

Driving down GHG from Transportation: Assessing Efforts in Four States



Next Generation Transportation for a
Sustainable Future Summit

May 29, 2015

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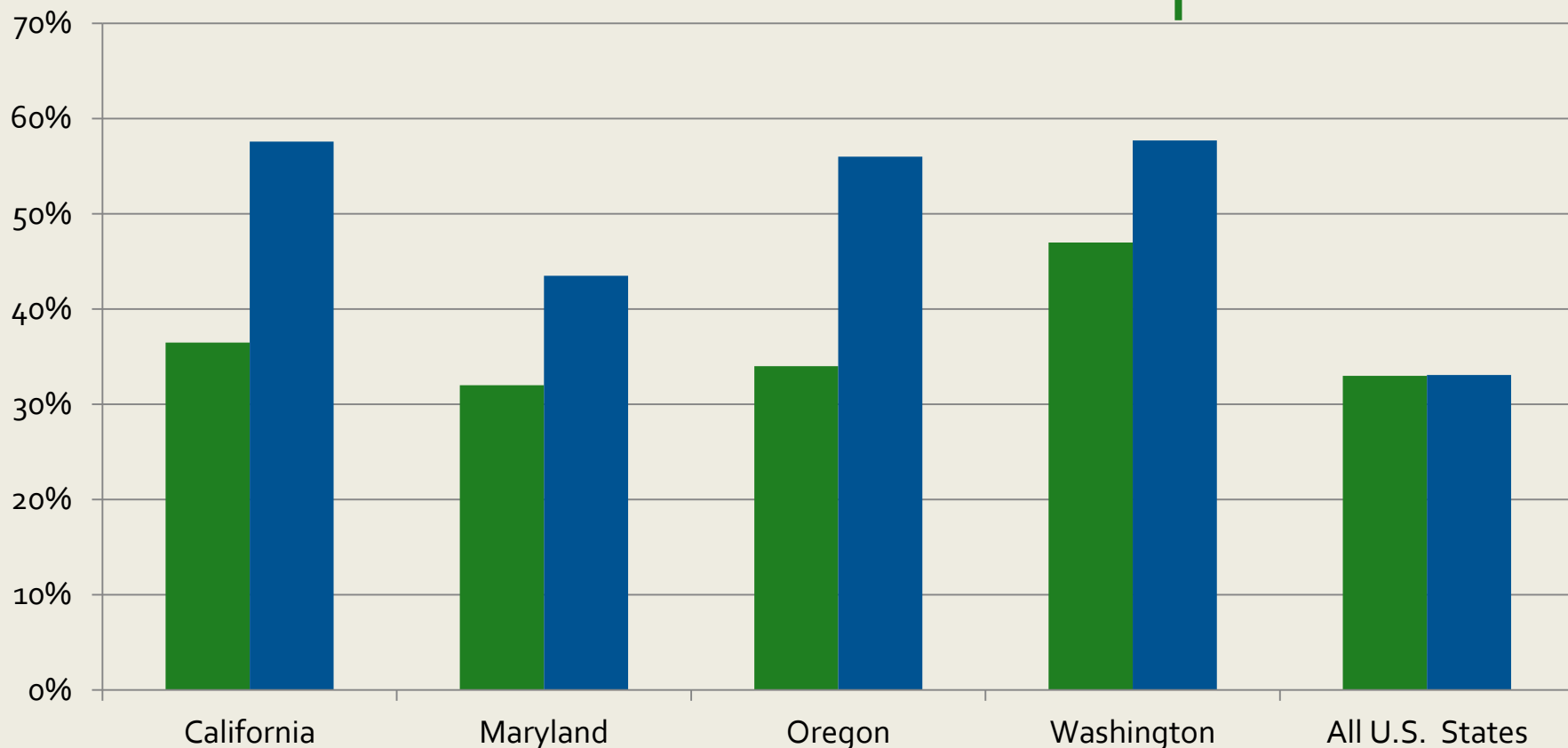
Outline

- Project Background
- Conceptual Framework
- State approaches to climate, transportation, land use in case study states
 - California, Maryland, Oregon, Washington
- Synthesis
- Preliminary Findings and Recommendations

Research Questions & Objectives

- 1. 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?

