Attainment Modeling Status Report

Metropolitan Washington Air Quality Committee (MWAQC)

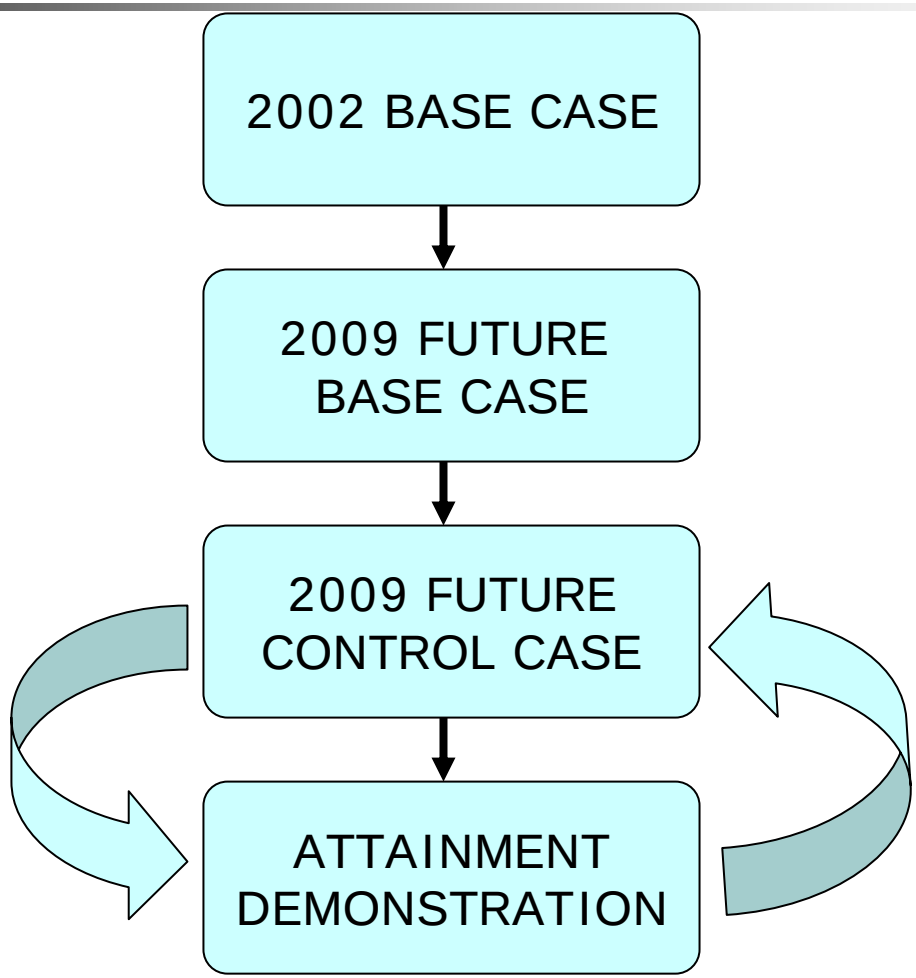
December 13, 2006

Presented by: VA Department of Environmental Quality

Purpose of Attainment Modeling

- Meet EPA requirements & guidance
- Predict future air quality conditions
- Develop & test potential control strategies
- Translate emission reductions into air quality benefit
- Demonstrate desired air quality outcome

