

CAAA90 Section 812 Second Prospective Study

Reporting

**Briefing for 812 Council
May 5, 2010**

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Presentation Overview

- ⇒ Overall reporting strategy
- ⇒ Key aspects of integrated report
 - ↳ Design principles and issues
 - ↳ Key features of preliminary draft report
 - ↳ Summary comparison of Pro I vs Pro II results
 - ↳ Cost-only vs. benefits-adjusted CGE results
- ⇒ Sample visualizations
 - ↳ Sensitive ecosystems maps
 - ↳ Google Earth visualization of results

Planned Reports and Outreach Products

⇒ Main published report

↪ ~100 pages

↪ Technically informed and interested audience

⇒ Web-based report

↪ Main report with extensive hyperlinks to underlying data, supporting reports

↪ Researchers, State agencies, other analysts

⇒ Brochure

↪ “Coffee table” publication of ~12 pages

↪ Wide audience interested in summary description of study, results

- Congress, reporters, students, other government

↪ Similar to common practice at World Bank

⇒ Web-based visualizations

↪ 2D maps

- Example: maps overlaying air quality improvements on sensitive ecosystems

↪ Google Earth

- Downloadable KMLs, overlays

- Example: comparison of air quality improvements vs population

Features of Preliminary Draft Integrated Report

- ⇒ FASOM results pending
- ⇒ Documentation of Primary PM adjustments pending
- ⇒ Visibility results reflect 10% downward scaling of unadjusted Primary PM ... now refined
- ⇒ CGE results based on unadjusted Primary PM
 - ↳ Probably impractical to run new CGE using adjusted PM
- ⇒ Summary of major sources of uncertainty

Design of Integrated Report

- ⇒ Expository objective: to facilitate understanding of—
 - ↪ Study purpose
 - ↪ Overall methodology, including how components relate
 - ↪ Key assumptions, uncertainties and limitations
 - ↪ Results

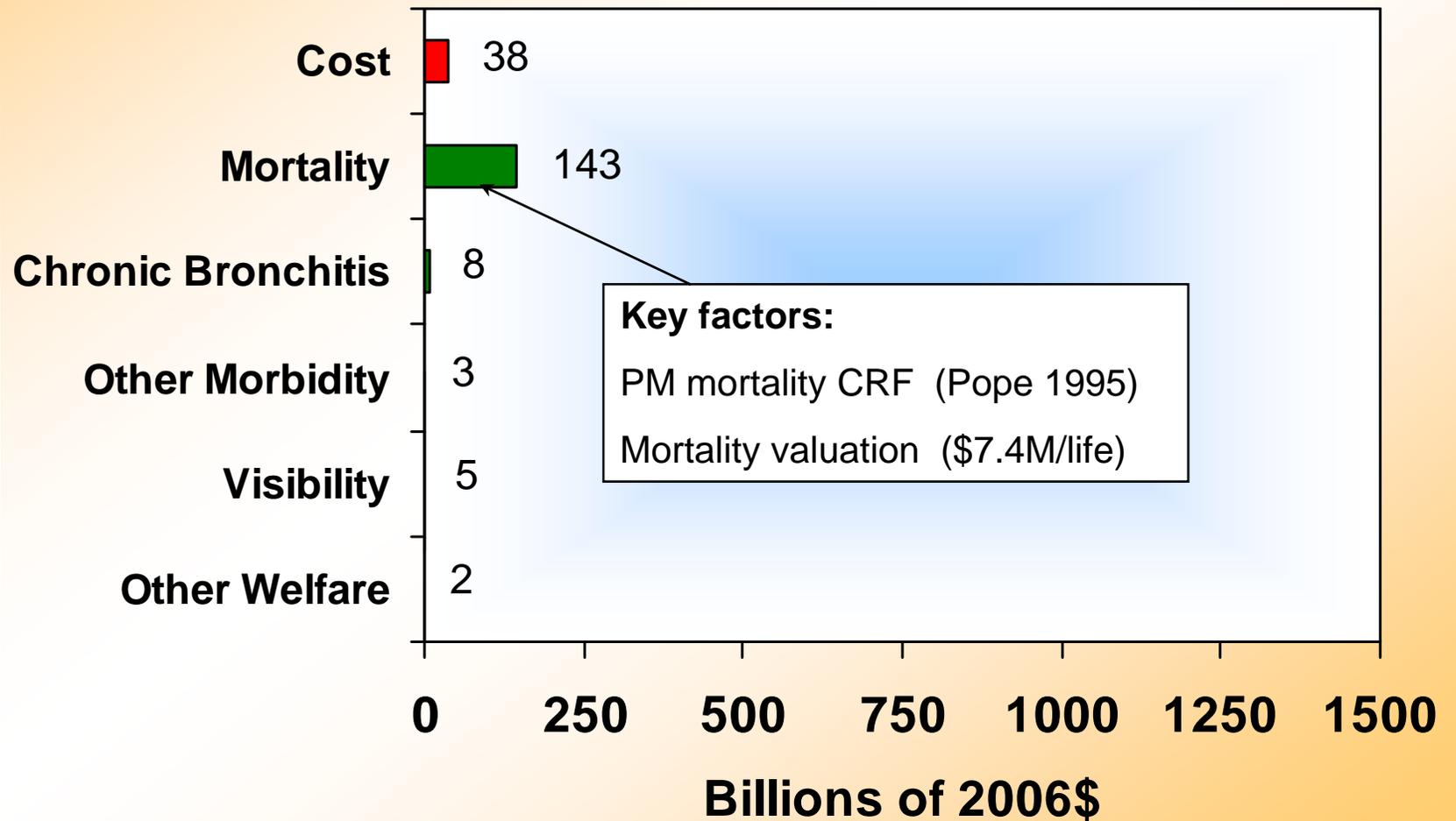
- ⇒ Not intended to convey all technical details
 - ↪ Rely on underlying 812 study component reports
 - ↪ Rely on reference materials, such as--
 - model documentation
 - peer review reports

