Driving down GHG from Transportation: Assessing Efforts in Four States

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NITC #789 Assessing State Efforts to Integrate Transportation, Land Use and Climate.
Research Questions

- **Policy Framework:** What is the framework for reducing GHGs from the transportation sector via transportation and land use strategies?

2. **Assessment:** What are strengths and weaknesses of the transportation-land use-climate policy framework at the state level? What are the obstacles to achieving GHG reduction goals?

3. **Knowledge Transfer:** What approaches are working well in the four case study states and what can they learn from each other? What can other states learn?
Conceptual Framework

Climate
- mitigation
- transportation sector (VMT)

Transportation
- options (modes)
- cost of driving

Land Use
- development patterns
GHG Reduction Targets

Other

Transportation

VMT (Transportation & Land Use)

Fuel Content

Vehicle Efficiency

Transportation Strategies

Pricing Strategies

Land Use Strategies

“3 legged stool”
## Statewide GHG Goals

<table>
<thead>
<tr>
<th>State</th>
<th>Goals</th>
<th>Key Legislation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon</td>
<td>By 2020, 10% below 1990 Levels. By 2050, 75% below 1990 Levels.</td>
<td>2007: HB 3543- Global Warming Actions</td>
</tr>
</tbody>
</table>
California

- **Climate**
  - SB 375: Regional per-capita targets, MPOs develop Sustainable Communities Strategies (SCSs), voluntary local implementation

- **Transportation**
  - CalTrans updating CTP 2040
  - Regional RTPs integrating SCSs

- **Land Use**
  - Local general plans (no state level growth management program)
  - Relax CEQA to support infill (LOS to VMT in CEQA – SB743)

- **Nexus**
  - Coordinated regional level transportation planning to reduce GHGs (SCS)
Maryland

- Climate:
  - GHG Reduction Act Plan of 2013: state level multi-sector and multi-agency plan

- Transportation
  - Maryland Transportation Plan 2035 (updated in 2014);
  - Annual: Consolidated Transportation Program, Attainment Report

- Land Use
  - Required local comprehensive plans addressing key elements and visions
  - Smart Growth: Priority Funding Areas
  - PlanMaryland (2011)

- Nexus
  - All 3 plans updated recently: cross-referencing and mention of integration
Oregon

- Climate
  - Statewide Transportation Strategy - all modes statewide
  - Metropolitan targets (% per capita) & scenario planning - GHG from light duty vehicles only

- Transportation
  - Oregon Transportation Plan + modal plans
  - Goal 12: Transportation
  - Statewide Transportation Improvement Program

- Land Use
  - UGBs; 19 Statewide Goals; required local plans

- Nexus
  - Oregon Transportation and Growth Management Program (ODOT/DLCD)
  - Statewide Transportation Strategy / OSTI
Washington

- Climate
  - HB 2815: GHG and VMT Per Capita Targets
    - EO 09-05: Delegate to regional level (Regional Transportation Planning Organizations)
- Transportation
  - Statutory VMT Target
- Land Use
  - Growth Management Act – 14 goals; required Urban Growth Areas in some cities
  - County Wide Planning Policy (CWPP)
- Nexus
  - Local plans consistent with regional transportation plans
  - SB 6580: linking Growth Management Act to GHG targets and policies
Synthesis

Goals


Source: U.S. EPA Greenhouse Gas Inventory Report

2035 GHG targets for Oregon metropolitan areas per capita light vehicle GHG emissions reduction

<table>
<thead>
<tr>
<th>Metropolitan area</th>
<th>Adopted target $^1$</th>
</tr>
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<tbody>
<tr>
<td>Portland Metro</td>
<td>20%</td>
</tr>
<tr>
<td>Salem-Keizer</td>
<td>17%</td>
</tr>
<tr>
<td>Corvallis</td>
<td>21%</td>
</tr>
<tr>
<td>Eugene-Springfield</td>
<td>20%</td>
</tr>
<tr>
<td>Bend</td>
<td>18%</td>
</tr>
<tr>
<td>Rogue Valley</td>
<td>19%</td>
</tr>
</tbody>
</table>

$^1$ Adopted by the Land Conservation and Development Commission in May 2011
$^2$ Required scenario planning and adoption
$^3$ Required scenario planning
Synthesis

Vertical
Synthesis

Horizontal

MDE

Maryland Department of Transportation

MDP

California Strategic Growth Council
Synthesis of Monitoring ClimatePlan: Addressing the Land Use Decisions that Shape Our Climate and Our Lives
Preliminary Findings: Process

Environmental groups important in pushing legislation
Preliminary Findings: Process

Source: Tescher, Mintier, Hammond

Strategies...

- Important to allow flexibility within regions
Preliminary Findings: Process

- Heavy reliance on models, assumptions and scenario planning

Source:
http://www.oregon.gov/ODOT/TD/OSTI/Pages/scenario_planning.aspx
Preliminary Findings: Process

Three approaches evaluated in 2013

**SCENARIO A**
Recent Trends
This scenario shows the results of implementing adopted land use and transportation plans to the extent possible with existing revenue.

**SCENARIO B**
Adopted Plans
This scenario shows the results of successfully implementing adopted plans and achieving the current Regional Transportation Plan which relies on increased revenue.

**SCENARIO C**
New Plans and Policies
This scenario shows the results of pursuing new policies, more investment and new revenue sources to more fully achieve adopted and emerging plans.

- Heavy reliance on models, assumptions and scenario planning

Source: Portland Metro
Preliminary Findings: Process

- Need a statutorily created agency with oversight, authority and budget
Preliminary Findings: Process

Silos hamper implementation
Preliminary Findings: Process

- Framing outcomes as co-benefits important to gaining public support
Preliminary Findings & Recommendations: Implementation

- Weak integration of land use plans and transportation plans (and funding decisions)
Preliminary Findings & Recommendations: Implementation

Lack of funding and incentives for planning at regional and local level
Preliminary Findings & Recommendations: Implementation

Lack of funding for transit and redevelopment
Preliminary Findings & Recommendations: Implementation

• Who holds states and regions accountable to targets?
Key Takeaways

• Initial legislation setting goals and requiring plans is a starting place
• But sustained leadership and momentum is essential
• Plans and scenarios will not be realized without adequate funding and a reorientation of transportation spending
• And selling co-benefits is important to gaining broad citizen support