Share of Emissions from Transportation

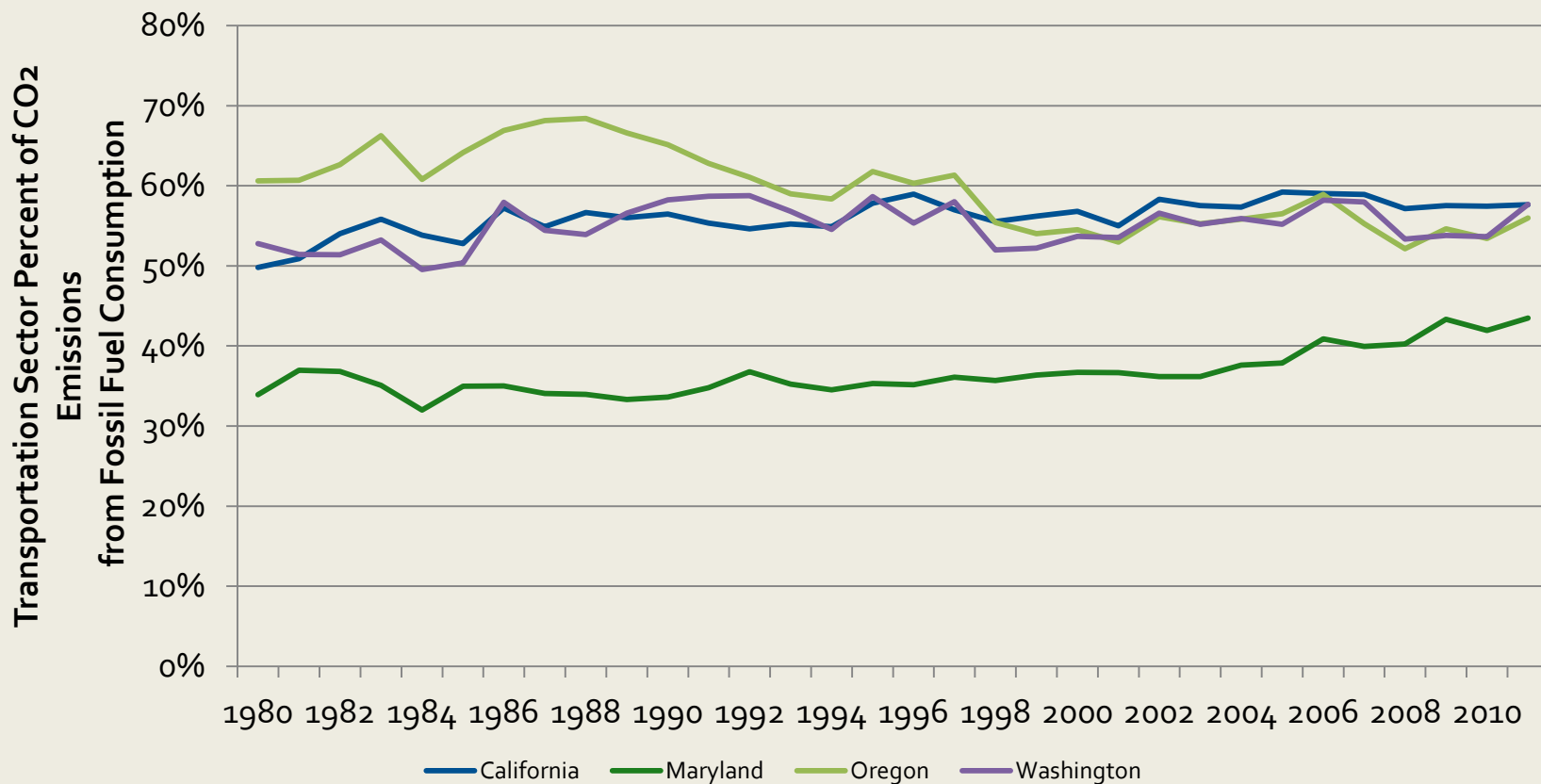


■ Transportation: Share of Total Emissions (Source: State Level GHG Inventories, 2006-2009)

■ Transportation: Share of Carbon Dioxide Emissions from Fossil Fuel Consumption (Source: U.S. Energy Information Administration, 2011)



