

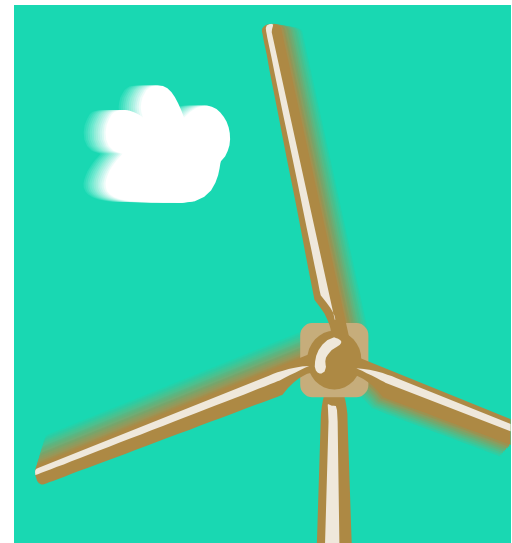


DRAFT 8-hr Ozone SIP OVERVIEW

Joan Rohlfs

MWAQC

March 15, 2007





Overview

- SIP Content Outline
- Emissions Reductions, 2002-2009
- Control Measures
- Reasonably Available Control Measures (RACM)
- Attainment Demonstration and Weight of Evidence
- Contingency Plans



