No Code Red Days Summer 2005

Metropolitan Washington Region

MWAQC

Sept. 28, 2005

No Code Red Days

- There were no Code Red Days this summer under either ozone standard
- Meteorology- typical
- Peak ozone levels were not as high as in previous years, despite high temperatures

1-Hour Ozone Season Summary

Daily Peak One-Hour Ozone Concentration (ppb)

Washington Area-2005

MAY

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
1	2	3	4	5	6	7
58	55	44	58	61	54	75
8	9	10	11	12	13	14
68	66	76	79	58	50	70
15	16	17	18	19	20	21
56	47	53	68	61	59	55
22	23	24	25	26	27	28
56	48	37	46	57	71	63
29	30	31				
56	67	67				

JUNE

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
			1	2	3	4
			87	57	36	59
5	6	7	8	9	10	11
87	98	98	96	70	49	62
12	13	14	15	16	17	18
45	49	80	70	69	56	75
19	20	21	22	23	24	25
61	60	84	86	89	92	100
26	27	28	29	30		
96	54	84	61	104		

JULY

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
					1	2
					104	75
3	4	5	6	7	8	9
82	80	89	81	66	53	88
10	11	12	13	14	15	16
86	90	115	66	106	67	68
17	18	19	20	21	22	23
76	78	67	97	112	115	74
24	25	26	27	28	29	30
81	107	111	86	78	72	83
31						
66						

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AUGUST

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
	1	2	3	4	5	6
	100	104	116	111	116	103
7	8	9	10	11	12	13
84	60	30	77	119	102	111
14	15	16	17	18	19	20
96	80	62	94	83	67	79
21	22	23	24	25	26	27
70	69	73	65	86	68	43
28	29	30	31			
72	69	37	48			

SEPTEMBER

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
				1	2	3
				61	83	61
4	5	6	7	8	9	10
57	62	70	71	97	98	89
11	12	13	14	15	16	17
94						
18	19	20	21	22	23	24
25	26	27	28	29	30	

8-Hour Ozone Summary

Daily Peak 8-Hour Ozone Concentration (ppb)

Washington Area-2005

MAY

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
1	2	3	4	5	6	7
55	51	40	53	58	51	69
8	9	10	11	12	13	14
64	60	67	67	47	46	59
15	16	17	18	19	20	21
50	44	47	62	58	54	49
22	23	24	25	26	27	28
52	41	29	37	53	65	53
29	30	31				
53	58	63				

JUNE

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
			1	2	3	4
			78	45	32	49
5	6	7	8	9	10	11
81	75	80	83	63	41	52
12	13	14	15	16	17	18
48	41	75	66	60	53	69
19	20	21	22	23	24	25
49	48	78	73	70	81	87
26	27	28	29	30		
96	43	67	52	91		

JULY

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
					1	2
					86	69
3	4	5	6	7	8	9
78	68	66	70	48	47	75
10	11	12	13	14	15	16
75	81	100	52	81	50	58
17	18	19	20	21	22	23
58	69	54	88	93	94	64
24	25	26	27	28	29	30
64	80	97	78	66	55	70
31						
59						

AUGUST

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
	1	2	3	4	5	6
	82	89	97	97	94	88
7	8	9	10	11	12	13
69	52	28	60	94	88	88
14	15	16	17	18	19	20
80	73	46	71	73	46	69
21	22	23	24	25	26	27
63	62	62	58	68	56	35
28	29	30	31			
58	55	29	43			

SEPTEMBER

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
				1	2	3
				54	72	54
4	5	6	7	8	9	10
50	55	60	67	83	88	80
11	12	13	14	15	16	17
77						
18	19	20	21	22	23	24
25	26	27	28	29	30	