Carbon Dioxide Emissions from Fossil Fuel Consumption (1980 - 2011)

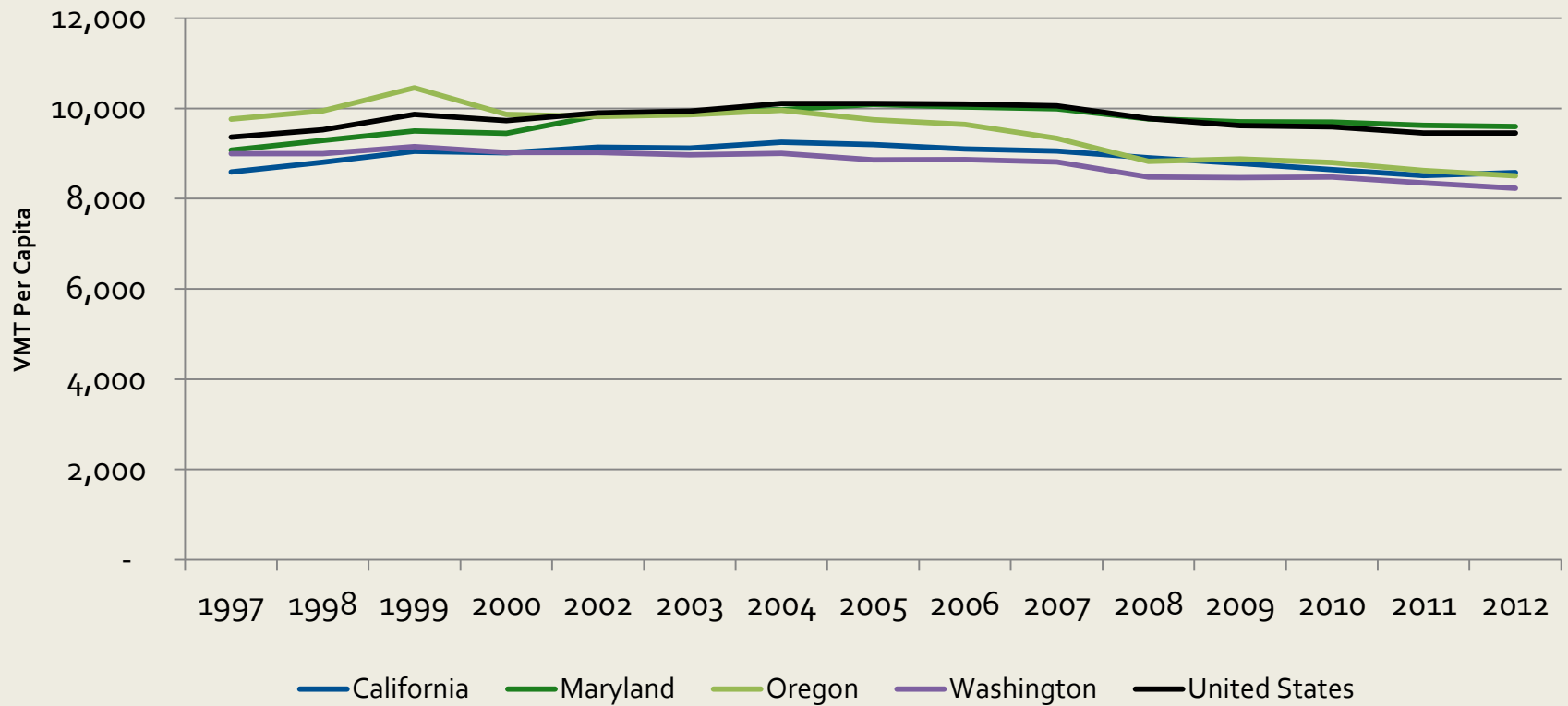


Source: "State CO₂ Emissions," Energy Information Administration, 2011.

