

Transportation & Land Use TWG Teleconference Meeting #2

June 24, 2008, 2:00 – 4:00 pm

Governor's Climate Change Sub-Cabinet
Center for Climate Strategies

Today's Agenda

- Roll call
- Review and approval of TWG Call #1 summary
- Review and comments on the draft GHG emission inventory & forecast
- Discussion of process for identifying priority options for analysis
- Review and discussion of the Catalog of State Actions
- Public input and announcements
- Agenda, time, and date for next meeting

Draft GHG Emission Inventory & Forecast

Inventory Approach

- Standard US EPA and UN methodologies, guidelines, and tools
- Emphasis on transparency, consistency, and significance
- Preference for Alaska data, where available
- Consumption and production-basis emissions from electricity generation
 - Very simplified approach used for initial analysis

Projection Approach

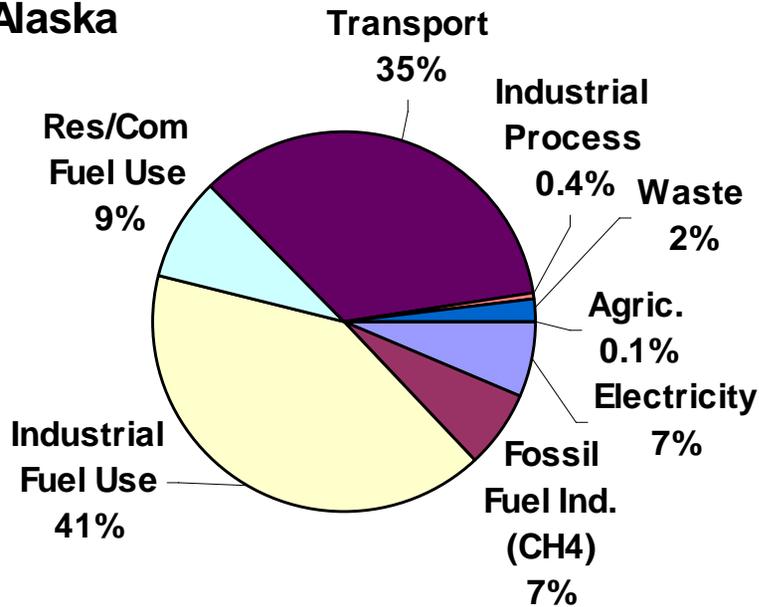
- Reference case assumes no major changes from business-as-usual (BAU)
 - Includes approved policies and actions to the extent possible
- Growth assumptions from existing sources
 - State population and employment forecasts
 - US Census and Bureau of Labor & Statistics
 - US Energy Information Administration

Coverage

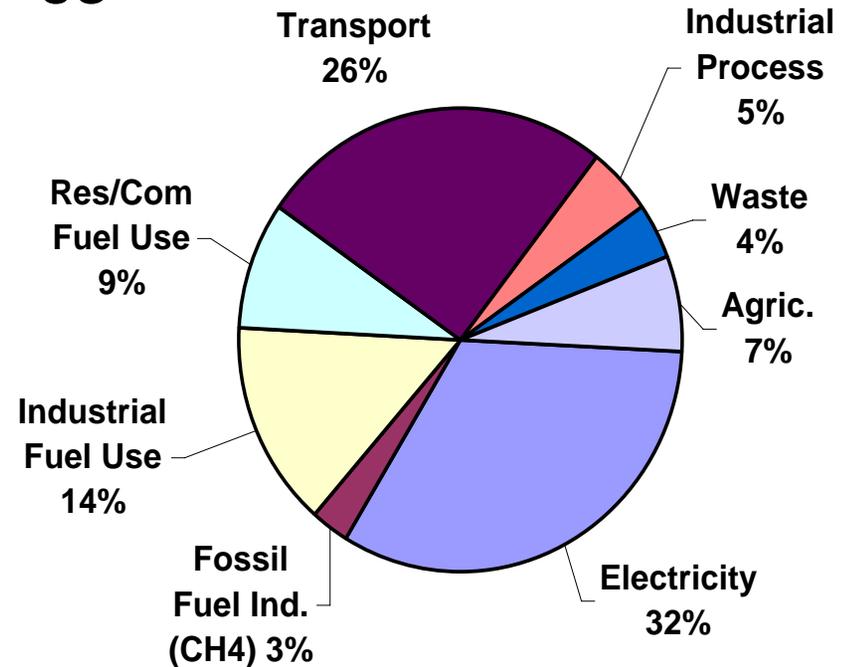
- Six gases per USEPA and UNFCCC guidelines
 - Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulfur Hexafluoride (SF₆)
- All major emitting sectors
 - Electricity Supply & Demand (Consumption Based)
 - Residential, Commercial, Industrial (RCI) Fuel Use
 - Industrial Non-Fuel Use Processes
 - Transportation (onroad and nonroad)
 - Natural gas pipeline transmission & distribution
 - Agriculture, Forestry, and Waste
- Emissions expressed as CO₂ equivalent
 - 100-year global warming potentials
 - CO₂ = 1; CH₄ = 21; N₂O = 310; HFC-23 = 11,700; SF₆ = 23,900

