Transportation Planning and Climate Change

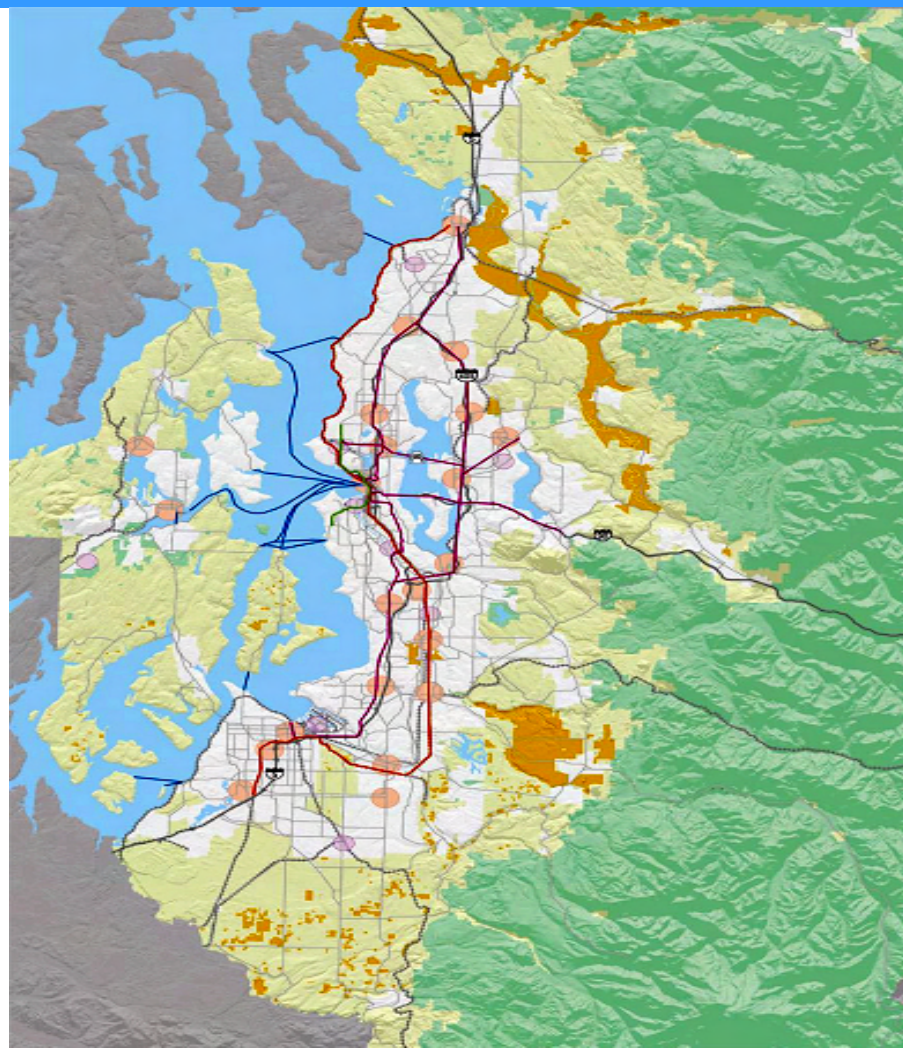
Presentation to the WSDOT Transportation Planning Symposium

November 14, 2007

PSRC Region

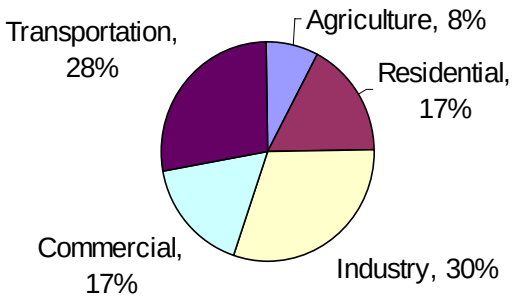
Four Counties – King, Kitsap, Pierce, Snohomish

- Major cities include Seattle, Tacoma, Bellevue, Everett, Bremerton
- Approx. 55% of the state's population
- Located between the Cascade and Olympic mountain ranges, bisected by Puget Sound



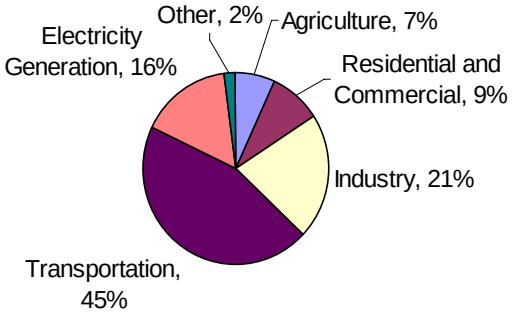
Washington State and Climate Change

US Greenhouse Gas Emissions by Sector, 2004



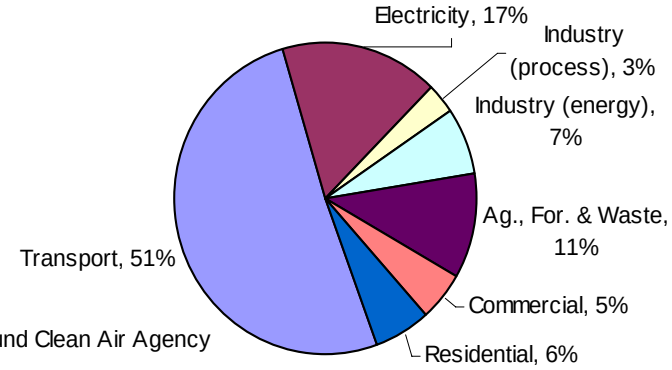
Source: Pew Center on Global Climate Change