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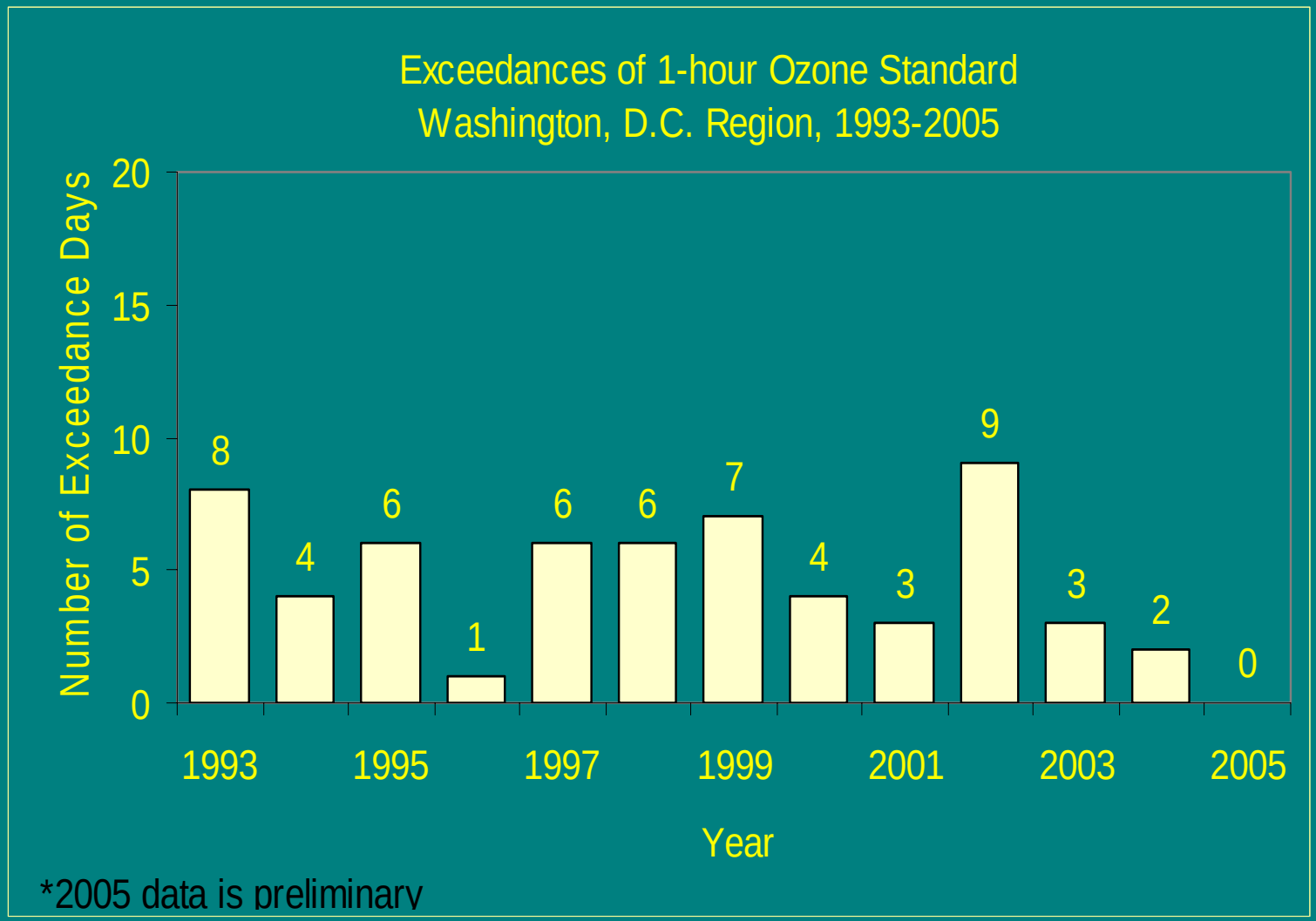
1-Hour Ozone Standard: Status

- Standard revoked in June 2005
- Attainment date was 11/5/05
- Washington region's SIP (1-Hour) approved in May
  - Predicted attainment by 11/5/05
  - Predicted Design Value <125 ppb

1-Hour Ozone Standard Met

Monitor	Days Over 125 ppb	Date	Maximum Hrly Level
P.G. Equestrian	2	6/25/04 6/26/03	141 137
Mt. Vernon	3	6/25/03 8/14/03 7/2/04	132 127 140