Alaska & US Gross Emissions by Sector, Year 2000

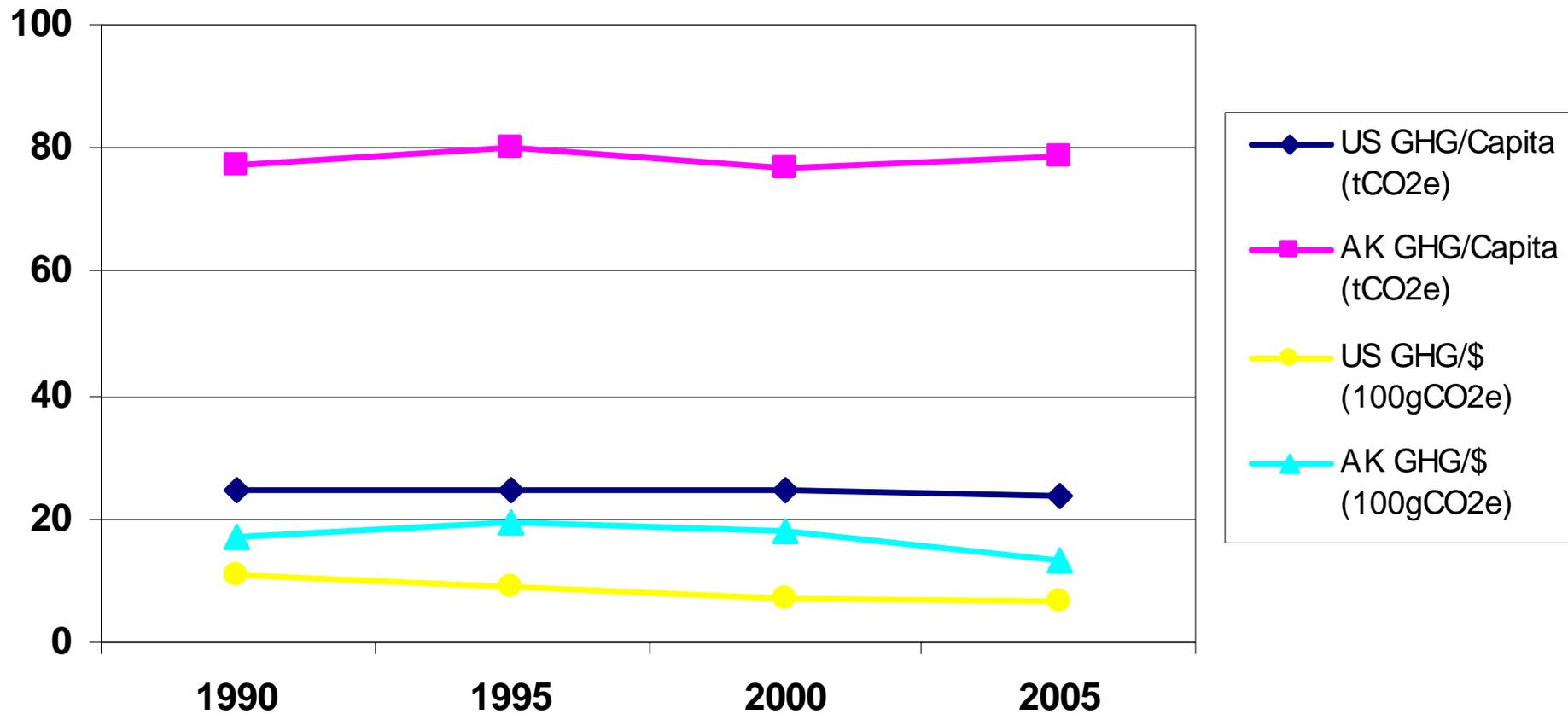
