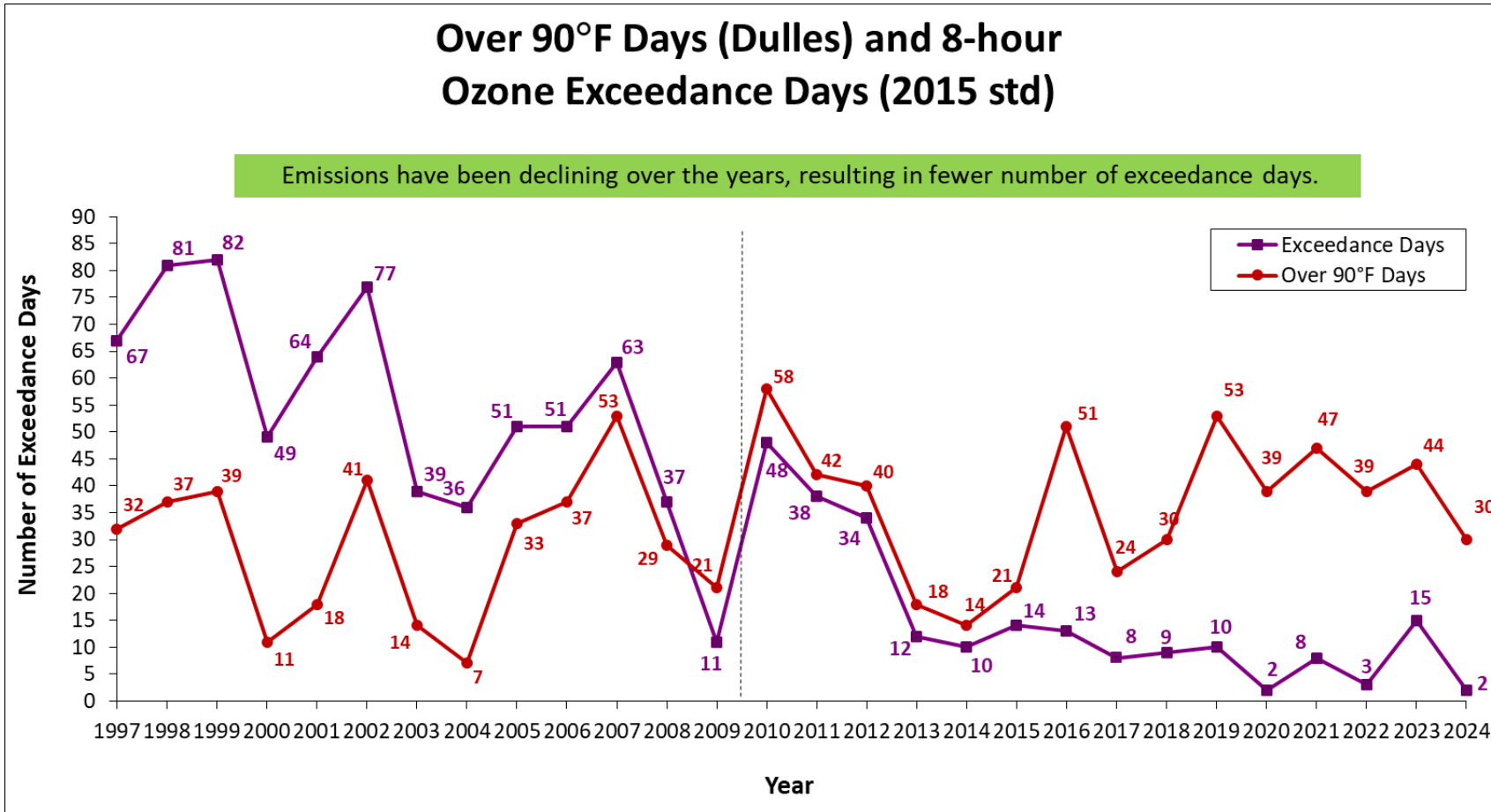
\* 2024 Data is preliminary.