Attainment Modeling Steps



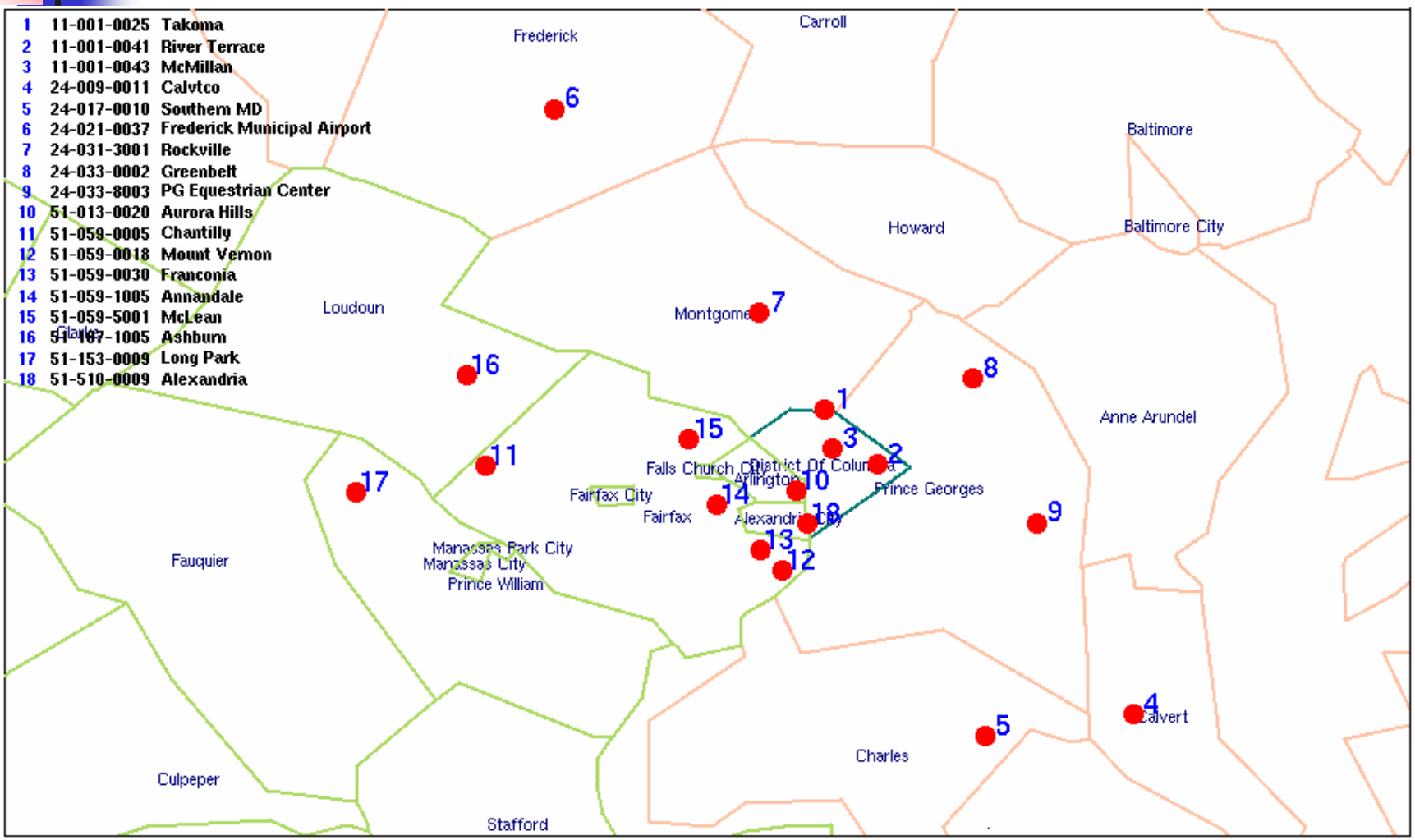
Latest Modeling Results

- Updated modeling effort:
  - Updated regional emissions inventories
  - Updated air quality model
- 2002 base case run by NY DEC
- 2009 future base case run by VA DEQ
  - Included OTB/OTW controls
- Initial results up to 3 ppb higher than previous modeling in DC area
- Evaluation of results begun