Design Issues for Integrated Report

- ⇒ Interested in paring down if appropriate and feasible
- ⇒ Balancing thoroughness of documentation vs readability
- ⇒ Adequacy of uncertainties reporting via chapter tables
- ⇒ Results organization, characterization

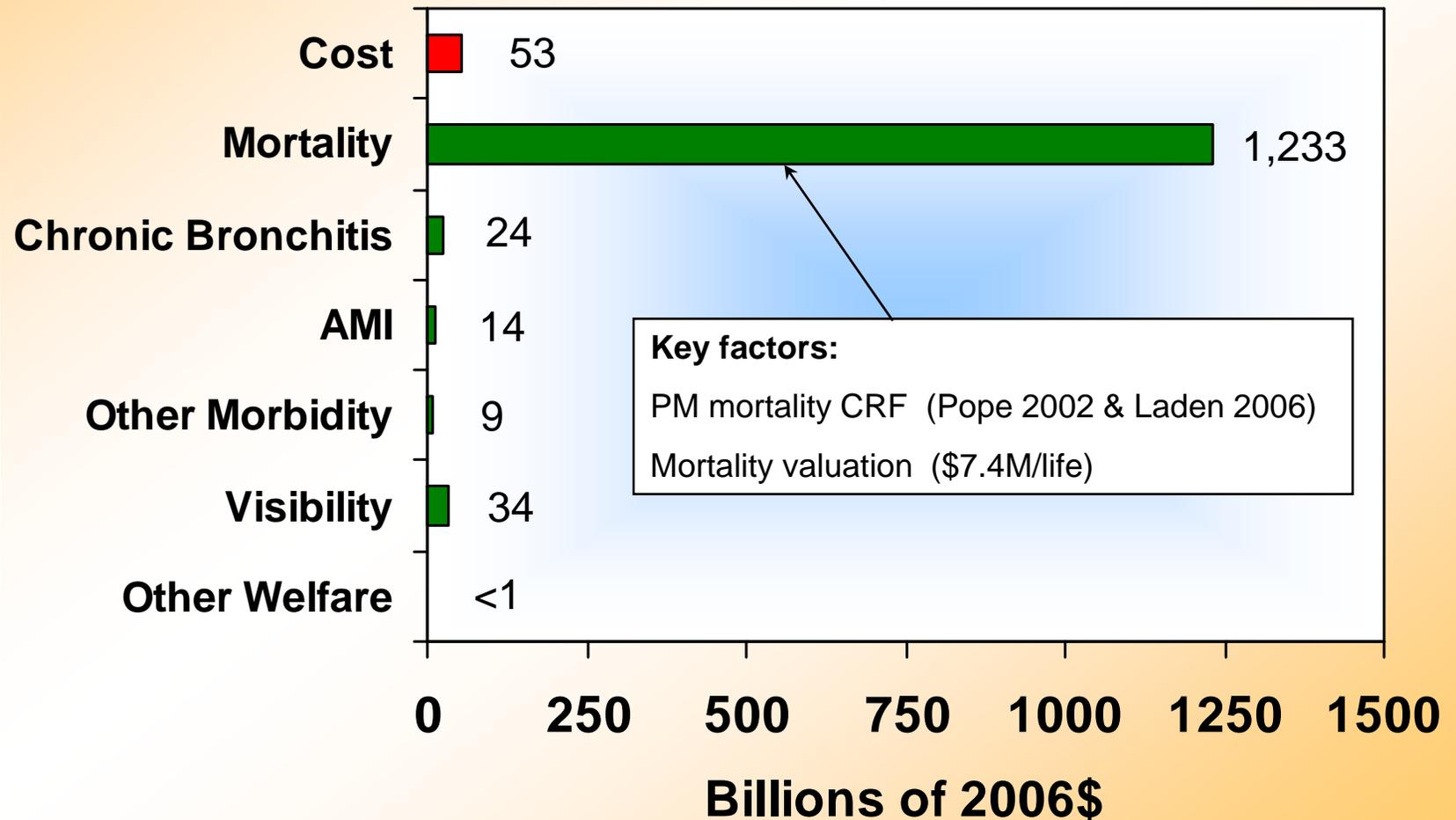