# Ozone Exceedance Trend



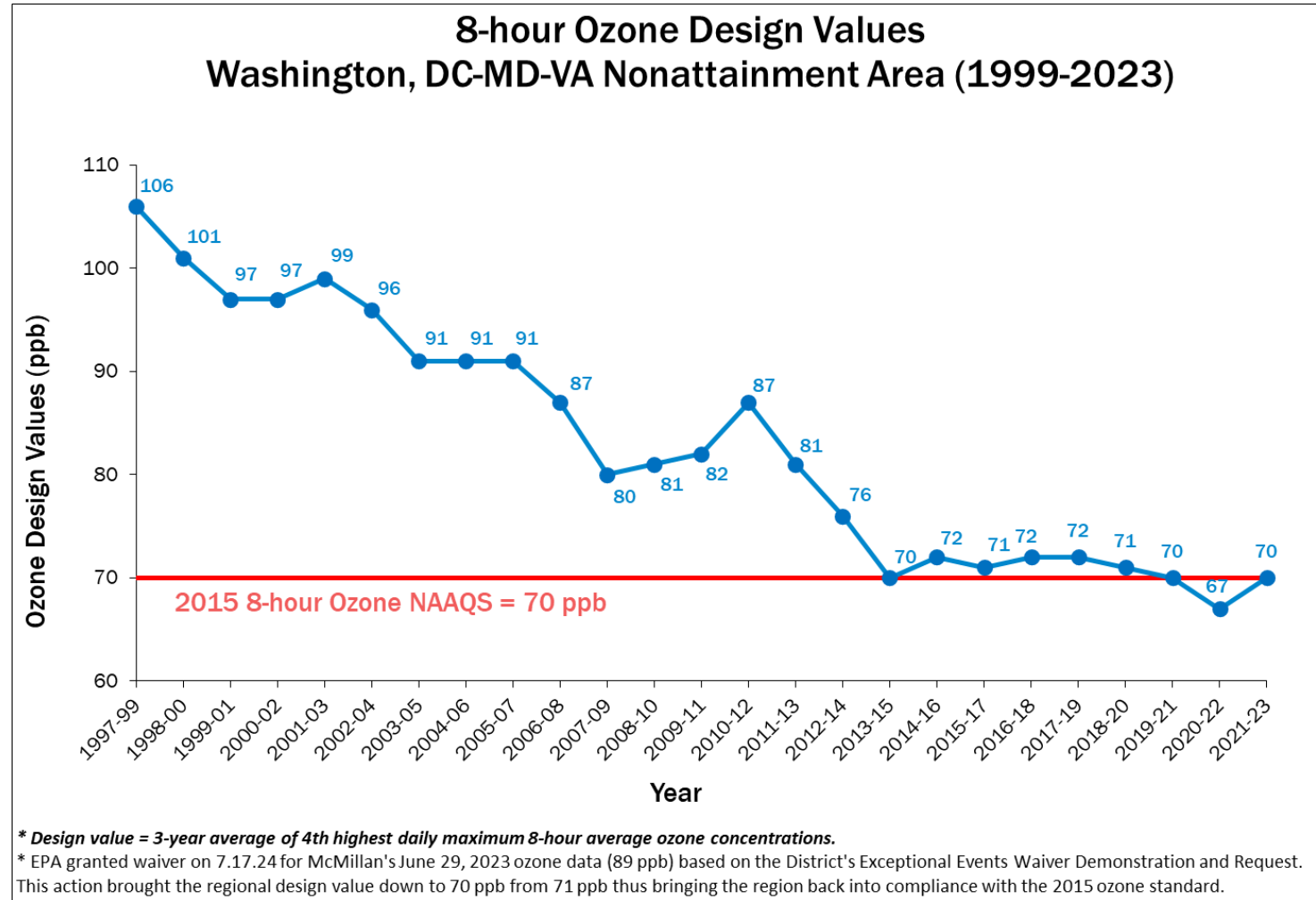
- 2024 Data is preliminary.
- 2023 data includes June 29 data (89 ppb) at McMillan (DC) flagged by EPA after grant of EE waiver.

# Ozone & Temperature Trend



\* 2024 Data is preliminary.