Emissions Reductions

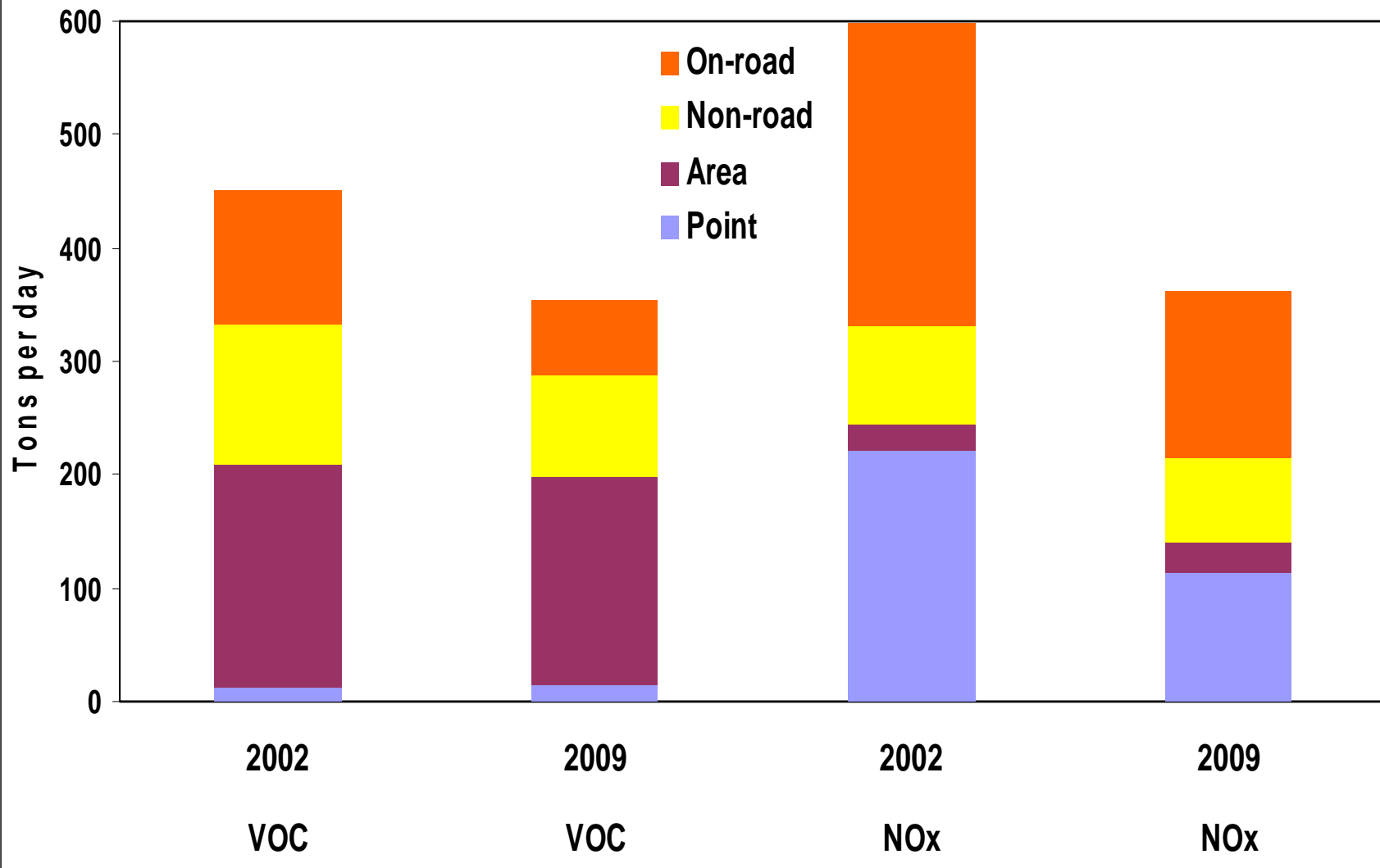
Emissions 2002-2008, 2009

- 2002 is the base year inventory
- Two projected inventories 2008, 2009



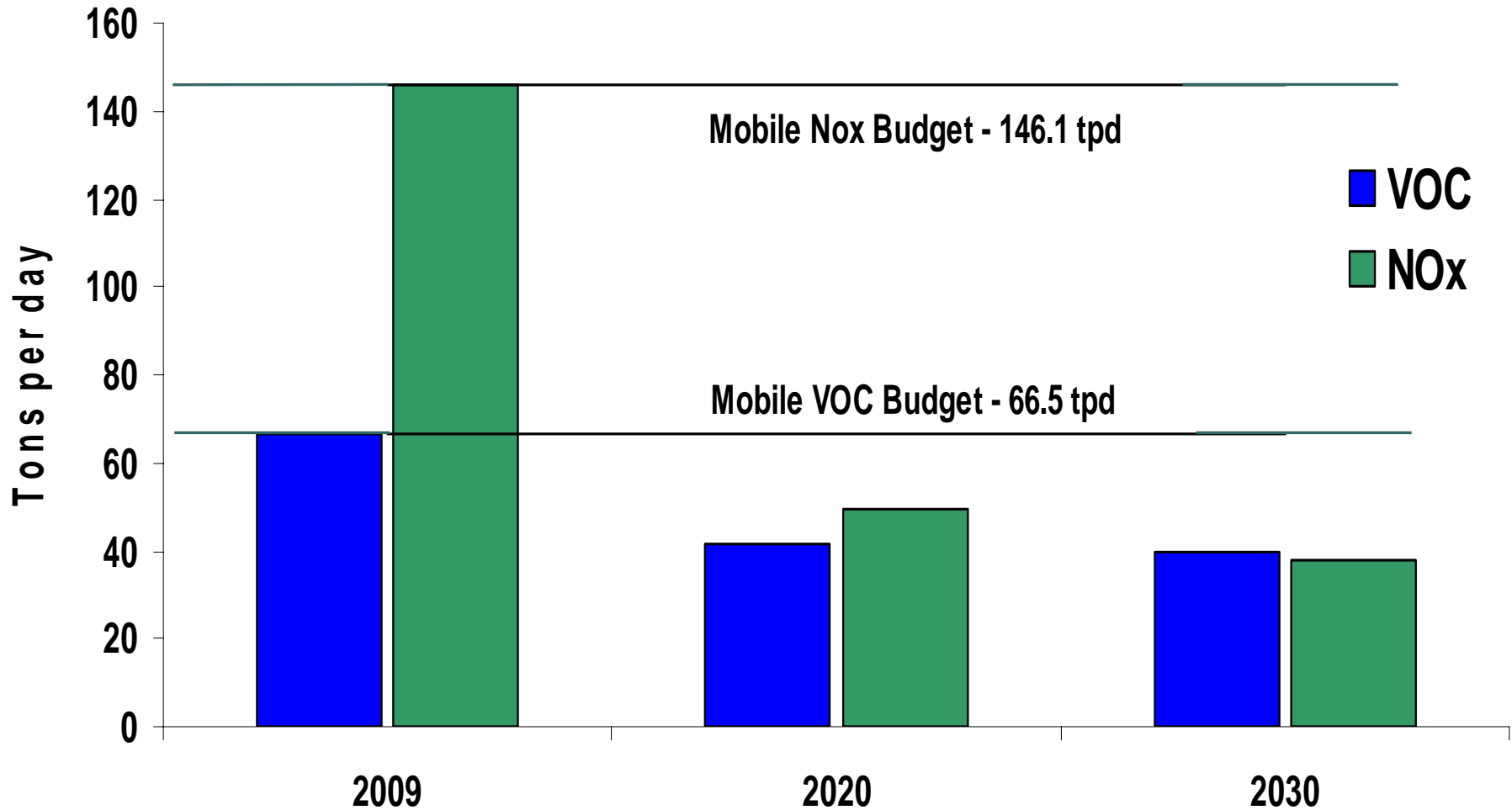
VOC & NOx Emissions - 2002 vs. 2009

Washington, DC-MD-VA 8-Hour ozone Non-Attainment Area



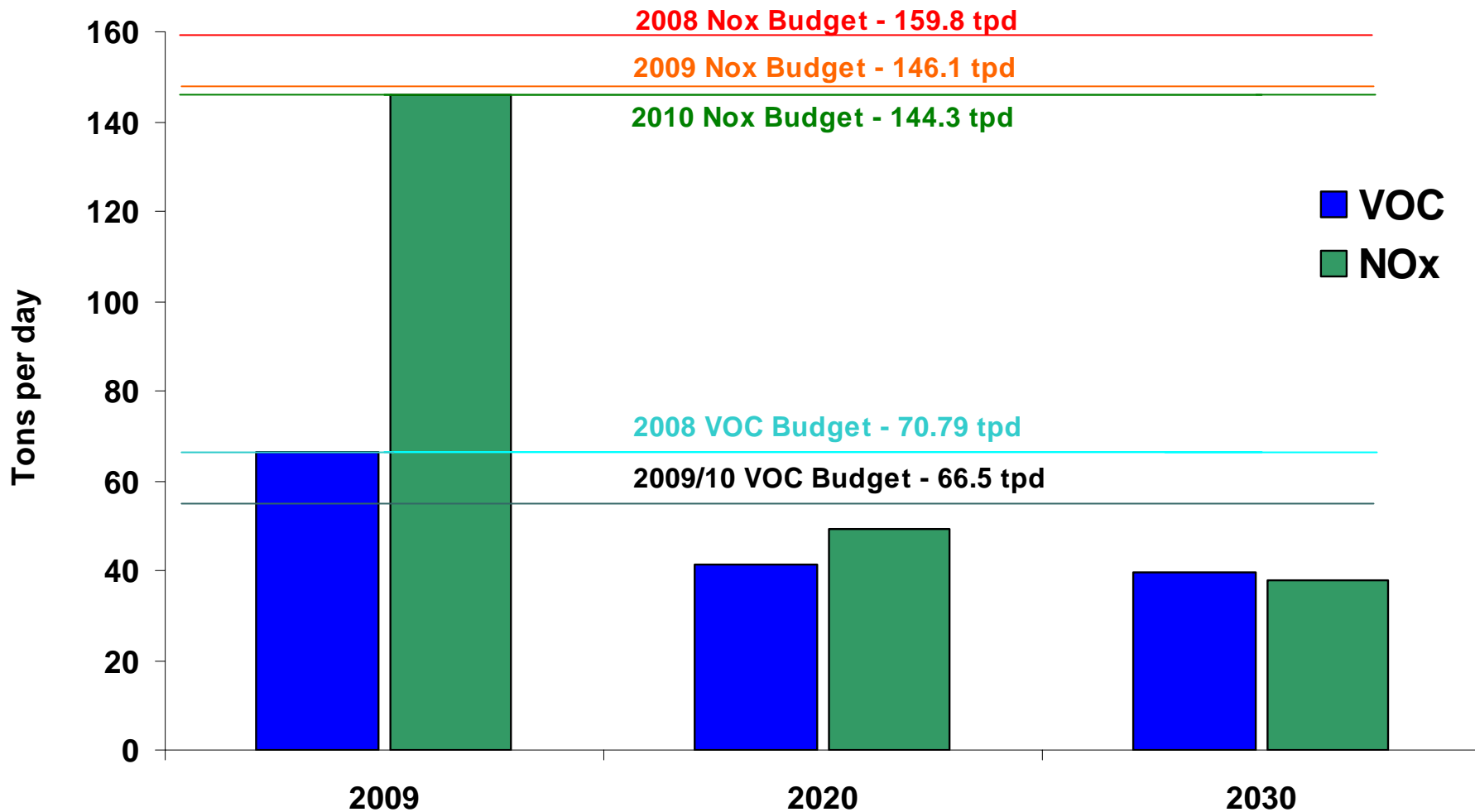
Mobile Emissions - 2009, 2020, 2030

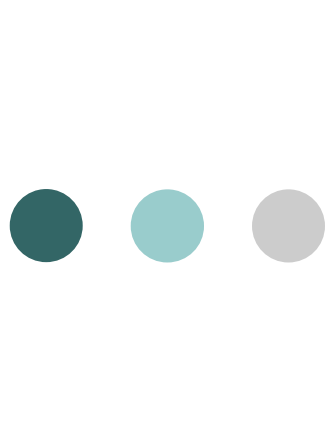
Washington, DC-MD-VA 8-Hour ozone Non-Attainment Area



Mobile Emissions & Budgets

Washington, DC-MD-VA 8-Hour ozone Non-Attainment Area





Control Measures