http://www.eia.gov/environment/emissions/state/state_emissions.cfm



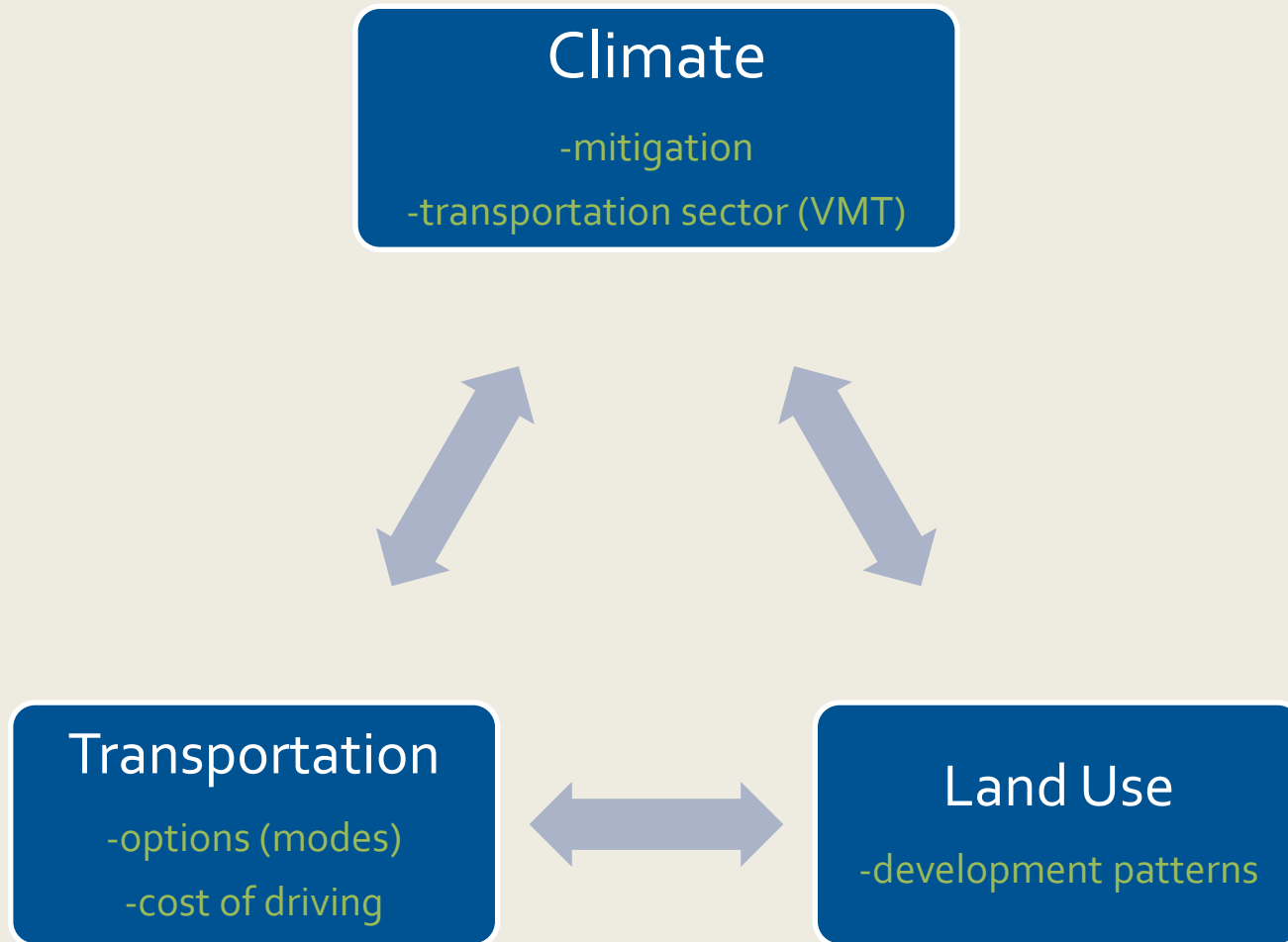
Vehicle Miles Traveled Per Capita, 1997-2012



Source: "Highway Statistics Series." *Office of Highway Policy Information (OHPI)*. Federal Highway Administration. <https://www.fhwa.dot.gov/policyinformation/statistics.cfm>



