



# Ozone, PM2.5, and Regional Haze Modeling Guidance Updates

Brian Timin EPA/OAQPS

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# Photochemical Modeling Guidance

- “Guidance on the use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for Ozone, PM<sub>2.5</sub>, and Regional Haze”- Final version- April 2007
  - <http://www.epa.gov/scram001/guidance/guide/final-03-pm-rh-guidance.pdf>



# OAQPS Modeling Guidance Team

- Core Guidance Team

- Brian Timin

- Kirk Baker

- Pat Dolwick

- Additional assistance from others in OAQPS

- EPA Regional modelers

- Comments and feedback



# Schedule

- September 2010- Revised draft to Regional modelers
- November 2010- Revised draft released for public review
- January 2011- Comments on draft due
- February/March 2011- "Final" version released



# Ozone Attainment Test

- Updates to address new NAAQS
  - Lower threshold for RRFs?
  - Review minimum number of days recommendations
  - W126 test

# PM2.5 Attainment Test

## ■ Unmonitored Area Analysis

- “Fused” ambient data and modeled data to examine unmonitored areas
  - Fine tune application of fused spatial fields
  - Policy questions concerning unmonitored areas
    - How should unmonitored “hotspots” be addressed?
    - Spatial resolution of the analysis
      - Annual vs. 24-hour NAAQS

## ■ Local Area Analysis

- Combines dispersion modeling and photochemical modeling results (at FRM monitors)
  - Feedback and experiences from States that are doing “local” modeling
  - Ultra fine scale grid modeling ( $\leq 1$ km) vs. dispersion modeling



# Baseline Design Value

- Currently using 5-year weighted average
  - Are there “better” alternatives?
  - How to avoid design value “shopping”?
  - Ideas?

# Weight of Evidence

- Numerical WOE “range”
  - Continue to specify suggested range for ozone and PM2.5?
- Add language to address attainment demonstrations that are submitted close to the attainment date
  - Relative importance of ambient data vs. modeling
  - Near term expected emissions reductions
- More use of met adjusted ambient data?
- Voluntary measures and other un-modeled measures
- Add more examples of supplemental analyses





# Other Issues to address

- High Electricity Demand Days (HEDD)
  - Modeling studies
- Language on climate change for long time frame modeling
- Future year boundary conditions
- Accounting for land use changes



# General Updates

- Update references and dates
- Looking for new references and information
  - Published articles
  - Reports
  - Work in progress