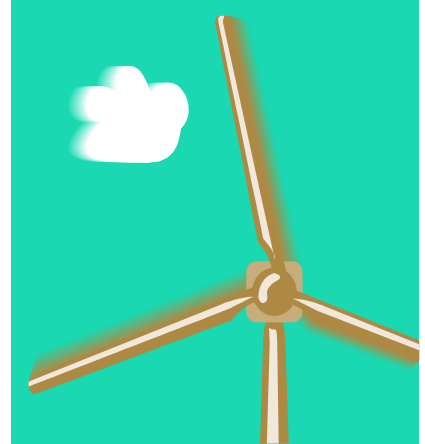


Control Measures

- Federal Nonroad Gasoline Engine Rule, Nonroad Diesel Rule, Heavy Duty Engine Rule
- State Clean Air Interstate Rule (CAIR) and Healthy Air Act (MD)
- Reformulated consumer products, paints, sealants and adhesives, less polluting solvent cleaning, portable fuel container rule (OTC measures)

Local Initiatives

- LED Traffic Signal Retrofits
- Wind Energy purchases
- Renewable Portfolio Standards
- Urban Tree Canopy
- Purchase of Low Emission Vehicles





RACM Criteria

- Will reduce emissions by the beginning of the Washington region's 2008 ozone season (May 1, 2008);
- Enforceable;
- Technically feasible;
- Economically feasible (proposed as a cost of \$3,500-\$5,000 per ton or less);
- Would not create substantial or widespread adverse impacts within the region; and
- Emissions from the source being controlled exceed a *de minimis* threshold, proposed as 0.1 tons per day.

RACM Analysis: Conclusion

- None of 332 measures analyzed can provide benefits by the 2008 ozone season
- The total overall reduction that could be provided by these measures is below the amount needed to reduce ozone levels by 1 part per billion (ppb)