# Ozone Design Value Trends



# Why Fewer Exceedance Days Now ?

## Emission Control Programs

Federal	State	Local
Acid Rain Program (1996/2000)	Vehicle Inspection & Maintenance Programs	Renewable Energy Programs Regional Wind Power Purchase Program Clean Energy Rewards Program Renewable Portfolio Standards
Tier 2 (LD Vehicle) Rule (2004)	Maryland Healthy Air Act (2009/2012)	Energy Efficiency Programs LED Traffic Signal Retrofit program Building Energy Efficiency Programs
HD Diesel vehicle Rule (2004/2007)	Virginia CSAPR Rule	VRE Idling Reduction
NOX SIP Call (2004)	Ozone Transport Commission Rules	LOW VOC Paint
CAIR/CSAPR/CSAPR Update/Revised CSAPR Update (2009/2015/2017/2021)		Gas Can Replacement



# 24-Hour Average PM2.5 Levels ( $\mu\text{g}/\text{m}^3$ )

March 2024						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
25	26	27	28	29	01	02
					6.1	4.8
03	04	05	06	07	08	09
7.0	5.8	3.2	7.9	3.8	4.7	5.6
10	11	12	13	14	15	16
2.3	1.9	6.9	10.4	13.0	10.7	4.9
17	18	19	20	21	22	23
5.0	3.8	3.8	7.6	5.0	7.3	5.9
24	25	26	27	28	29	30
4.9	6.6	7.1	7.3	9.1	7.5	7.4
31						
9.2						

April 2024						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31	01	02	03	04	05	06
	8.3	6.1	3.7	3.4	2.0	3.0
07	08	09	10	11	12	13
3.3	9.0	13.7	9.5	8.2	3.0	3.2
14	15	16	17	18	19	20
7.0	10.9	6.3	10.9	10.9	12.7	8.1
21	22	23	24	25	26	27
4.1	5.6	6.8	6.1	5.7	5.6	6.7
28	29	30				
12.0	11.4	13.9				

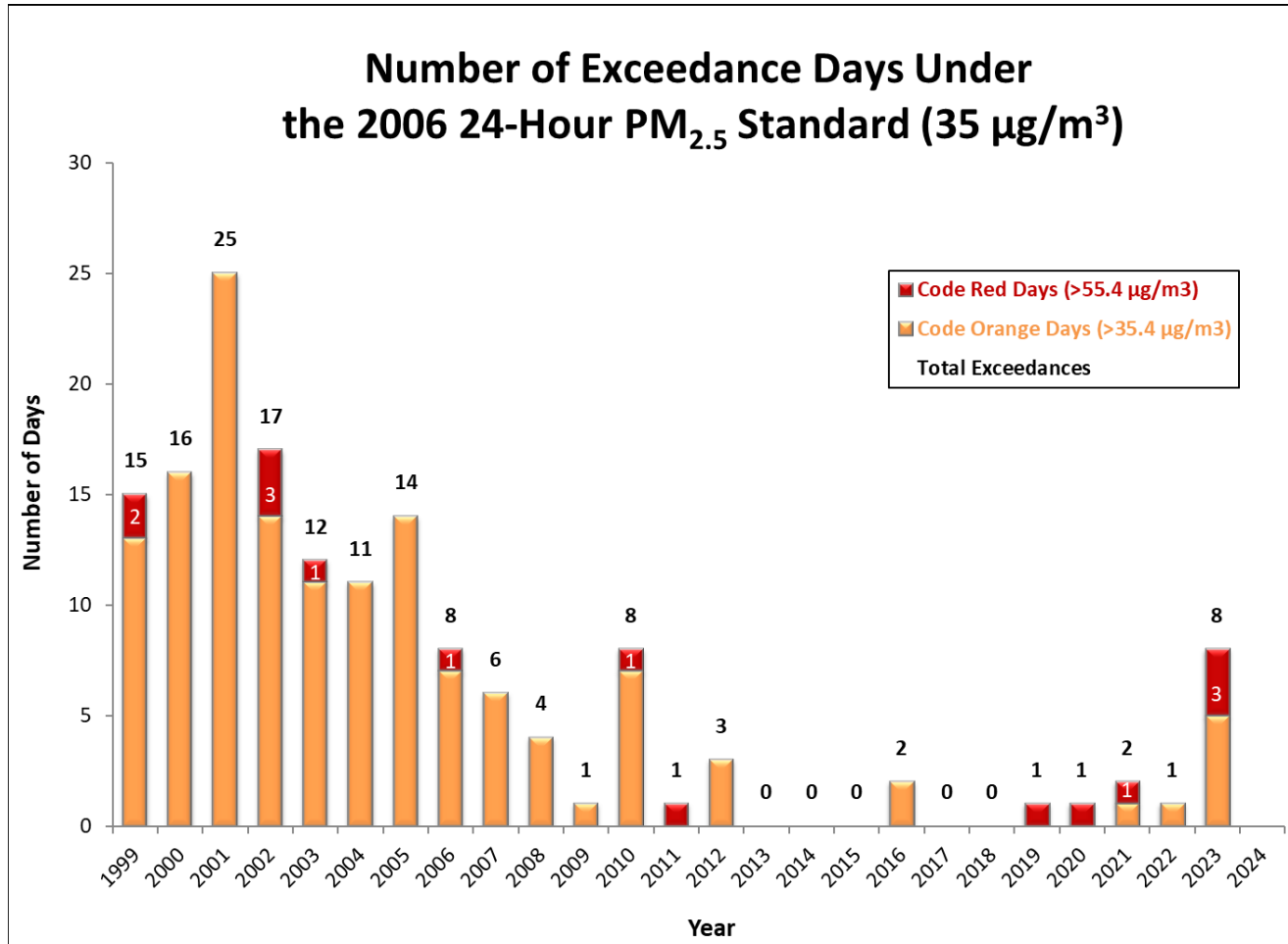
May 2024						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	01	02	03	04
			6.7	9.8	8.6	4.1
05	06	07	08	09	10	11
6.0	8.7	9.4	9.3	8.3	4.4	3.4
12	13	14	15	16	17	18
4.4	6.1	8.0	4.8	6.1	5.2	7.3
19	20	21	22	23	24	25
10.2	9.6	8.4	10.2	10.9	10.8	11.8
26	27	28	29	30	31	
9.7	7.6	4.7	6.5	5.2	6.0	