Alaska



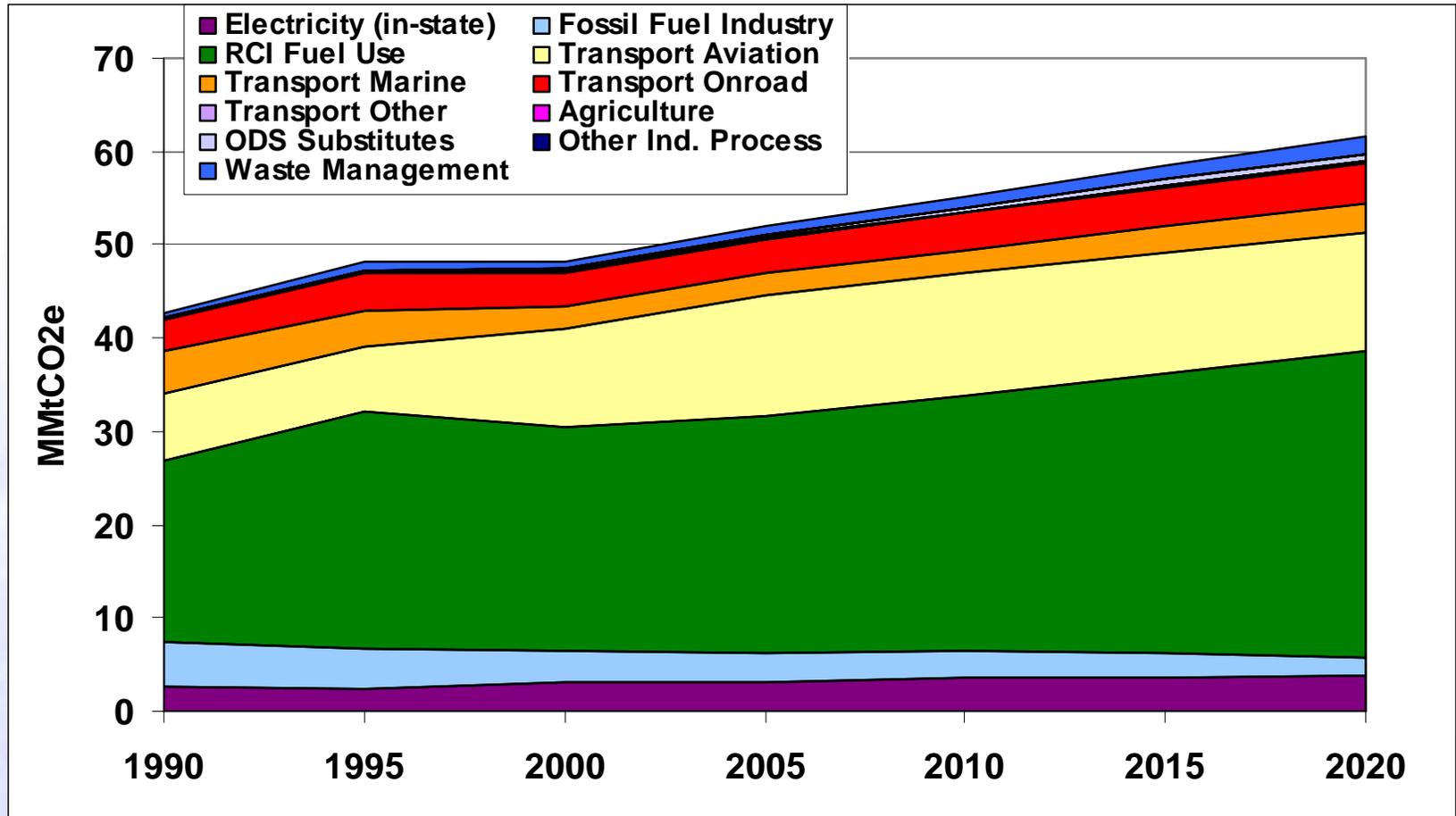
US