Conceptual Framework

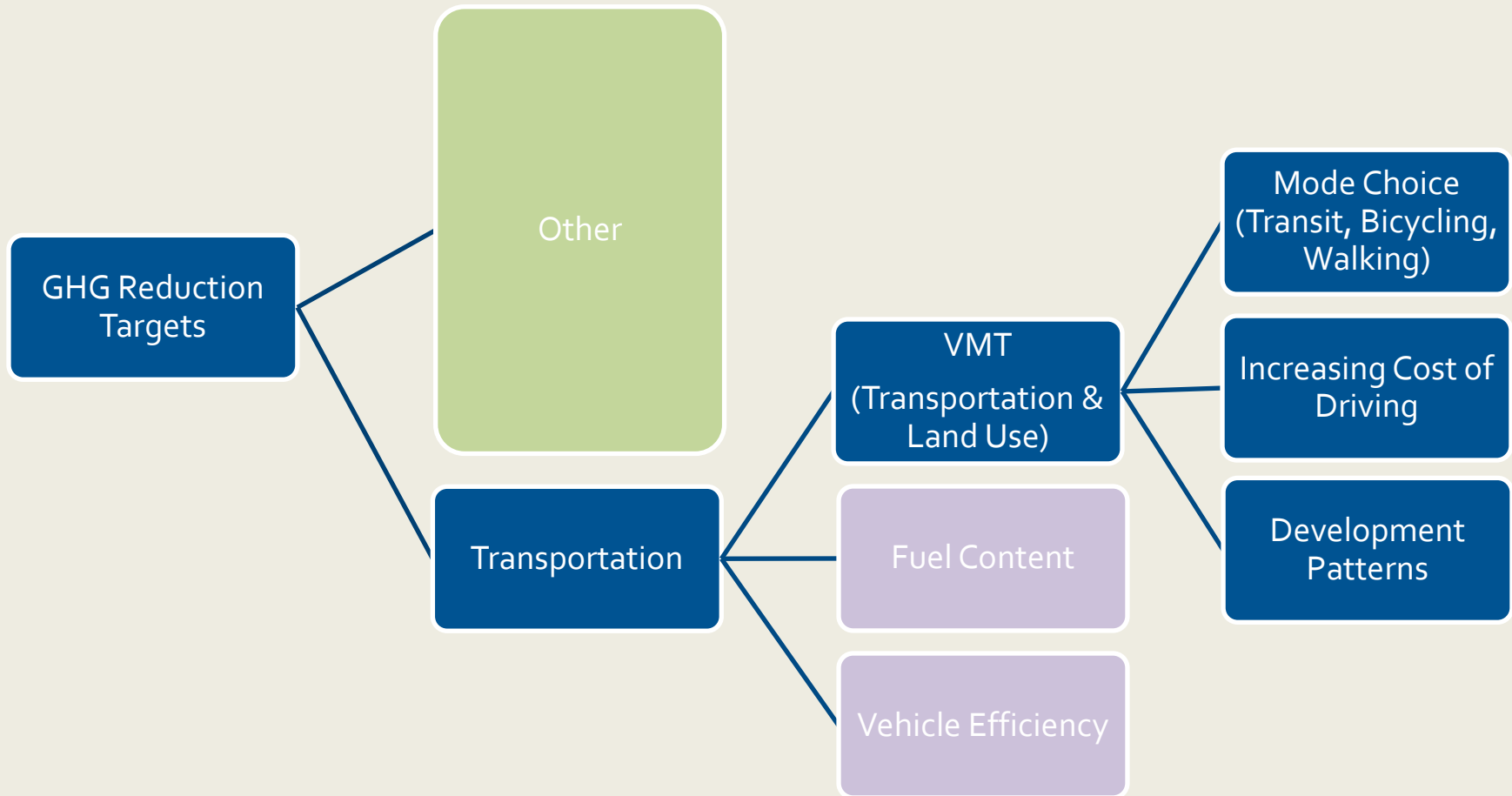


Targets

Sectors

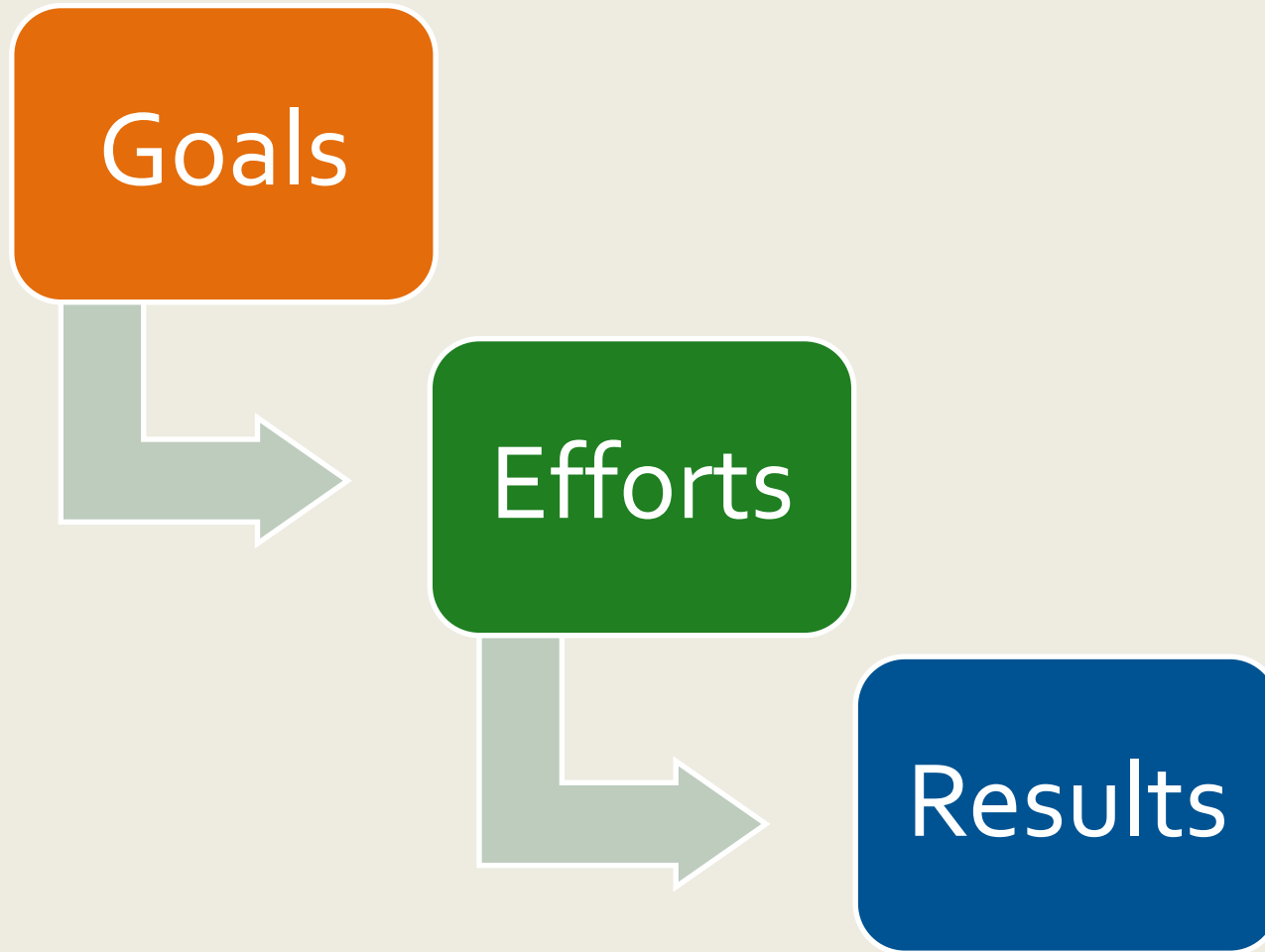
Components

Strategies



“3 legged stool”

Conceptual Framework



Goals: Statutory GHG Targets

State	Targets	Key Legislation
California	By 2020, 1990 levels. By 2050, 80% below 1990 levels. (E.O.)	2006: AB32-California Global Warming Solutions Act
Maryland	By 2020, 25% below 2006 levels; By 2050, 90% below 2006 levels.	2009: SB 278/HB 315: Greenhouse Gas Reductions Act of 2009
Oregon	By 2020, 10% below 1990 Levels. By 2050, 75% below 1990 Levels.	2007: HB 3543- Global Warming Actions
Washington	By 2020, 1990 levels. By 2035, 25% below 1990 levels. By 2050, 50% below 1990 levels.	2008: HB 2815: Climate Action and Green Jobs Act