1990 to 2010 First Prospective Study

Monetized Benefits & Costs for 2010

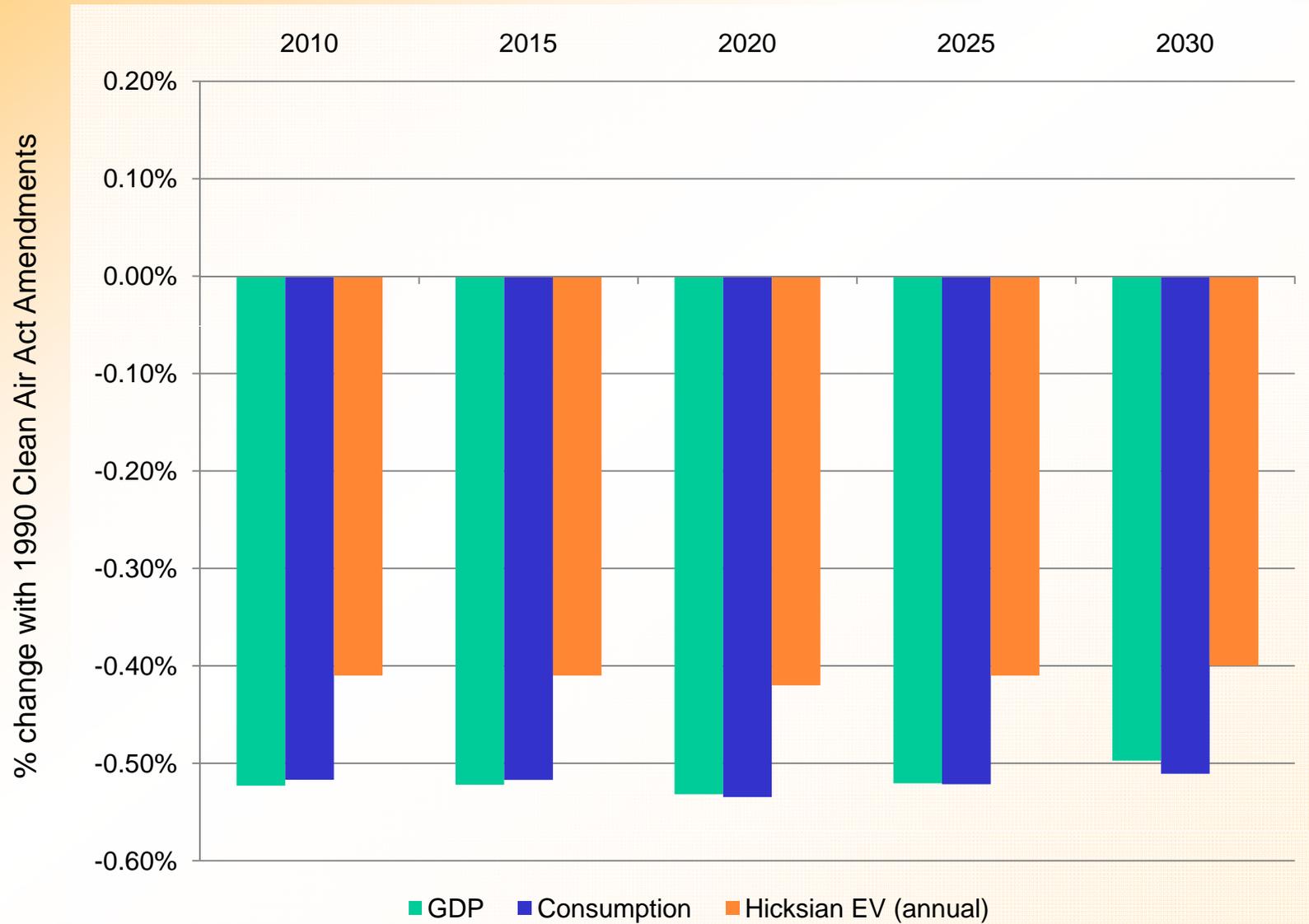


1990 to 2020 Second Prospective Study

Monetized Benefits & Costs for 2010

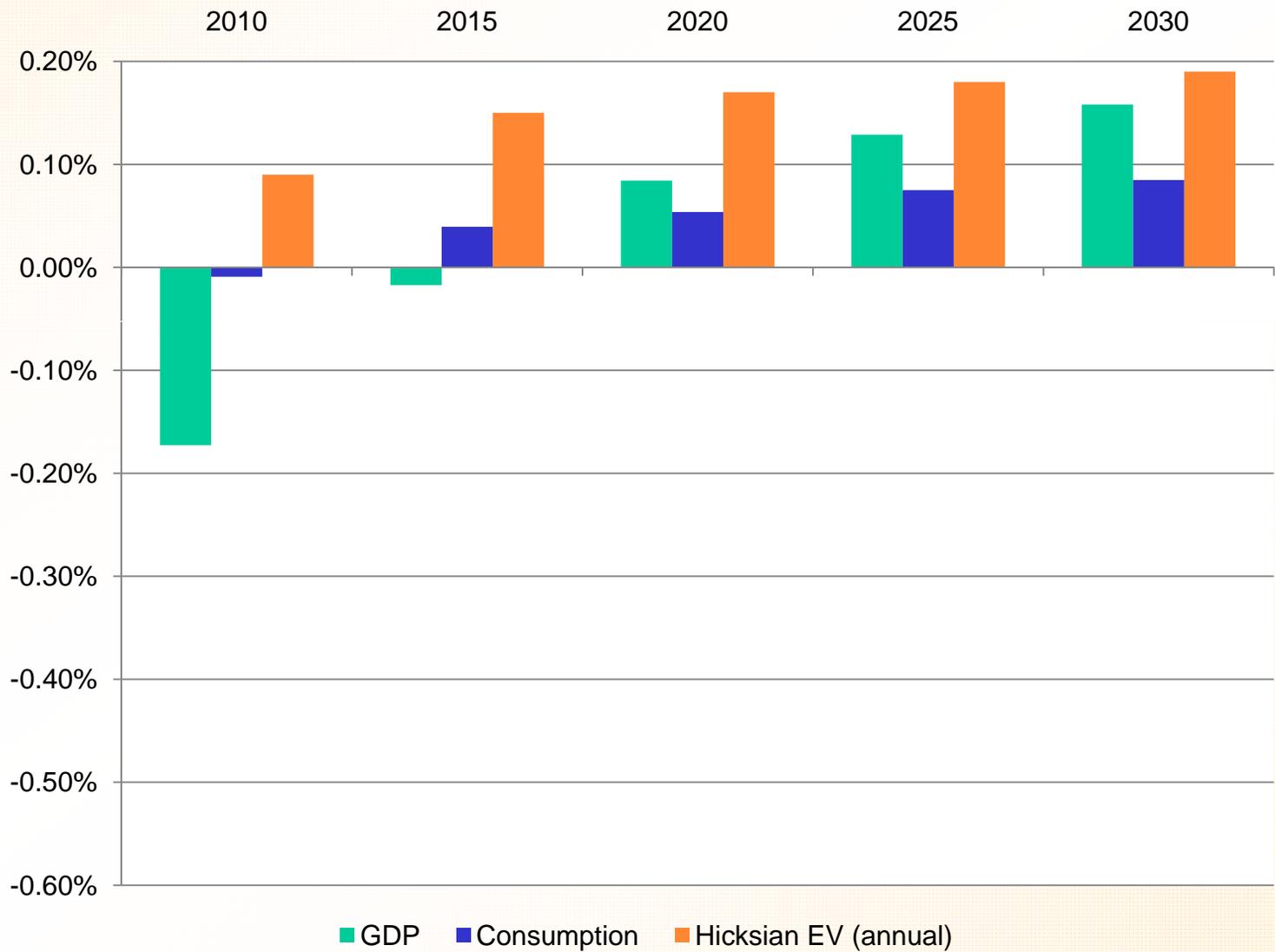


Economy-Wide Effects – Cost Adjustment Only



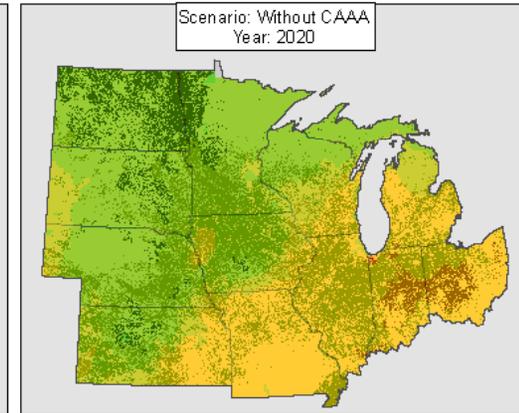