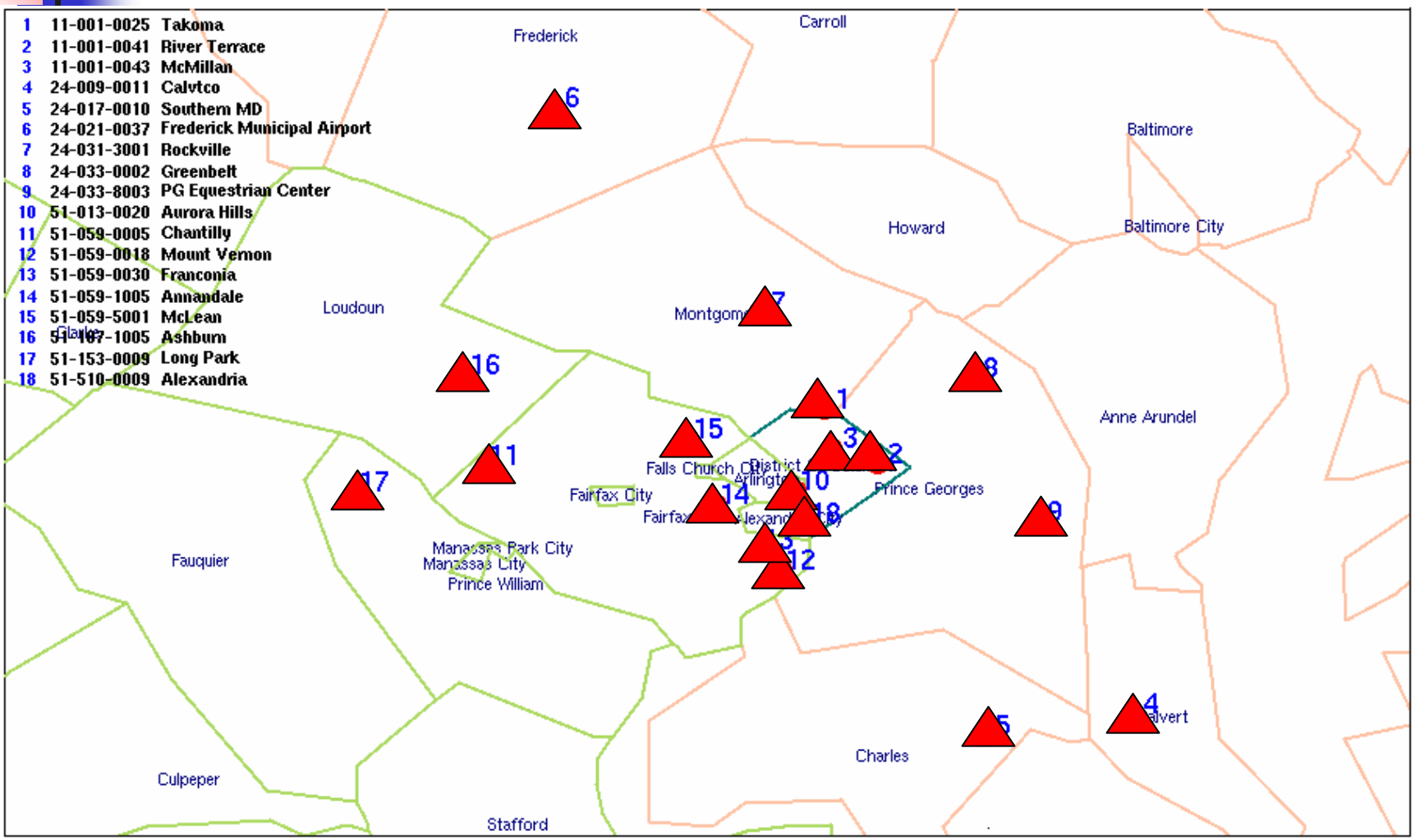
Latest Modeling Results (Cont)

- Emissions error found
  - No mobile emission reductions in the southeast
- Corrected model run underway
- Results in early January
- ***Interim draft results*** calculated using partial ozone season data
- Future modeling efforts/schedule:
  - Final DC control strategy (Feb)
  - Additional OTC controls (Feb/Mar)