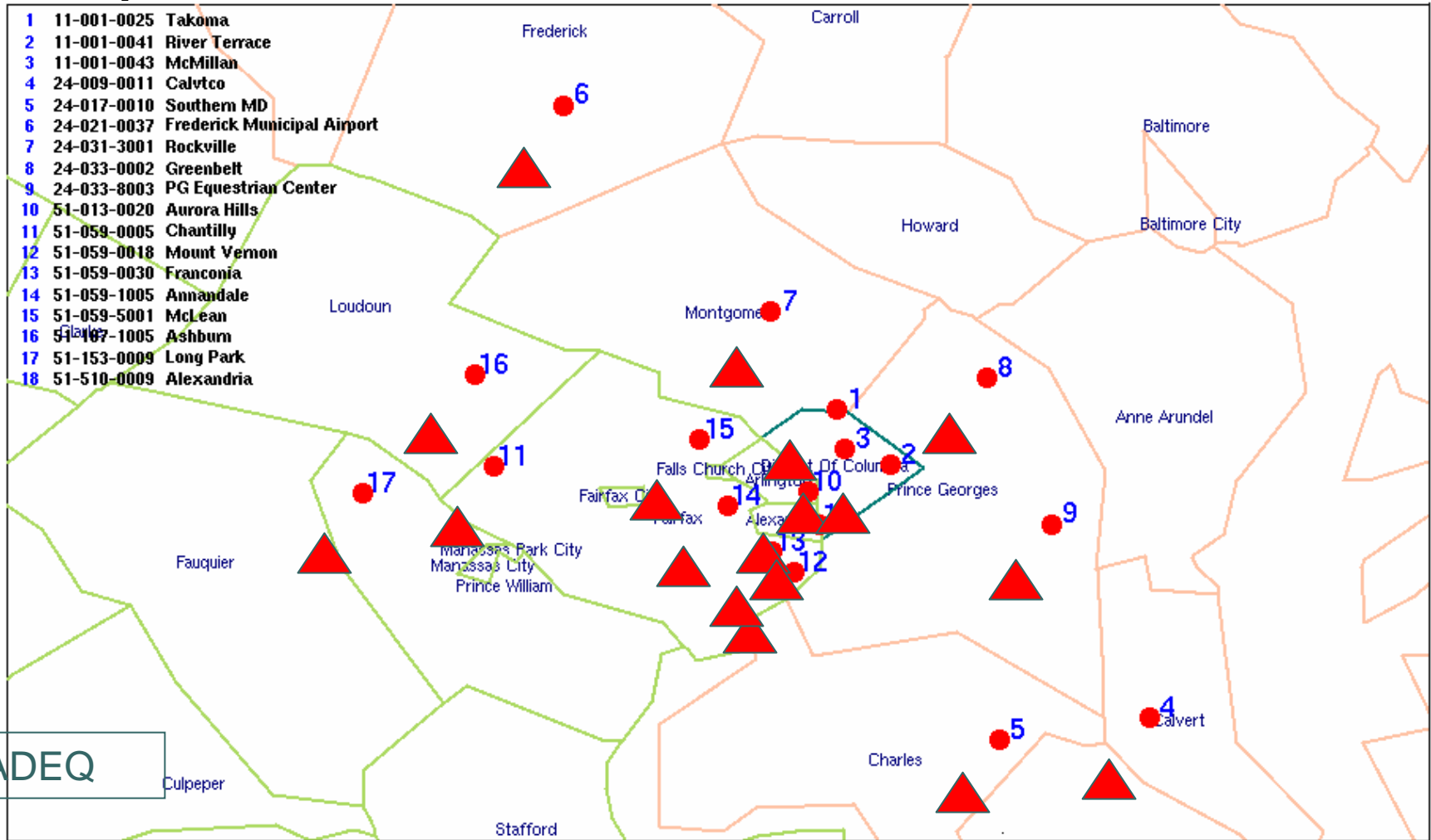




Attainment

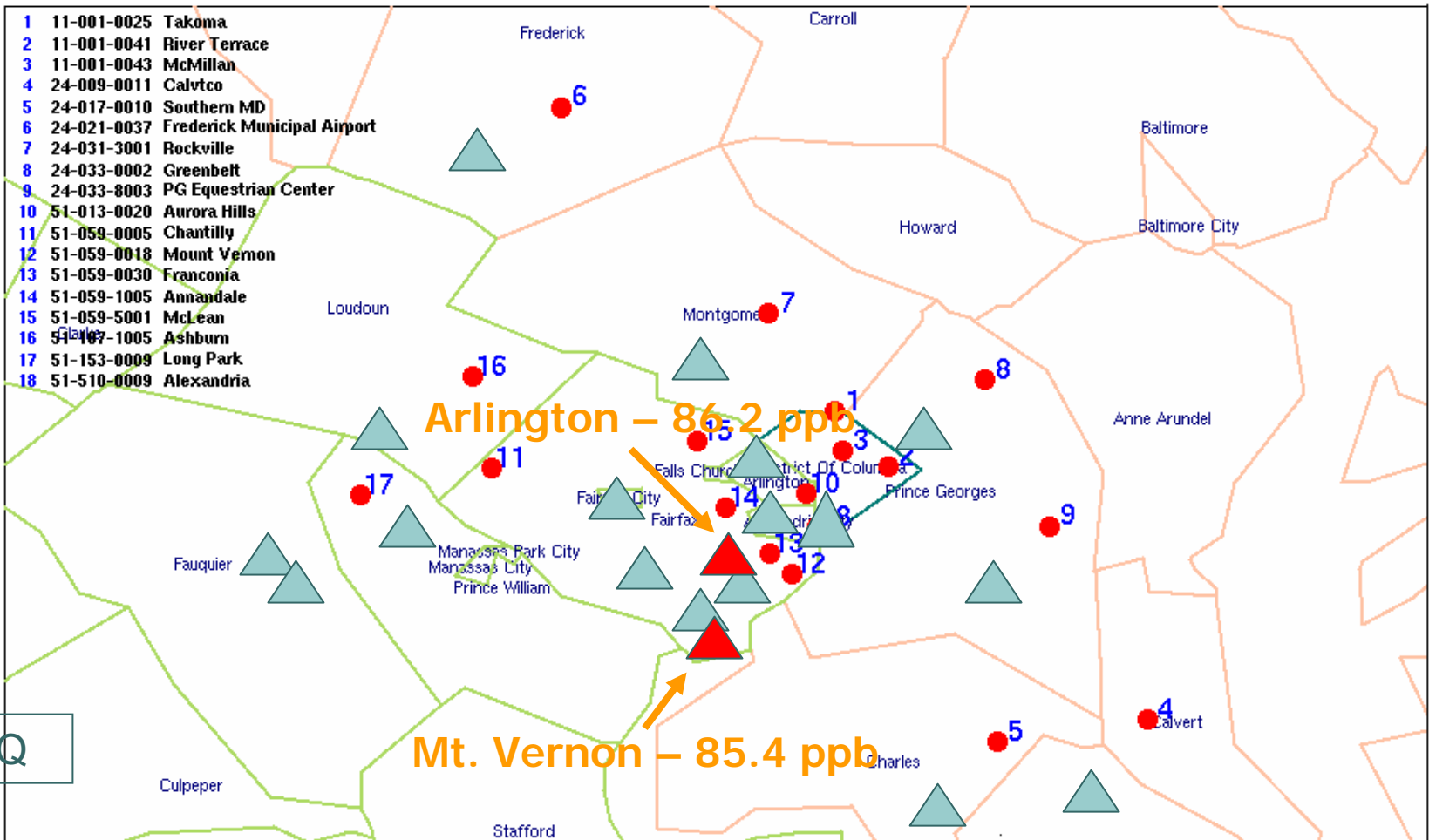
Demonstration and