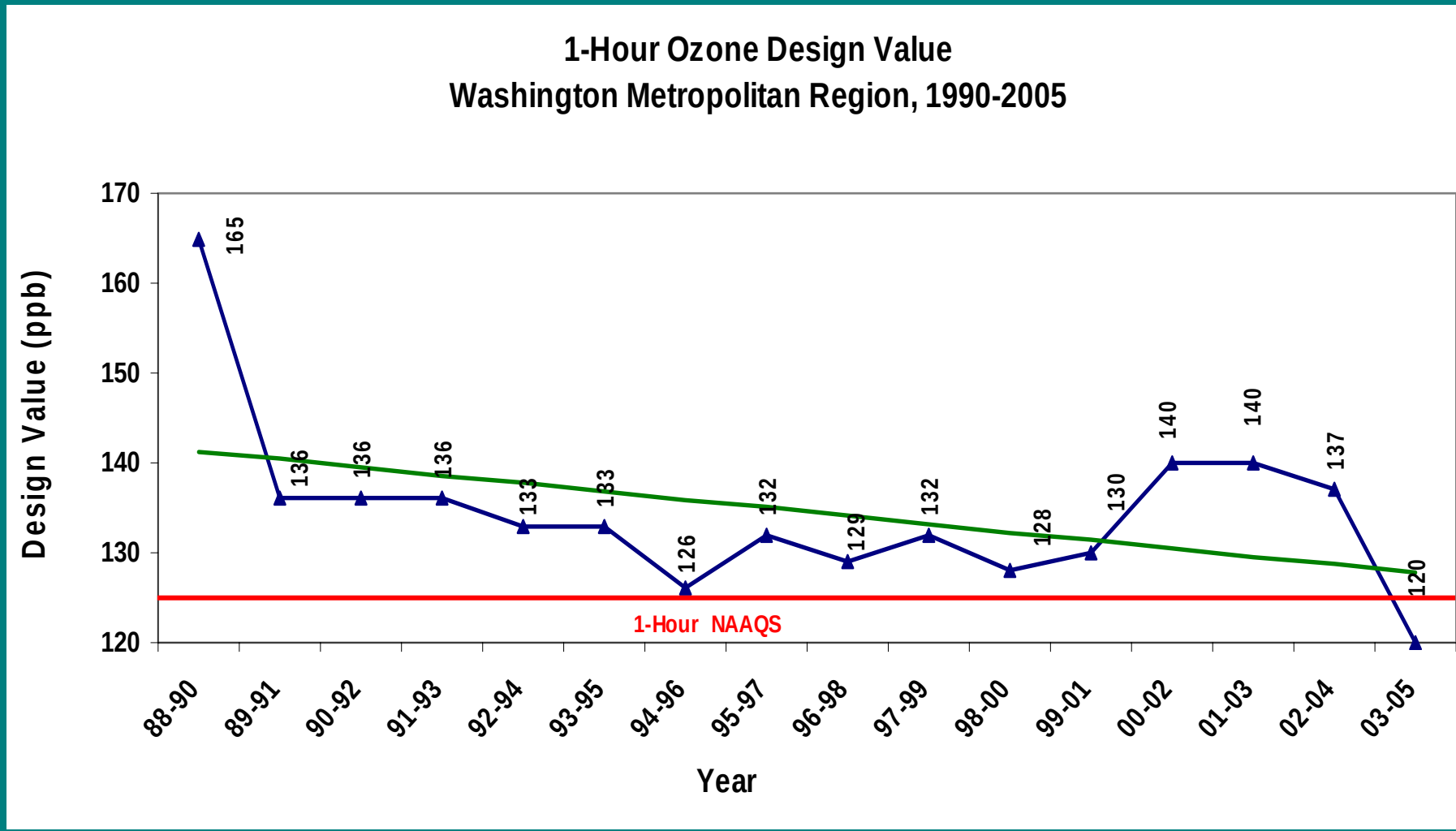
Exceedances of the 1-Hour Ozone Standard