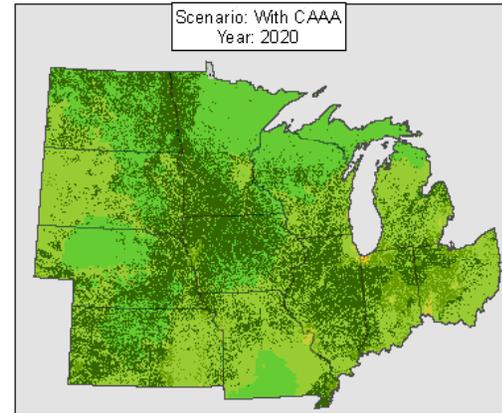
Economy-Wide Effects – Benefits-Adjusted

% change with 1990 Clean Air Act Amendments

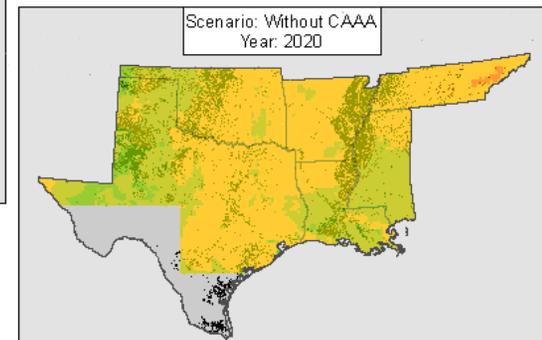
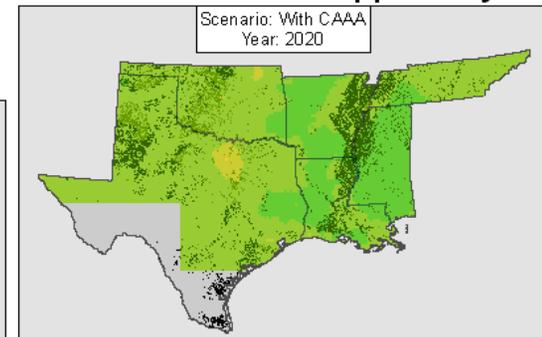


Sample Maps Comparing Sensitive Ecosystem Resources and Air Pollution Changes

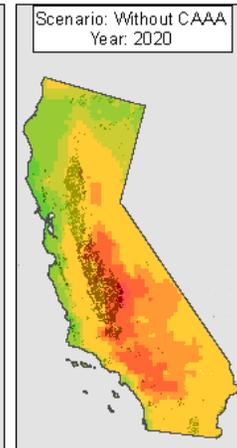
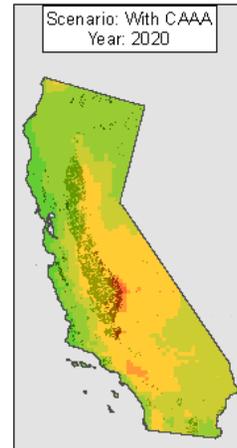
Midwest



Southwest/Mississippi Valley

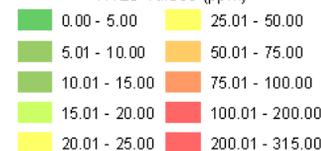


California



Sources:
 1.) W126 Estimates Provided by Stratus Consulting on July 21, 2009.
 2.) U.S. Department of Agriculture
 3.) Environmental Systems Research Institute, Inc.