June 2024						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	31	01
						7.0
02	03	04	05	06	07	08
11.5	10.0	11.6	12.4	9.2	5.6	7.3
09	10	11	12	13	14	15
7.4	6.5	6.4	8.7	14.6	12.2	8.2
16	17	18	19	20	21	22
9.2	12.4	12.3	8.0	8.4	10.2	15.1
23	24	25	26	27	28	29
10.8	6.7	9.9	10.0	6.5	6.4	8.8
30						
11.1						

July 2024						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	01	02	03	04	05	06
	4.7	5.5	7.7	29.5	15.3	9.1
07	08	09	10	11	12	13
7.3	12.4	12.0	9.7	4.7	7.2	11.1
14	15	16	17	18	19	20
11.6	13.7	14.5	10.2	9.6		
21	22	23	24	25	26	27
28	29	30	31			

\* 2024 Data is preliminary.

# PM2.5 Exceedance Trend



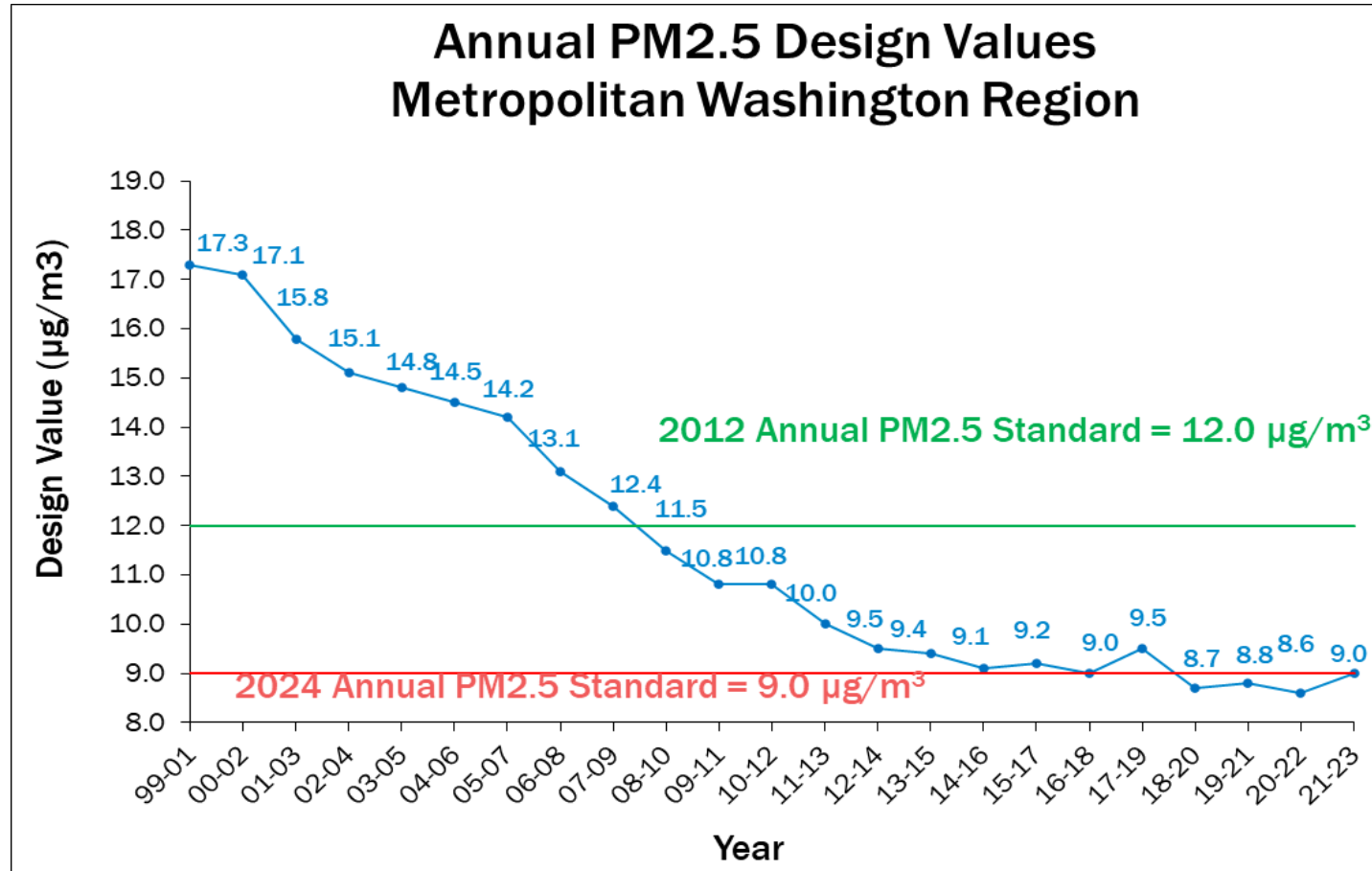
\* 2024 Data is preliminary.