Regional Growth, 1990-2005

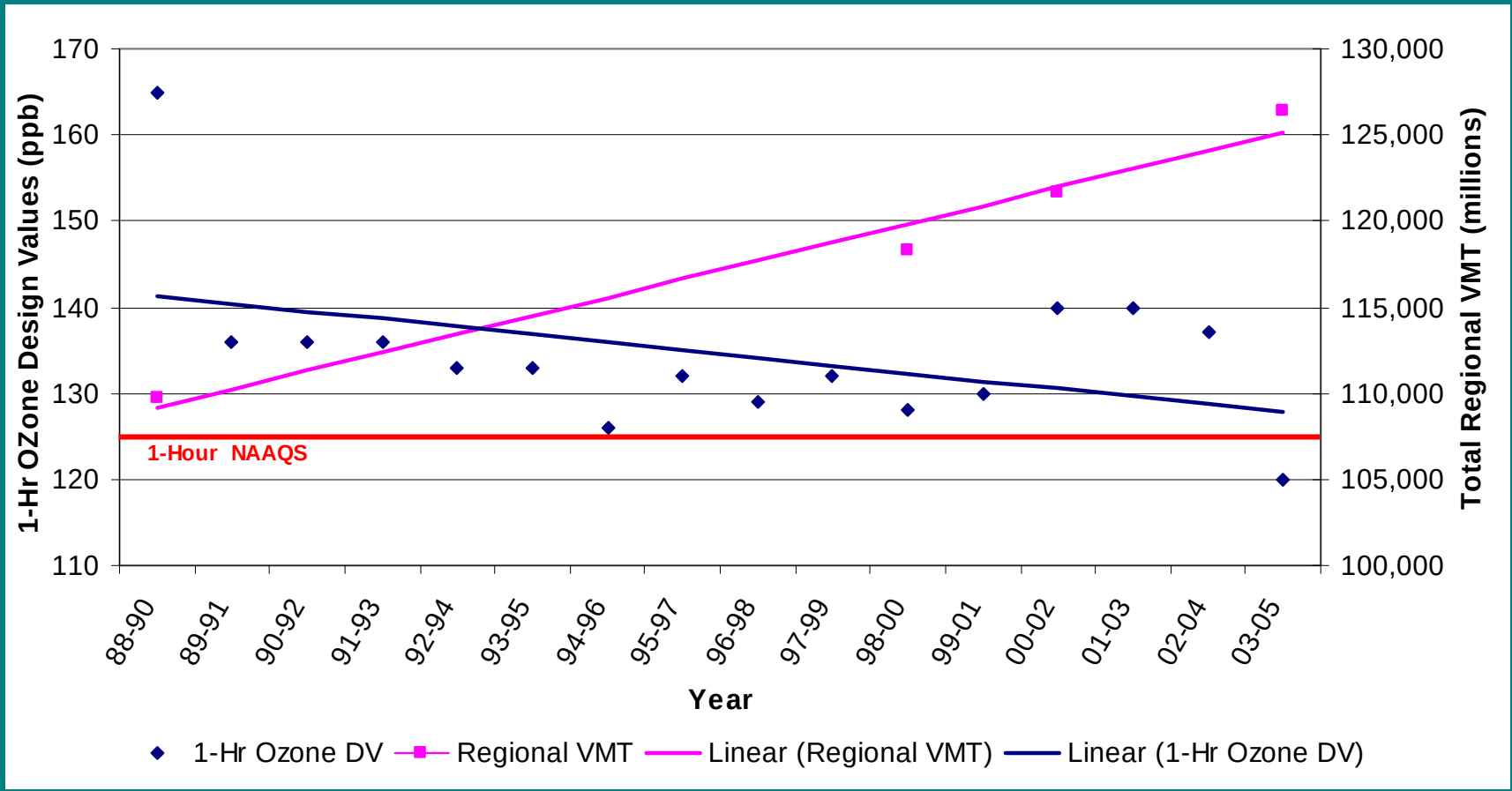
- Household population grew 28%
- Vehicle Miles Traveled grew 25%
- Ozone Design Value dropped 27%

