Reducing Greenhouse Gas Emissions from Transportation: Lessons from West Coast States (California, Oregon and Washington), especially by reducing light duty vehicle travel.

**RESEARCH QUESTION**

What are the best practices for reducing greenhouse gas emissions (GHGs) from transportation in West Coast States (California, Oregon and Washington), especially by reducing light duty vehicle travel?

**CONTEST**

Transportation in West Coast States (California, Oregon and Washington), especially by light-duty vehicles (LDVs) is a significant source of greenhouse gas (GHG) emissions.

**Prior research on statutory mandates for reducing GHG from transportation is limited. Scholars have examined climate action plans (3), climate change in state transportation plans (4) and the determination of GHG reduction targets (5).**

**Nationally, roughly one third of all GHGs come from the transportation sector. GHGs from motor vehicles are determined by the “three legged stool” of vehicle efficiency, fuel content and VMT. See Figure 1.**

**Transportation, land use and climate plans; Metropolitan Planning Organizations (MPOs) have strategies to set targets and plans;**

**Each state has adopted reduction targets for vehicles but the choices vary across states. See Tables 1 & 2.**

**STATE REDUCTION TARGETS**

<table>
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<th>Sectors</th>
<th>Targets</th>
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<tbody>
<tr>
<td>Transportation</td>
<td>GHG Reduction Targets for Vehicles (6)</td>
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**SYNTHESIS**

**Policy Implications**

- **State Level**
  - Require GHG targets (OR & WA) or 5% reduction in GHG (CA)
  - Complete Transportation Strategies &1 real plans
  - Use modeling to set targets to be consistent with statewide GHG goals

- **Transportation Strategies**
  - Vehicle Efficiency
  - Fuel Content
  - Voluntary/mandatory

- **Pricing Strategies**
  - Cap and trade
  - Fuel efficiency
  - Voluntary actions

- **Land Use Strategies**
  - Complete Transportation Strategies &1 real plans
  - Use modeling to set targets to be consistent with statewide GHG goals

**State Approaches**

- **California**
  - Complete Transportation Strategies &1 real plans
  - Use modeling to set targets to be consistent with statewide GHG goals

- **Oregon**
  - Use modeling to set targets to be consistent with statewide GHG goals

**Simulation Framework**

- **Sectors**
  - GHG Reduction Targets

- **Targets**
  - GHG Reduction Targets for Vehicles (6)

- **Context**
  - Transportation in West Coast States (California, Oregon and Washington), especially by light-duty vehicles (LDVs)

**STATE APPROACHES**

Each state has adopted reduction targets for vehicles but the choices vary across states. See Tables 1 & 2.

**Perspective**

- **Funding and Approval**
  - Local & State Authority over land use
  - Federal funding authority

- **Implementation**
  - Cap and trade funds for transit (CA) and investing in mass transit (WA)

- **Lessons learned**
  - State growth management key strength in reaching goals (OR and WA); key weakness in CA

**DISCUSSION**

**Policy research and interviews in California, Oregon and Washington provide important lessons for West Coast states and other regions. Strategies and lessons learned are summarized in Table 2.**

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