Weight of Evidence

Actual Monitor Status – 2002



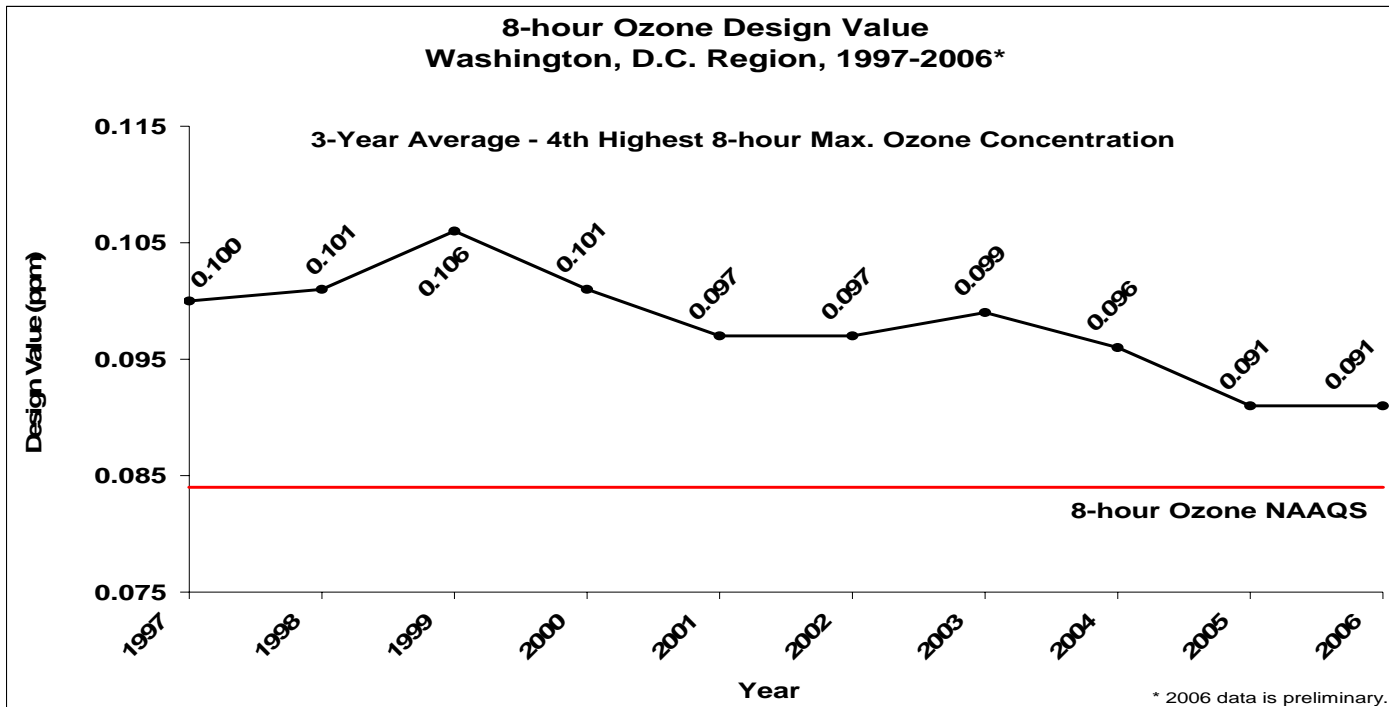
VADEQ