Washington State Greenhouse Gas Emissions by Sector, 2004



Source: WA Dept. of Community, Trade and Economic Development

2002 Greenhouse Gas Emissions for the Puget Sound Region



Source: Puget Sound Clean Air Agency

Washington State and Climate Change

Actions:

- SSB 6001 establishes statewide GHG emissions reduction goals, performance standards for baseload electric generation
- HB 1303 directs the state to analyze vehicle electrification, sets goal for all state fleets to run on electricity or biofuel by 2015
- Executive Order 07-02 sets goals to reduce GHG emissions:
  - to 1990 levels by 2020
  - to 25% below 1990 levels by 2035
  - to 50% below 1990 levels by 2050
  - by increasing clean energy sector jobs to 25,000 by 2020
  - by reducing expenditures by 20% on imported fuel

Washington State and Climate Change

Other Actions:

- Washington Clean Car Standards – adoption of California emissions standards beginning with 2009 model year
- Agreement with British Columbia to reduce GHG emissions and collaborate on clean technologies
- Participation in the Western Regional Climate Action Initiative and the Climate Registry
- Washington Climate Challenge – engages business, community, environmental and other groups to develop recommendations for reaching emission reduction goals
- Initiative 937 – large utilities required to meet 15% of their annual load with renewable energy resources by 2020

Local Jurisdictions and Climate Change

King County:

- Global Warming Action Plan – goal to reduce emissions by 80% below current levels by 2050
- Renewable Energy Order – renewable energy and efficiency requirements
- GHG emissions included in State Environmental Policy Act reviews

Local Jurisdictions and Climate Change

Seattle:

- Climate Action Plan – $37 million over the next two years for climate protection actions such as expanded transit service, bicycle/pedestrian facilities, fuel efficient fleets, business parternships and community education
- Participation in US Mayors Climate Protection Agreement
- Seattle Climate Partnership – voluntary agreement among area employers to take action to reduce their own emissions
- City Light Net Zero GHG Emissions Goal

PSRC and Climate Change

Who We Are:

- Metropolitan Planning Organization for the Central Puget Sound Region
  - 89 Member Agencies/Organizations: counties, cities/towns, ports, transit agencies, tribes, Washington State Department of Transportation, Washington State Transportation Commission
  - Transportation, Growth Management, Economic Planning
    - VISION 2020 – regional growth, transportation and economic strategy
    - Destination 2030 – 30-year long-range metropolitan transportation plan
    - Prosperity Partnership – coalition of government, business, labor and community organizations to develop and implement a regional economic strategy

PSRC and Climate Change: VISION 2040

VISION 2020, the regional growth, transportation and economic strategy:

- Update underway to consider anticipated growth to the year 2040: 1.7 million more people, 1.2 million more jobs – VISION 2040
  - Environmental Framework (new)
  - Regional Growth Strategy – focus growth in urban centers and compact communities
  - Multicounty Planning Policies - environment, economy development patterns, transportation and public services

PSRC and Climate Change: VISION 2040

VISION 2040 and Climate Change:

- **Analysis** - CO_2 analysis in EIS/growth alternatives
- **Policies** – Reduce emissions contributing to climate change
  - reduce the rate of energy consumption
  - expand the use of conservation and alternative energy sources
  - increase urban forests
  - reduce the impacts of transportation on air quality and climate change
- **Implementation Actions** – Regional Action Plan

PSRC and Climate Change: VISION 2040

Public Comment Period concluded September 7, 2007

- Approx. 2000 comments received
- Message = strengthen policies related to climate change

VISION 2040 Next Steps:

- Boards approve final policies December 2007
- Final approval of VISION 2040 Spring 2008

PSRC and Climate Change: Destination 2030

Destination 2030, the 30-year long-range metropolitan transportation plan:

- Transportation strategy implementing VISION 2020 and the Regional Economic Strategy
- Now beginning a 2010 update – *Destination 2040?*

Destination 2030 Update and Climate Change:

- **Policy Board direction** – consider climate change in Destination 2030 Update
- **Analysis** – CO_2 analysis will be performed for the EIS /strategy alternatives
  - Climate Change Technical Working Group
- **Policies** – Implementation of VISION 2040 policies
  - Support the regional growth strategy, provide an efficient multimodal transportation system, protect the environment and reduce emissions,

PSRC and Climate Change: Destination 2030

Destination 2030 Update schedule:

- Scoping: November 15, 2007 - January 30, 2008
  - Issues include:
    - Land use
    - Economy
    - Congestion and mobility
    - Equity and special needs transportation
    - Safety and health
    - Security
    - Energy and the environment (with a focus on climate change, air quality, Puget Sound)
    - System preservation
    - Transportation financing
    - Project prioritization
- Alternatives development: Spring 2008
- Analysis: 2008/2009
- Final Approval: 2010

PSRC and Climate Change: Destination 2030

Technical Issues:

- Current tools (MOBILE6.2) = simplistic analyses, only VMT-based
- Future analyses:
  - Ability to analyze for speed variations, changes in vehicle/fuel mix, corridor/subarea analyses, analysis of transportation and land use strategies (e.g. pricing)
  - PSRC, regional partners working with EPA and FHWA on model improvements – travel demand and emissions models

Policy Issues:

- Destination 2030 update will also need to consider and address the impacts of climate change *to* the transportation system (adaptation):
  - Accelerated pavement deterioration
  - Flooded roadways
  - Bridge damage
  - Increased maintenance
  - Increased stormwater, drainage issues

Conclusion

- Strong state, regional, local actions related to climate change
- Board direction to address in PSRC planning activities
- Stakeholders involved in PSRC Boards, Committees, Technical Working Groups include:
  - State, regional, local government agencies
  - Business, tribal, environmental organizations
- Public participation throughout
- Technical needs being addressed - collaboration with air quality consultation partner agencies and member agencies key

Contacts and Information

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