Design Value Declined to Below 1-Hour Standard



1-Hr Ozone Trends Down, VMT Trend Up

1990-2005

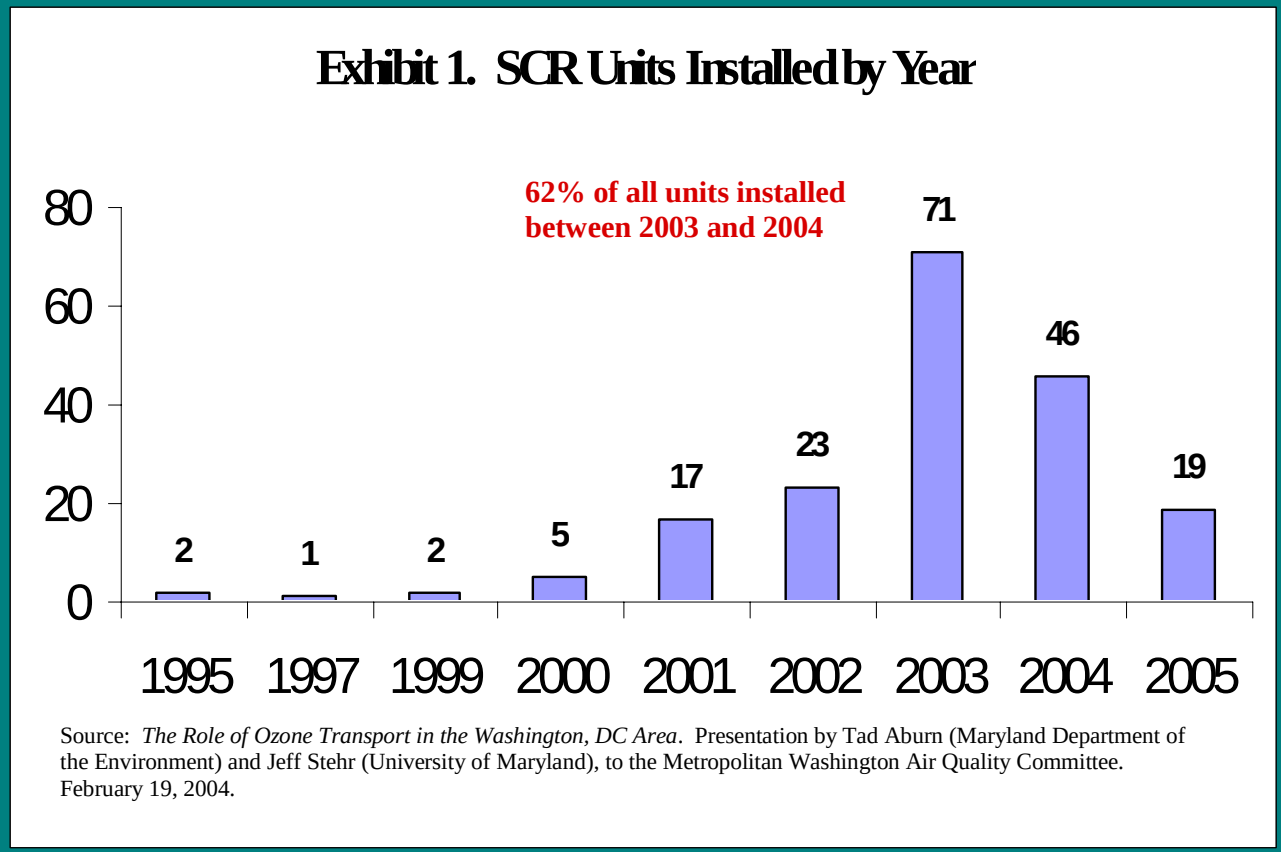


Factors Reducing Pollution

- Reduced transport from Midwest
- Controls on power plants (NOx SIP Call)
  - Midwest and regionally
- Cleaner cars and trucks, low sulfur fuel
- Control programs in air quality plan (SIP)