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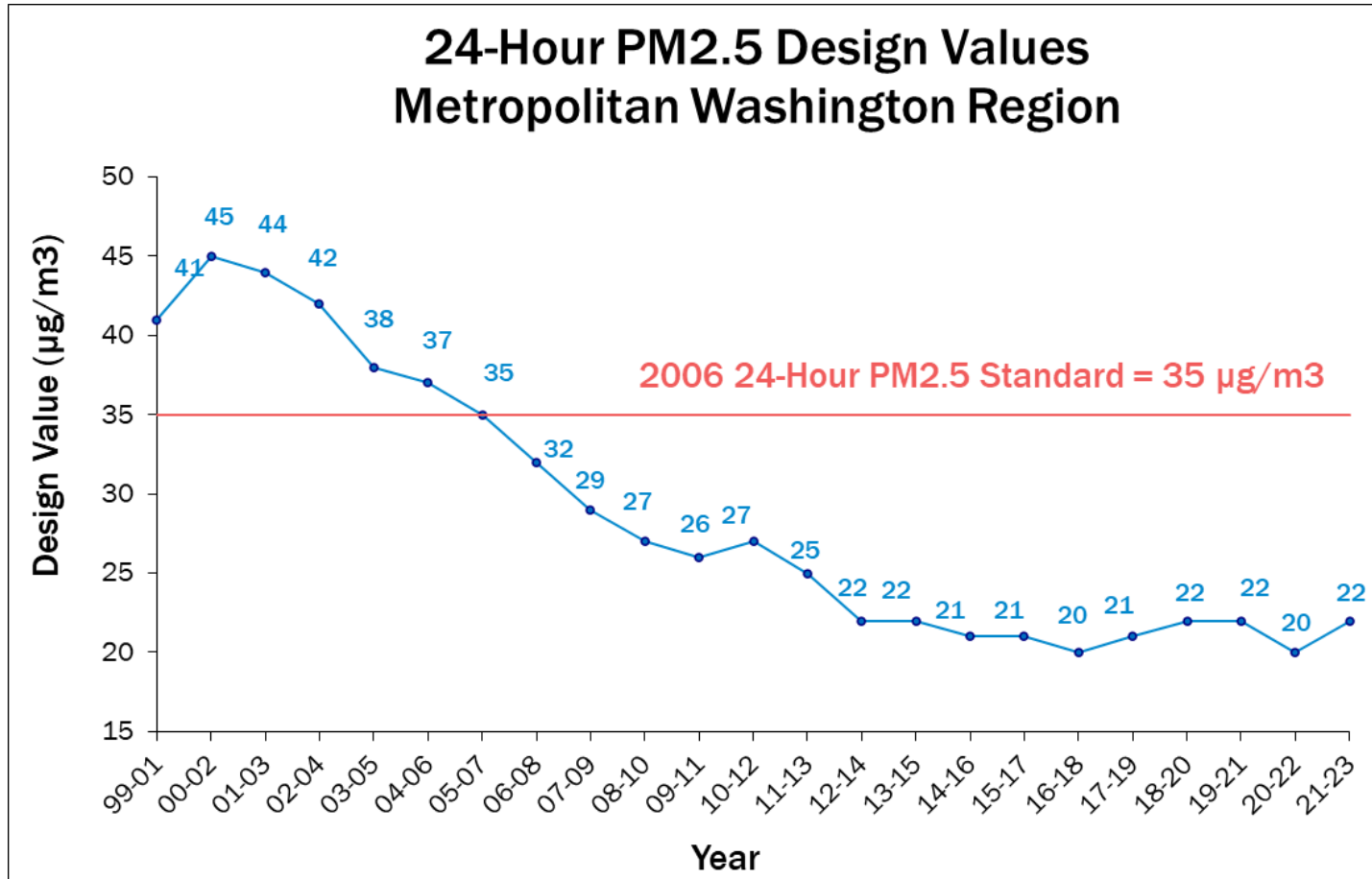
# Annual PM2.5 Design Value Trend



New annual PM2.5 standard (9.0 ug/m3) became effective May 6, 2024

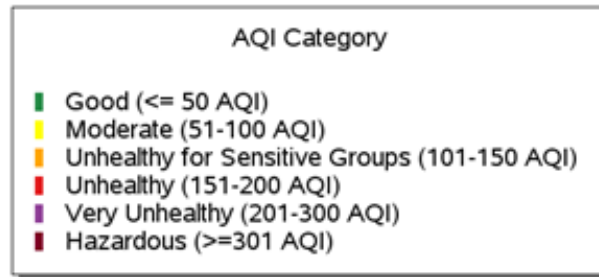
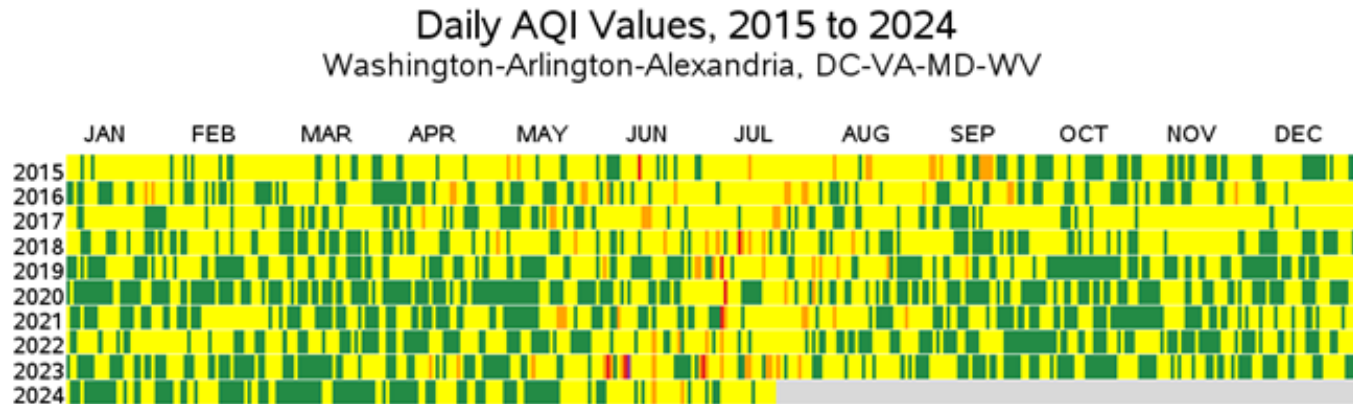
\* 2021-23 Data is preliminary.