Predicted Monitor Status 2009 Base Case

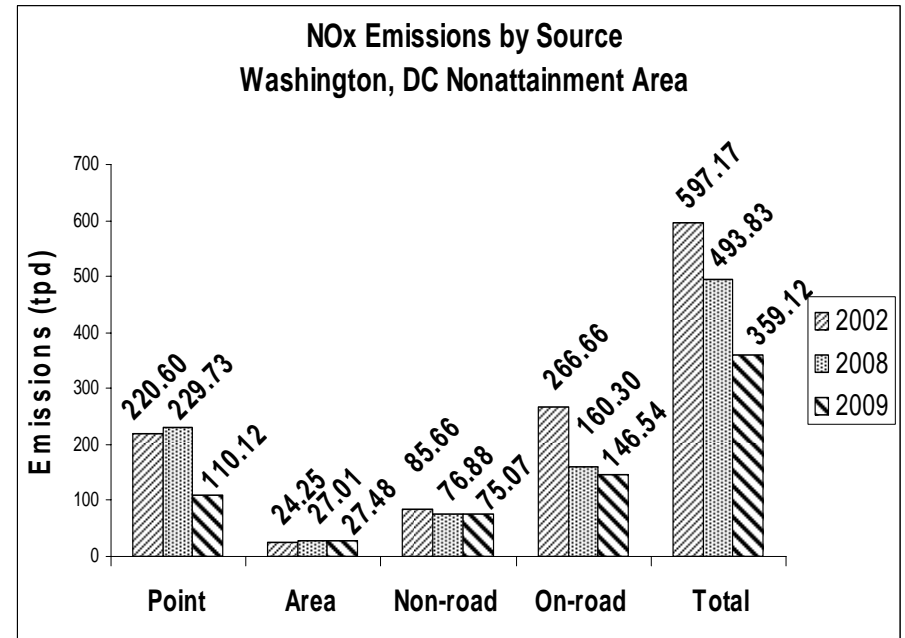
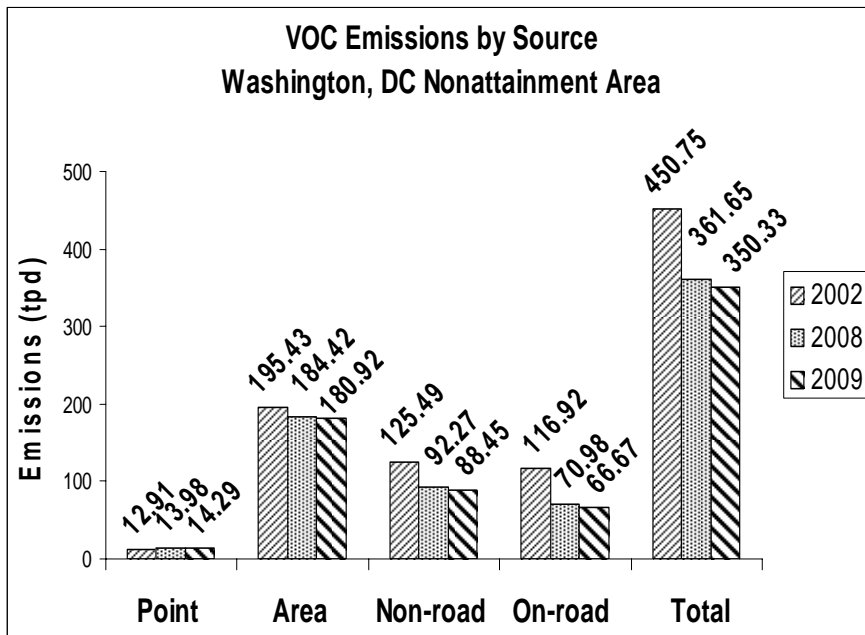