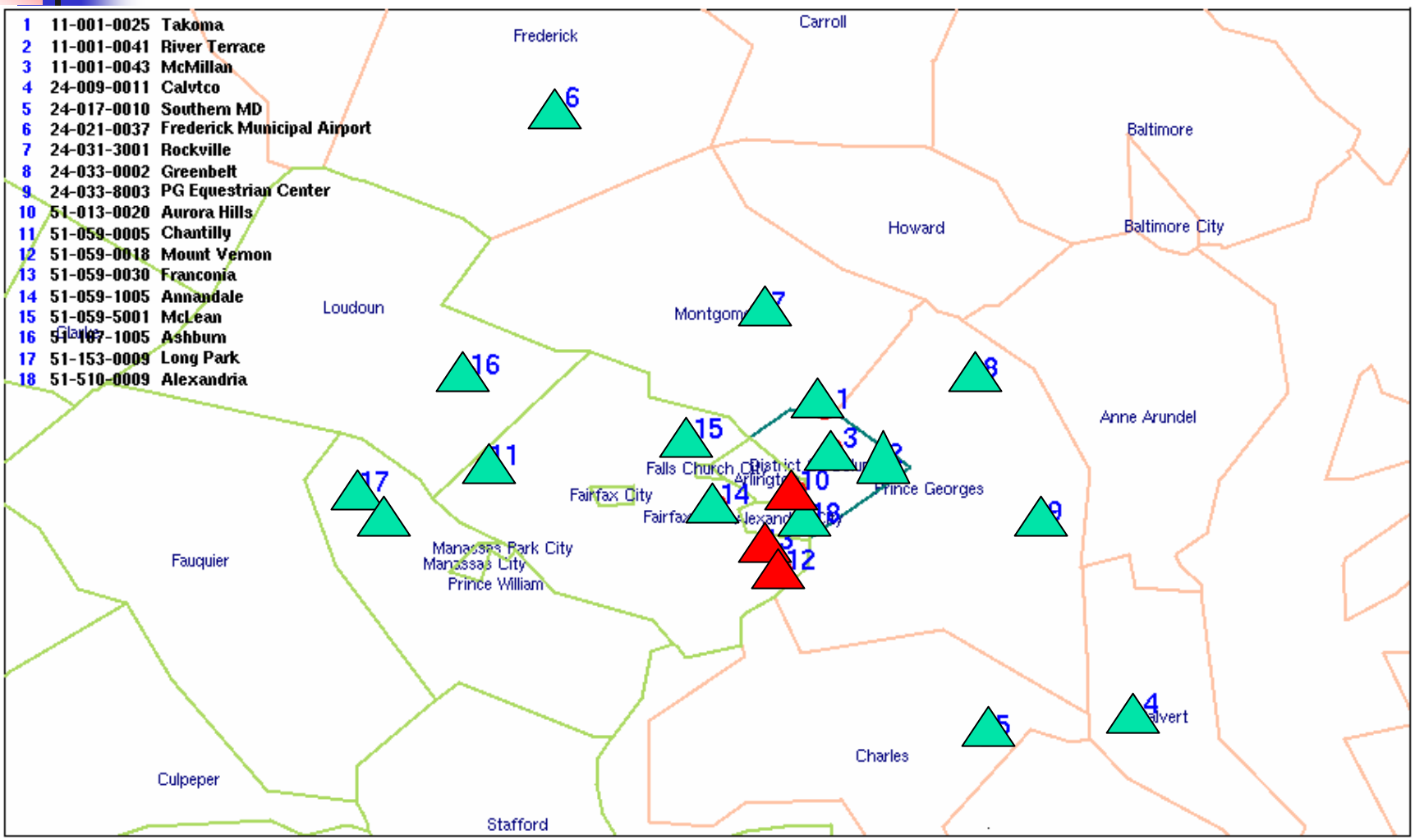
Location of Ozone Monitors



Actual Monitor Status – 2002



Predicted Monitor Status – 2009



Remaining 2009 8-Hour Ozone Problem Monitors

- Virginia
  - Arlington-0020 = 87 ppb
  - Fairfax-0018 = 86 ppb
  - Fairfax-0030 = 85 ppb

Weight of Evidence (WOE)

- Supplemental analyses supporting attainment demonstration
  - Acknowledges model uncertainties
- All DC monitors back within WOE range
- Types of analyses:
  - Emissions trends
  - Air quality trends
  - Other modeling results
  - Model uncertainty evaluations

OTHER MODELING RESULTS

SOUTHEAST OZONE MODELING PROJECT

2009 8-Hour Ozone Problem Monitors

- Virginia
  - Arlington-0020 = 87 ppb
  - Fairfax-0018 = 86 ppb
  - Fairfax-0030 = 85 ppb