# 24-Hour PM2.5 Design Value Trend



\* 2021-23 Data is preliminary.

# AQI Value Trends

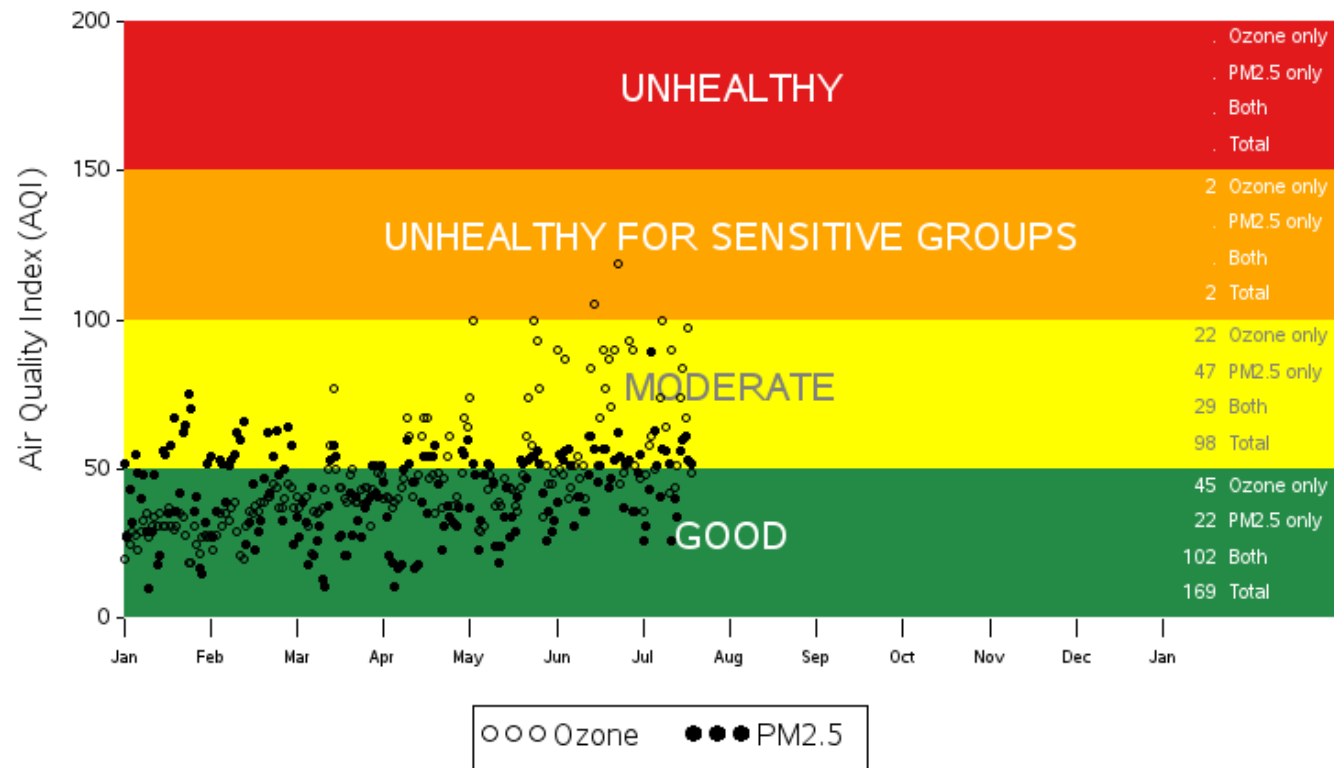


Source: U.S. EPA AirData <<https://www.epa.gov/air-data>>  
Generated: July 19, 2024

Note: Data shown above is for combined AQI values for ozone, PM2.5, PM10, CO, NO2, and SO2 for the Washington-Arlington-Alexandria CBSA.

