Overview of the RIA Process

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Goals of an RIA

- Provide national estimates of costs and benefits of fully attaining current and proposed NAAQS
- Analyze proposed standard(s) and at least one more and one less stringent standard
- Where appropriate, provide health-based cost-effectiveness analysis and probabalistic uncertainty analysis
- As needed, provide analyses to meet requirements of other executive orders, e.g. children's health, UMRA, etc.

What is the Scope of the RIA?

- **Definition of current and future baselines** – generally use on the books controls as baseline, have not focused on examining the impacts of alternate baselines
- **Projection of inputs to future analysis year (usually year of expected full implementation)** – we typically do not have enough resources to estimate benefits and costs for each year of implementation
- **Selection of controls** – focus is on using known controls first to reduce potential uncertainties
- **Estimation of costs** – we have tools to estimate both direct compliance costs and changes in economic output (through CGE modeling)
- **Estimation of impacts** – focus has been on human health, but we have tools for limited welfare impacts assessment when time and resources are available
- **Valuation of impacts** – we use benefits transfer methods because of the high time and resource requirements to conduct primary valuation research

What is Outside the Scope?

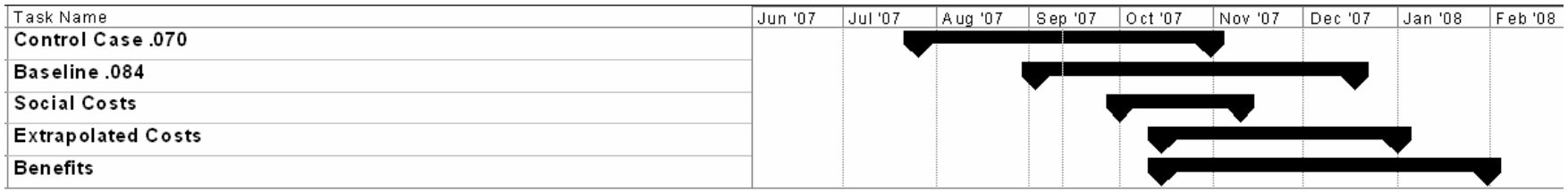
- Estimation of net present value of implementing the standard
- Full estimation of technological change
- Fully quantified probabilistic estimation of costs and benefits
- CGE modeling of benefits
- Full estimation of non-health benefits (missing most ecosystem benefits)
- Fully dynamic modeling of impacts of CGE results on emissions
- Speculation on emissions control strategies outside of the U.S.

What is the Timeline?

- Generally we have between 6 months and a year to complete the proposal RIA and 9 months to complete the final RIA
- Emissions and AQ modeling can take up to a month per run, so control strategy selection has to begin early in the process
- However, control strategy selection can only begin once the baseline AQ modeling has been completed
- Control strategy selection can take from one to several weeks depending on the complexity of the analysis
- Compliance cost estimation proceeds directly from control strategy selection
- Benefits analysis based on AQ modeling takes days to around a week
- In recent RIA's, a significant time element related to extrapolated costs and benefits has been added – this portion of the analysis can take many weeks due to the need for additional sensitivity modeling
- Analysis of results and writeup proceeds along with the analysis, but usually requires at least 2 weeks to complete after the final results have been produced
- Interagency review can take several months

- *Example schedule for final Ozone NAAQS is provided on the following slide*

Example Schedule for Final O3 NAAQS



- We had a compressed schedule of 7 months because of delays in completing the proposal RIA
- Note that because we knew from the proposal analysis that we would not attain with maximum available known controls, we were able to start with the control case before the baseline was modeled
- Not included in this schedule, but planned for the RIA is an analysis of health based cost-effectiveness and an assessment of impacts associated with potential reductions in UV-b screening

Components of the RIA