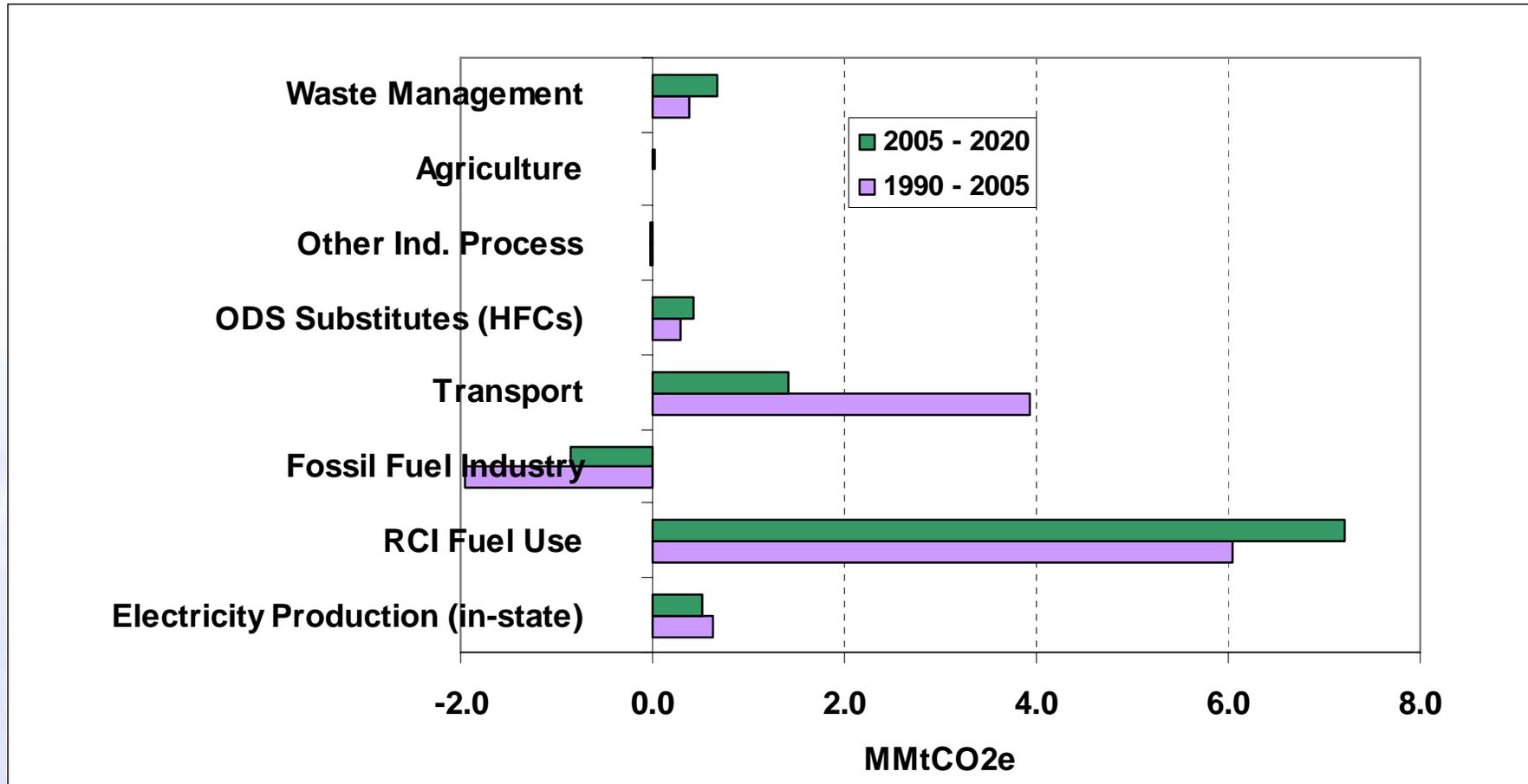
Per Capita and GSP/GDP Gross GHG Emissions, 1990-2005