# AQI Values - 2024

Daily Ozone and PM2.5 AQI Values in 2024  
Washington-Arlington-Alexandria, DC-VA-MD-WV

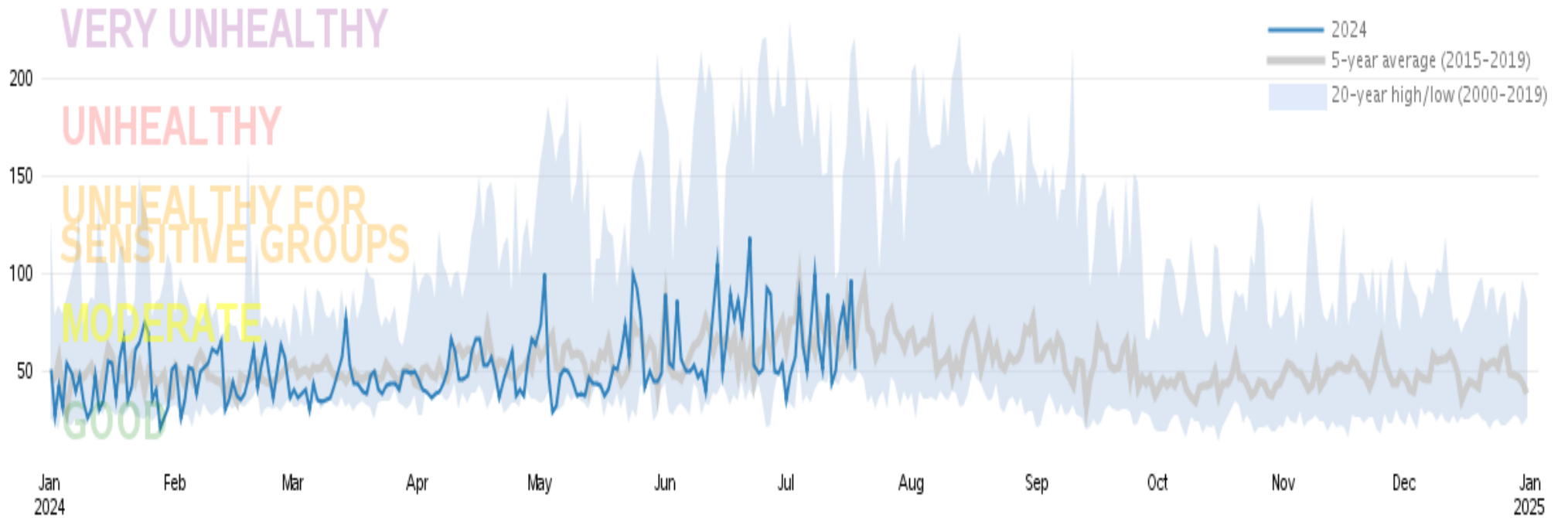


Source: U.S. EPA AirData <<https://www.epa.gov/air-data>>  
Generated: July 19, 2024

# AQI Value Trends

## Combined Ozone and PM2.5 Daily AQI Values

Washington-Arlington-Alexandria, DC-VA-MD-WV



Source: U.S. EPA AirData <<https://www.epa.gov/air-data>>

Generated: July 19, 2024

Note: Data shown above is for the Washington-Arlington-Alexandria CBSA.



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# Minimum 4<sup>th</sup> High Ozone Levels Needed in 2024 To Maintain Compliance With 2015 Ozone NAAQS

Monitor	4 <sup>th</sup> High Ozone Needed (ppb)	Observed Draft 4 <sup>th</sup> High Ozone (ppb)*	Draft 2022-24 Design Value (ppb)*
McMillan (DC)	72	68	68
Beltsville (MD)	76	67	68
Prince George's Equestrian Center	76	66	67

\* Based on draft and incomplete data as of July 17, 2024.



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