VADEQ

Air Quality Continues to Improve



Emissions Continue to Decrease





Weight of Evidence

- AQ DataTrends Analysis
- Spatial Reduction
- Additional modeling results
- Directionally Correct programs:
 - Clean Air Partners, episodic telework
 - HEDD
 - Tree canopy



Conclusion re Attainment

- The photochemical modeling combined with supporting Weight of Evidence analysis provide strong evidence the region will attain the 8-hour ozone standard by 2009.



Contingency Plan



Contingency Plan

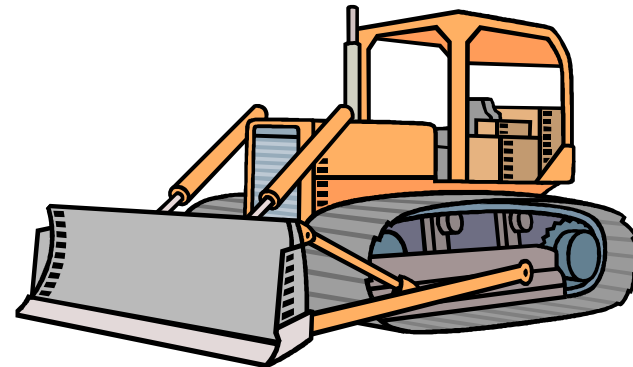
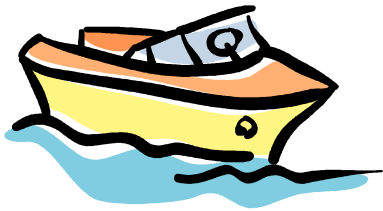
- *The EPA encourages the early implementation of required control measures and of contingency measures as a means of guarding against failures to meet a milestone or to attain. Any implemented measures (that are not needed for the rate-of-progress requirements or for the attainment requirements) would need to be backfilled only to the extent they are used to meet a milestone.*

Contingency Plan 2008

- OTC PFC Rule: 1.31 tpd VOC
- CAIR, 15.3 tpd NOx
- Healthy Air Act



Contingency Measures



Tier 2 Motor Vehicle Standards

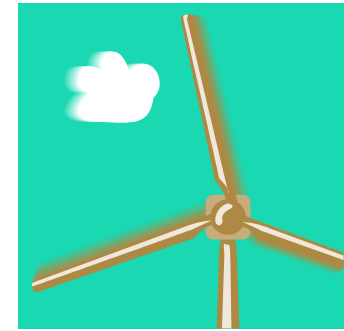
Emission Standards for Nonroad
Engines

Portable Fuel Container Rule

Marine Engine, Emission
Standards



Draft SIP Posted



<http://sharepoint.mwcog.org/airquality/default.aspx>

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