Power Plant Controls Installed

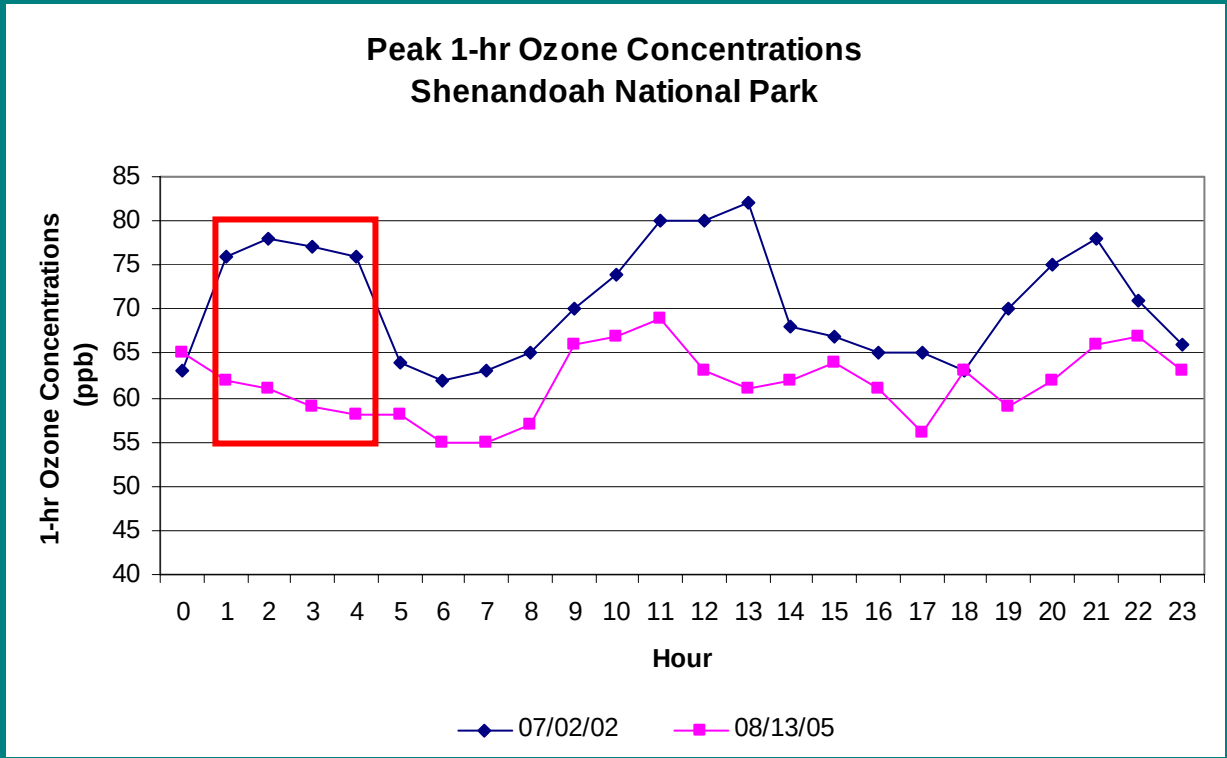
1995-2005



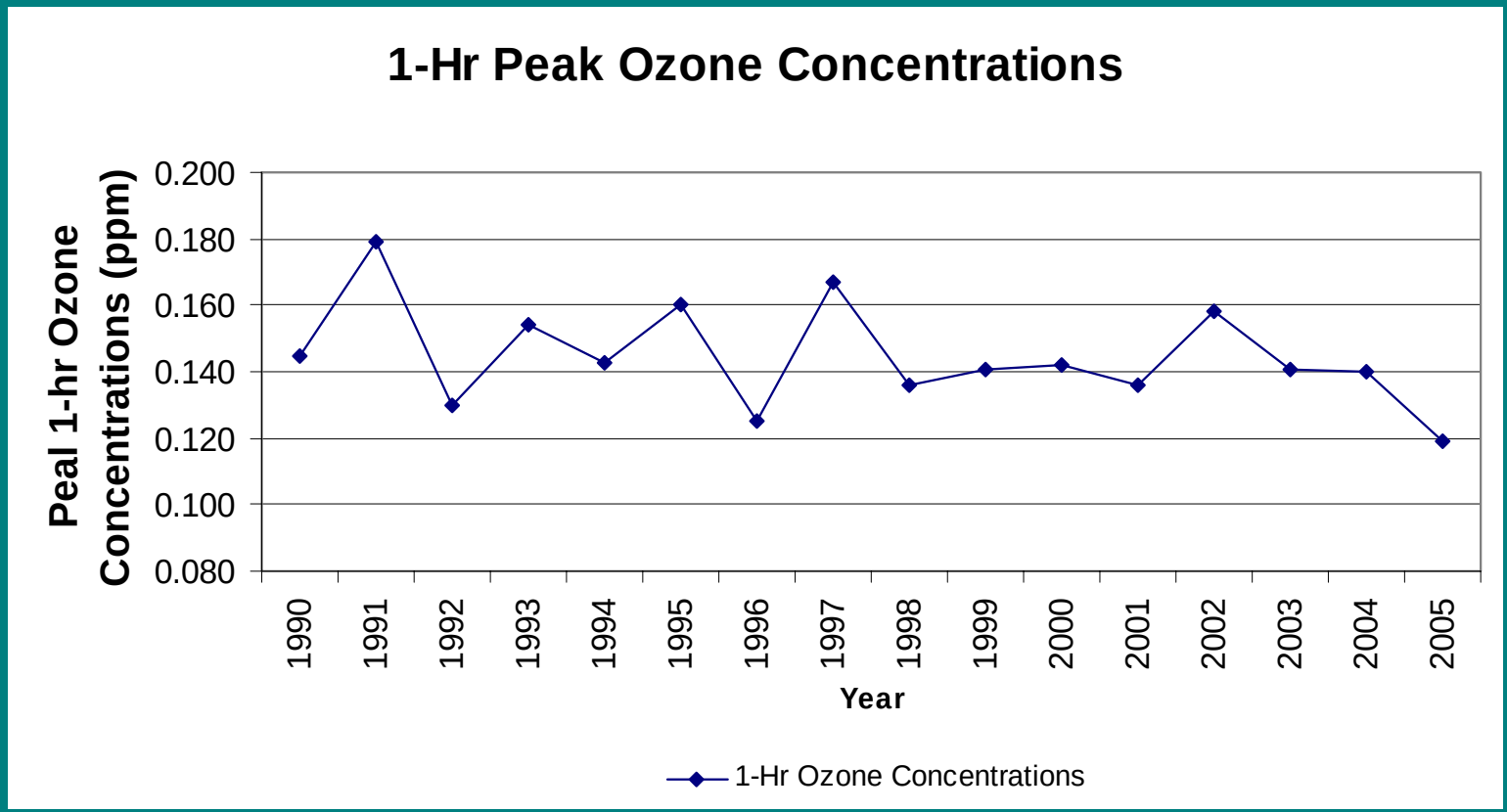
Source: *The Role of Ozone Transport in the Washington, DC Area*. Presentation by Tad Aburn (Maryland Department of the Environment) and Jeff Stehr (University of Maryland), to the Metropolitan Washington Air Quality Committee. February 19, 2004.

