

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)





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FINAL STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM 2005-2011

S T I P



- Improve travel times
- Enhance safety

STIP Selection Criteria

- 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



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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



Preliminary Testing Vehicle Efficiency and Lower Carbon Fuels





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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