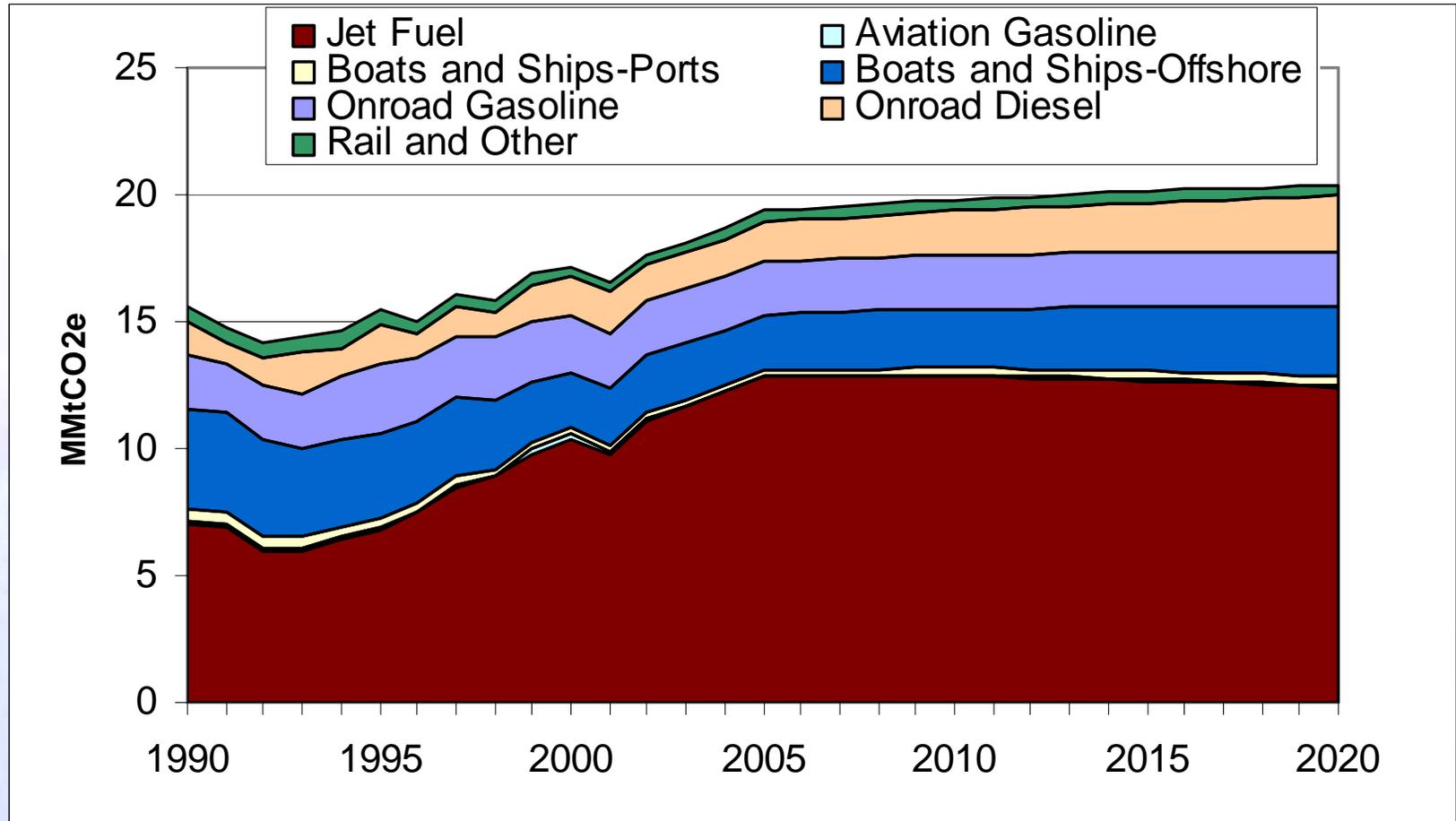
Alaska Gross GHG Emissions By Sector, 1990-2020



