Integrating GHG Reduction in Policy and Planning in Oregon

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Oregon is Building Its Four-legged Stool

**Vehicle Efficiency**
- Truck Efficiency and Idling
- Electric Vehicles

**Low Carbon Fuels**
- HB 2186 - Oregon’s Low Carbon Fuel Standard
- Oregon DOE Incentives

**System Efficiencies**
- Congestion Pricing Pilot
- PAYD insurance Pilot
- Road User Fee study

**VMT Reduction**
- STIP Criteria
- Least Cost Planning
- SB 1059 Planning for GHG reductions from transportation sector
## Oregon Transportation and GHG Legislation from 2009 and 2010 Sessions

### HB 2001
- Least Cost Planning
- STIP Criteria Revision
- VMT Reduction Goals for Portland and Eugene/Springfield
- *Practical Design*

### HB 2186
- Truck Efficiency and Idling*
- Low Carbon Fuel Standard*
- Greenhouse Gas Metropolitan Organization Planning

*Oregon DEQ is the lead*

### SB 1059
- State-level Strategy to reduce GHG emissions from transportation
- Toolkit
- MPO Scenario Planning
- Outreach and Education
- GHG reduction goals for MPO
Least Cost Planning

“A process of comparing direct and indirect costs of demand and supply options to meet transportation goals and/or policies to identify the most cost-effective mix of options”

- HB 2001, Sec. 6 (2009)
STIP Selection Criteria

- Improve travel times
- Enhance safety
- Increase operational reliability
- Must be consistent with State’s GHG reduction goals
SB 1059 - Greenhouse Gas Reduction

- **State-level strategy** to reduce greenhouse gases from transportation
- **Toolkit** to assist local governments and MPOs
- Guidelines for *scenario planning* for MPOs
- Conduct outreach and *education* to the public
- DLCD to develop **GHG reduction targets** for MPOs
Oregon SB 1059

Who?
- Leads - ODOT and DCLD
- Consultation - ODEQ and ODOE
- Cooperation - MPOs and local governments

When?
- Strategy is for 2050
- Report to legislature and rulemaking in 2011

Scope?
- The strategy includes all modes and all travel
- However, the GHG goals are only for light-duty vehicles within MPO boundaries
Decision-Making Process: We’re in this together

Collaborative efforts with metropolitan areas, local governments and stakeholders

- **Statewide Strategy Advisory Committee** (ODOT)
  - Final: Oregon Transportation Commission
- **Target Rulemaking Advisory Committee** (DLCD)
  - Rulemaking: Land Conservation and Development Commission
- **Technical Advisory Committee** (ODOT and DLCD)
  - Modeling subcommittee for GreenSTEP (interagency)
- **Outreach and Public Education**
We are not starting from scratch

- **Long-term Plans and Goals**
  - **Oregon Transportation Plan: Goal 4** “To provide a transportation system that meets present needs without compromising the ability of future generations to meet their needs from the **joint perspective of environmental, economic and community objectives.**”

- **Integrated Land Use and Transportation Planning and Modeling**

- **Greenhouse Gas Emissions Policies and the Oregon Global Warming Commission**
GreenSTEP = Greenhouse gas State Transportation Emissions Planning Model

- Developed by the Oregon Department of Transportation

- GreenSTEP will be used to support the development of Oregon’s statewide strategy for reducing GHG emissions from the transportation sector

- FHWA is funding tests for deploying GreenSTEP in another state and a metropolitan area
Many factors affect GHG emissions from the transportation sector
GreenSTEP Policy Sensitivity

- Demographic and income changes
- Relative amounts of development occurring in urban and rural areas
- Metropolitan and other urban area densities
- Urban form
- Amounts of metropolitan area public transit service
- Highway capacity
- Vehicle proportions: autos, light trucks, EVs, plug-in HEVs, lightweight EVs
- Vehicle ages
- Vehicle fuel efficiency
- Pricing of fuel, carbon, VMT, parking
- TDM and eco-driving
- Effects of congestion on fuel economy
- Lifecycle carbon content of fuels
- CO2 production from electrical power use for transportation
Preliminary Testing of Land Use and Public Transportation Policies

CO2e Targets

Year

1990 2000 2010 2020 2030 2040

Pounds CO2 Equivalents

Med Lt Veh Eff
Med Lt Veh Eff & More Den
Med Lt Veh Eff, More Den & More PT
Preliminary Testing Vehicle Efficiency and Lower Carbon Fuels

- Med Lt Veh Eff
- High Lt Veh Eff
- EV & High Lt Veh Eff
- EV & High All Veh Eff
- EV & High All Veh Eff & Low Carb Fuel
SB 1059 Policy Issues

• Allocation of Statewide GHG emissions
  - What is transportation’s current share now, and what is it in the future (2035?)
  - What is its “fair share”?

• Difference between MPOs
  - Jurisdiction
  - Resources

• Freight and intra-state travel
  - What portion should be allocated?
Questions?

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