Evidence of Reduced Transport:

Shenandoah National Park



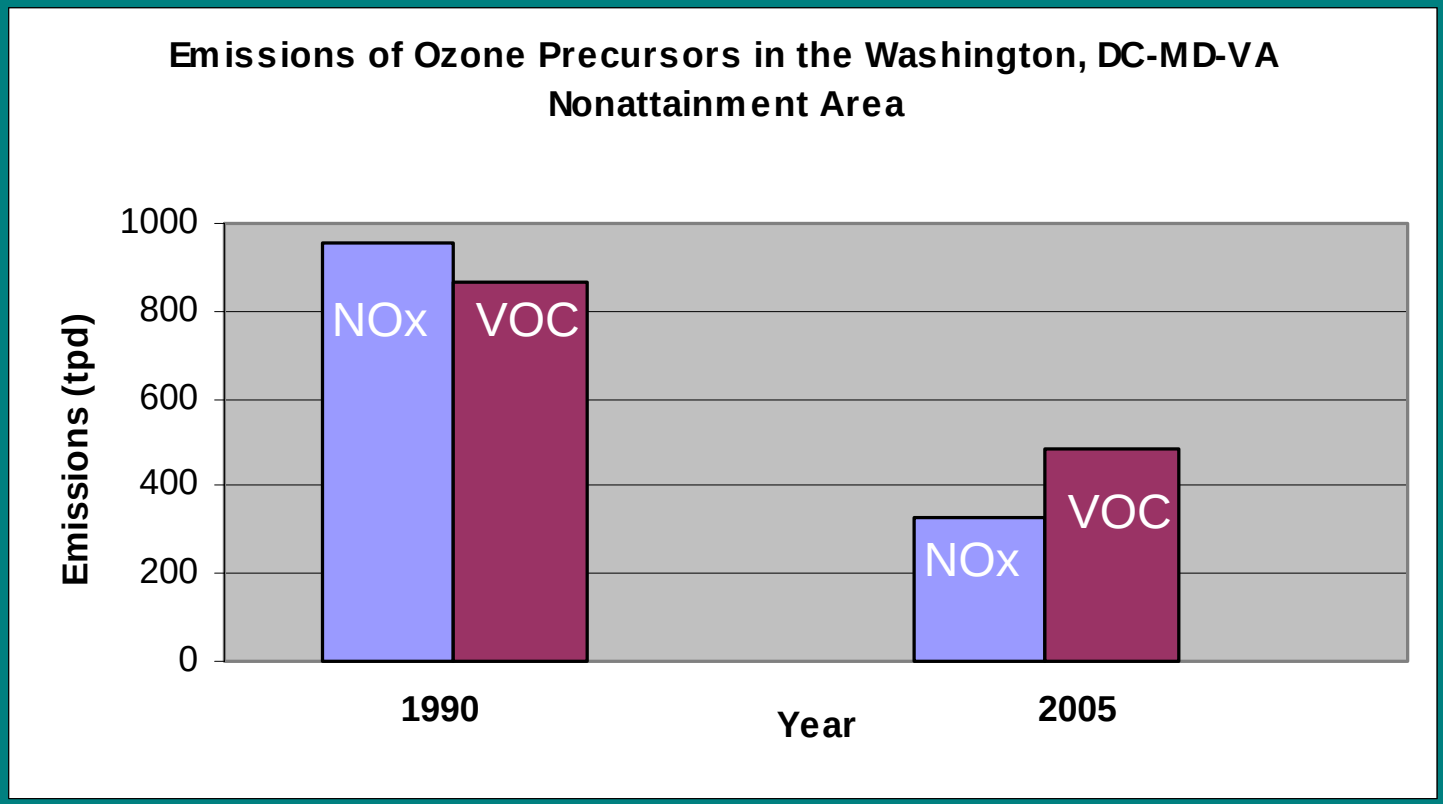
Peak Ozone Dropped



SIP Control Measures Reduced Emissions

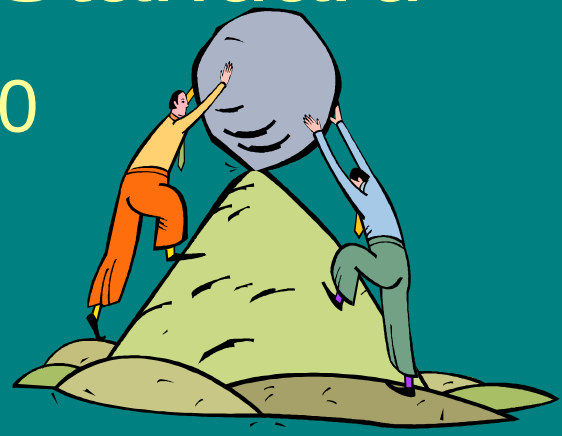
- Vehicle inspection and maintenance programs
- Reformulated paints and solvents
- Gas can replacement programs
- AFV purchases, wind energy purchase