California

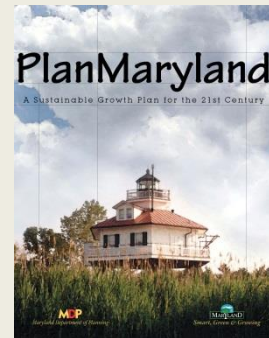
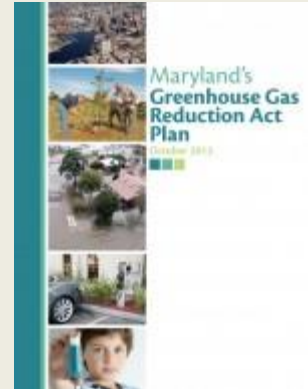
- Climate
 - SB 375: Regional per-capita targets, MPOs develop Sustainable Communities Strategies (SCSs), voluntary local implementation
- Transportation
 - CalTrans updating CTP 2040
 - Regional RTPs integrating SCSs
- Land Use
 - Local general plans (no state level growth management program)
 - Relax 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





Washington

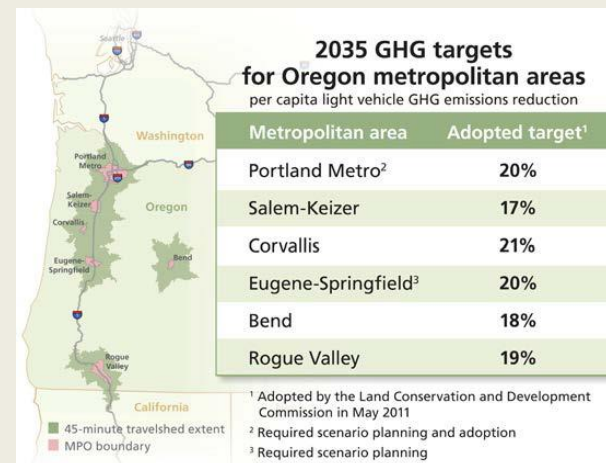
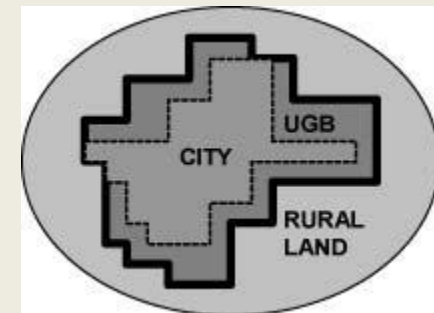
- Climate
 - HB 2815: GHG and VMT Per Capita Targets
 - EO 09-05: Delegate to regional level (Regional Transportation Planning Organizations)
- Transportation
 - Washington Transportation Plan 2030 (2010)
 - Statutory VMT Target
- Land Use
 - Growth Management Act – 14 goals; required Urban Growth Areas 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





Oregon

- Climate
 - HB 2001 (2009) & SB 1059 (2010)
 - 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