Tropospheric Ozone Concentrations
 W126 Values (ppm)

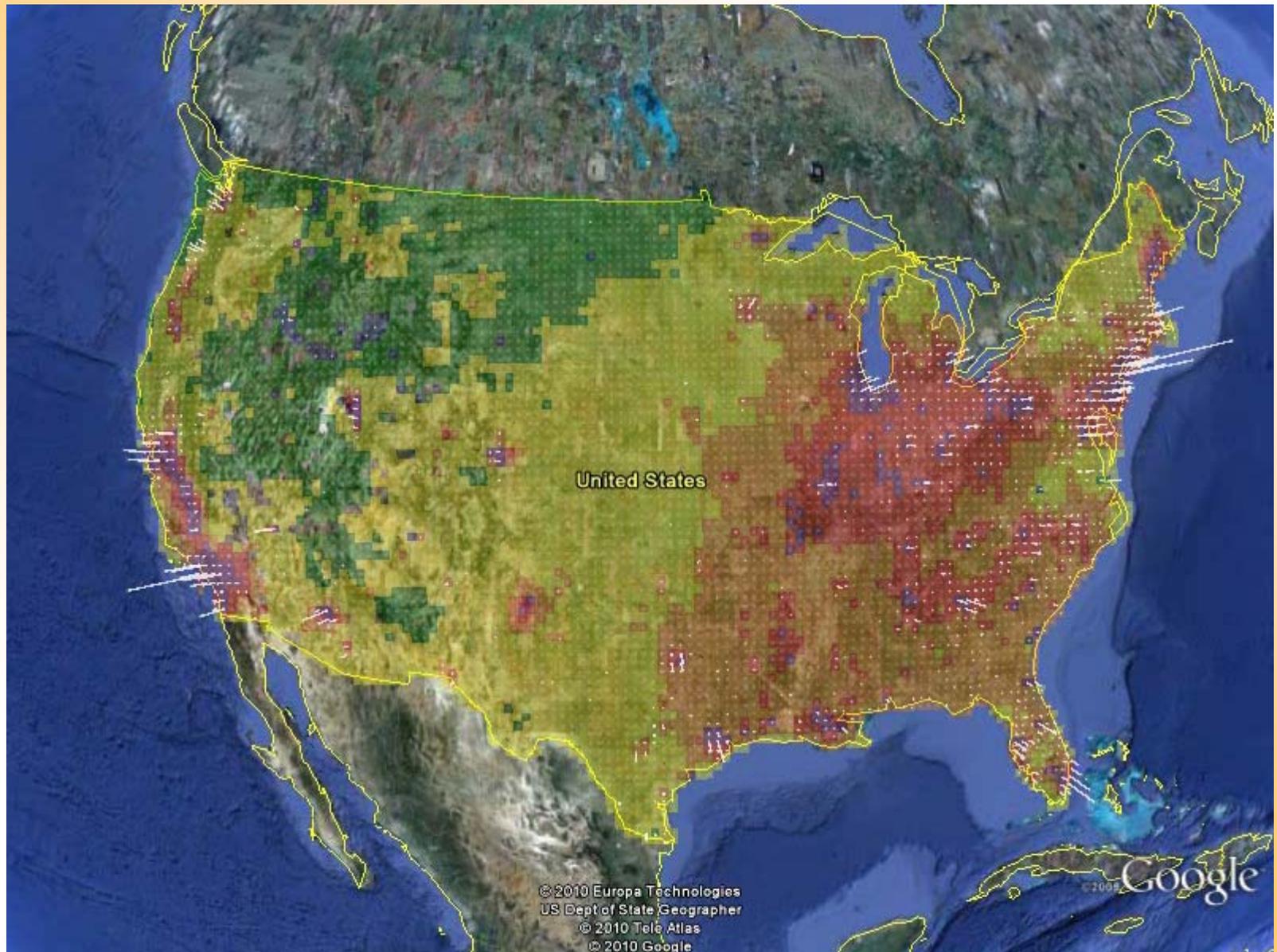


IEC Map Projection: Lambert Conformal Conic
 Geodetic Reference System: NAD 1983
 INDUSTRIAL ECONOMICS, INCORPORATED

■ Cultivated Cropland

Google Earth visualization of results

Unadj 2010 PM2.5 ambient reductions vs population



Remaining Steps

1. Review of PM adjustments
2. Incorporate refined adjustments to visibility
3. Complete new FASOM runs
4. Summarize major sources of uncertainty
5. Revise integrated report
6. Google Earth visualizations
7. Develop web-based and brochure versions
8. Council review summer 2010