Emission Levels in Washington Area



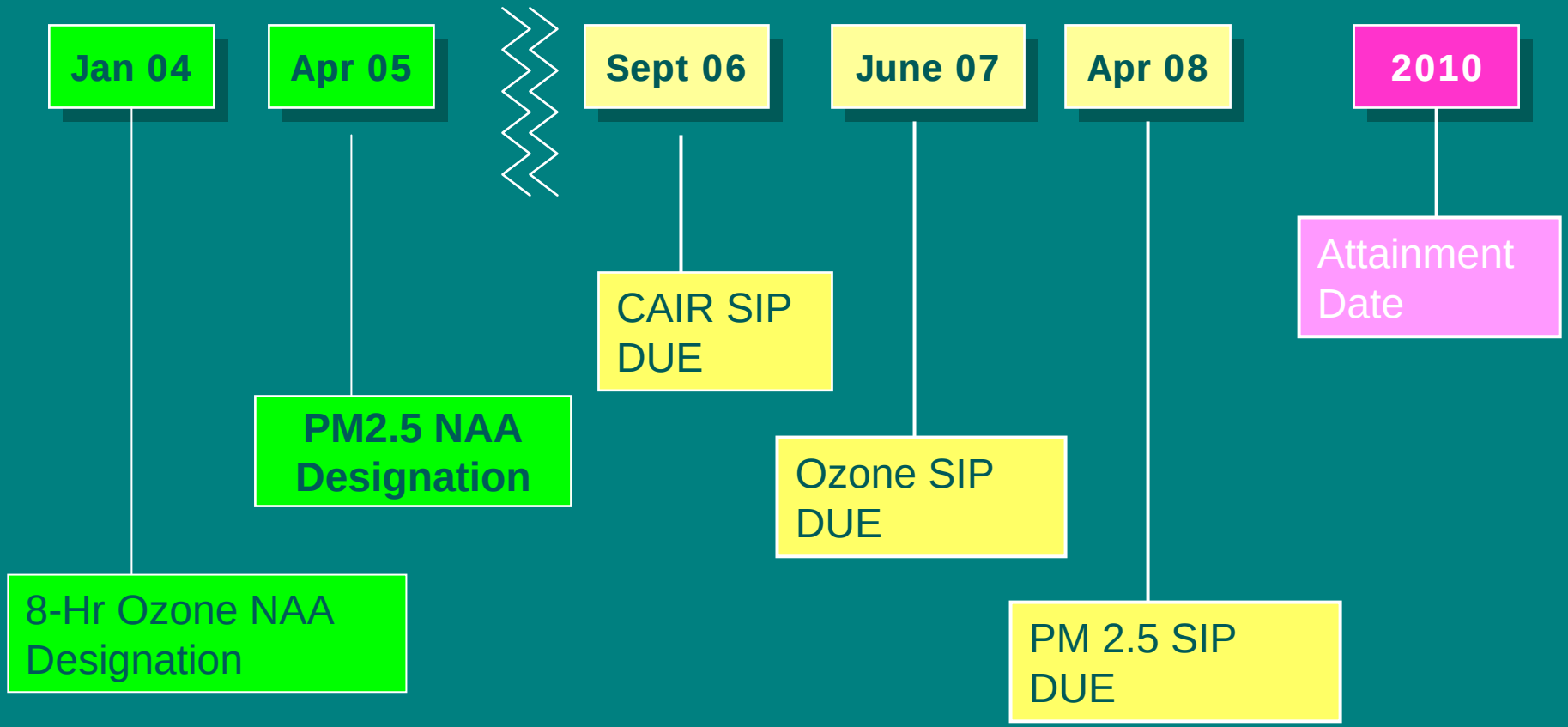
Challenge: New Ozone Standard

2010



- 19 exceedances in 2005 (Code Orange)
- EPA modeling for the Clean Air Interstate Rule (CAIR) shows the Washington region not meeting the 2010 deadline.
- New control measures are needed to meet the new standard.

Washington Region SIP Deadlines



For Further Information

- MWCOG.ORG/ENVIRONMENT/AIR
- AIRNOW.ORG
- AIR-WATCH.ORG
- EPA.GOV