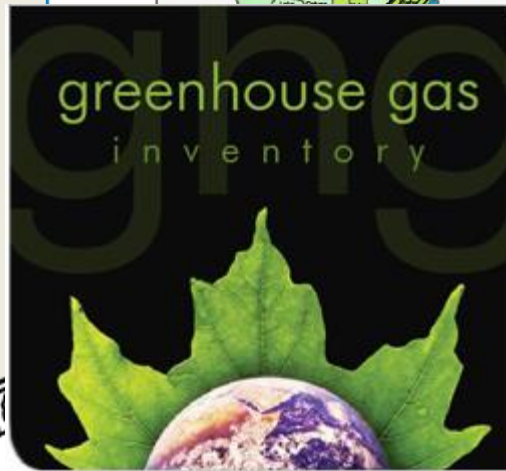


Synthesis

Monticortag
Climate Plan

Climate Plan

Addressing the Land Use Decisions that Shape Our Climate and Our Lives



Preliminary Findings: Process



MD

Oregon

Source: Portland Metro

TRANSFORM

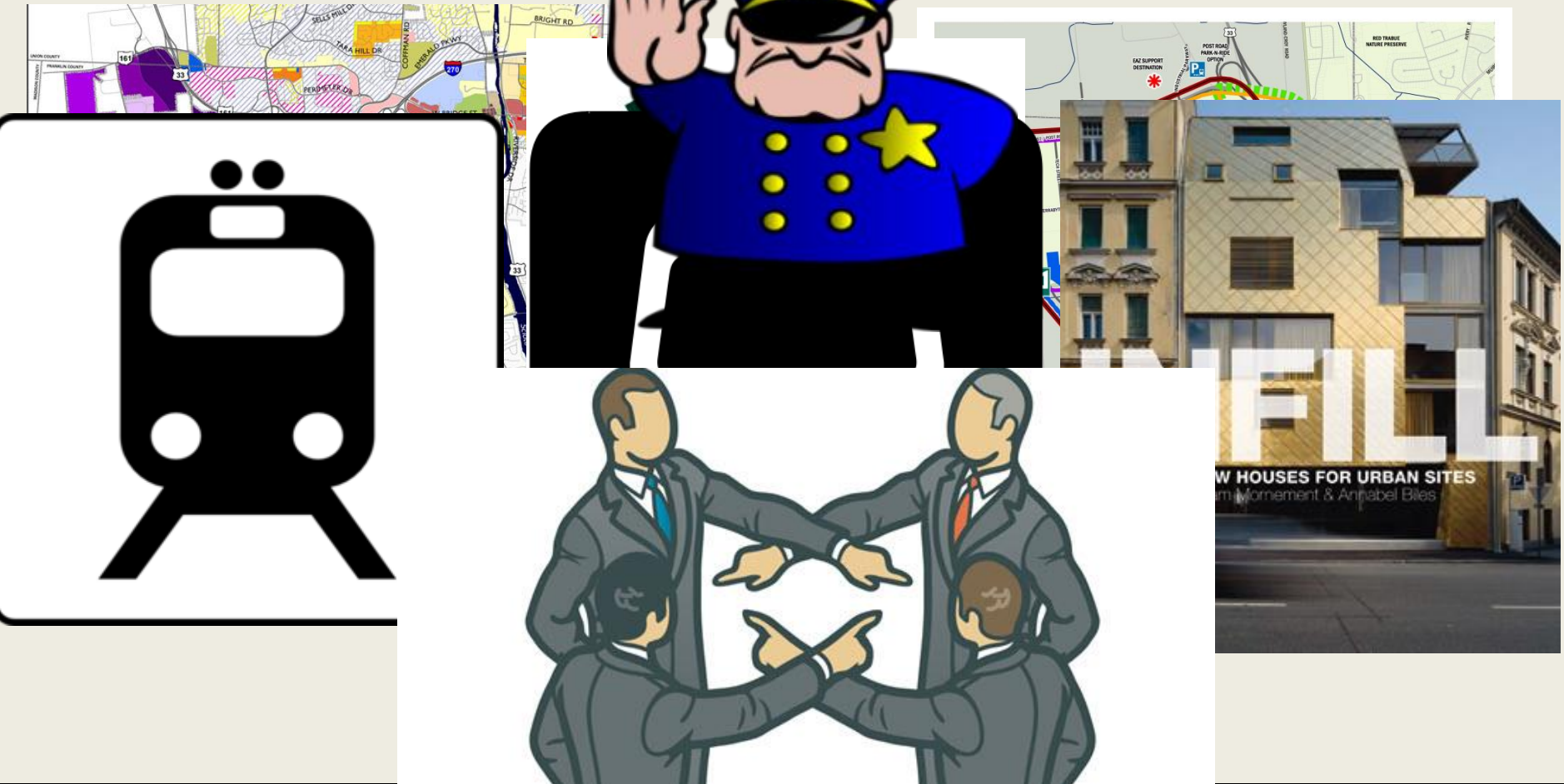
Portland Metro



SCENARIO



Preliminary Findings & Recommendations: Implementation



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

Next Steps

- Completing interviews
- Synthesizing information
- Publishing policy briefs and academic publications
- Next project:
 - Effectiveness of Transportation Funding for Achieving Livability Goals (proposed)

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