Alaska Gross Emissions Growth (MMtCO₂e Basis)



Transportation Inventory & Forecast



Transportation Inventory & Forecast

- Data Sources
 - Onroad Diesel and Gasoline: Western Region Air Partnership (WRAP) Mobile Source Inventory and EIA AEO2006
 - Other Onroad Fuels: EIA
 - Aviation: jet fuel prime supplier sales volumes in Alaska from EIA
 - Marine Vessels: ADEC commercial marine inventory, Commission for Environmental Cooperation in North America inventory, EIA, EPA's National Emissions Inventory, Waterborne Commerce Statistics Center (Army Corps)
 - Rail and Other: SGIT and fuel consumption from EIA

Transportation Inventory & Forecast

- Projection Methods
 - Onroad Diesel and Gasoline: Total VMT projections from WRAP, distributed to vehicle types by AEO2006 figures, adjusted by AEO2006 fuel efficiency projections.
 - Other Onroad fuels: regional fuel consumption projections from AEO2006 apportioned by population
 - Aviation: FAA aircraft operations forecasts by facility, adjusted by aviation fuel efficiency forecasts from AEO2006
 - Marine Vessels: projected using historical growth factors from ADEC inventory
 - Rail and Other: Historical trends and USDOE regional projections

Transportation Inventory & Forecast

- Key Assumptions
 - Ethanol consumption assumed to remain at the 2002 level. Biodiesel and other biofuels not considered.
 - No growth in rail emissions, consistent with historical pattern
- Key Uncertainties
 - Future year vehicle mix
 - Future biofuel consumption
 - Aviation fuel for international travel
 - Aviation fuel efficiency forecasts
 - Consistency of multiple sources for marine fuels

Identifying Priorities for Analysis

Identifying Priorities for Analysis

- TWG reviews and revises catalog of options (today)
- MAG reviews, amends, and approves catalog (July 15)
- TWG identifies a preliminary set of priority options for further analysis by voting process (via email, weeks of July 28 – August 8)
 - Ballot sent by CCS to TWG members
 - Each TWG member identifies a number of priority options, adds comments as needed (for example, with regard to possible consolidation of policies, rationale for priorities, etc.)
- CCS compiles results for discussion at next TWG call (August 26)

Catalog of State Actions

- See separate catalog documents (catalog and descriptions)
- Updated based on TWG input

Public Input and Announcements

Next TWG Call

- Agenda:
 - Report back from MAG on catalog
 - Discuss approach for choosing priority options for analysis
 - Further review of the emissions inventory and projection if/as needed
- Proposed date/time for Call #3:
 - Thursday, July 24, 2:00 pm – 4:00 pm
- Proposed date/time for Call #4:
 - Tuesday, Aug 26, 2:00 pm – 4:00 pm

