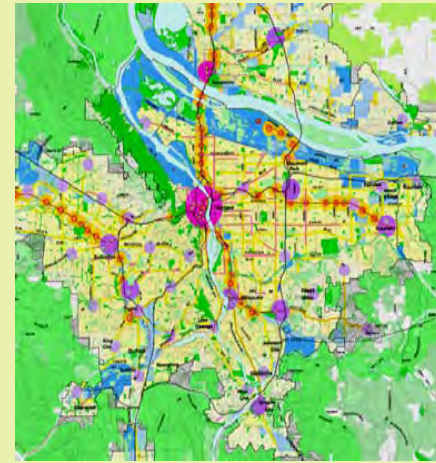


Transportation, Land Use & Climate Change

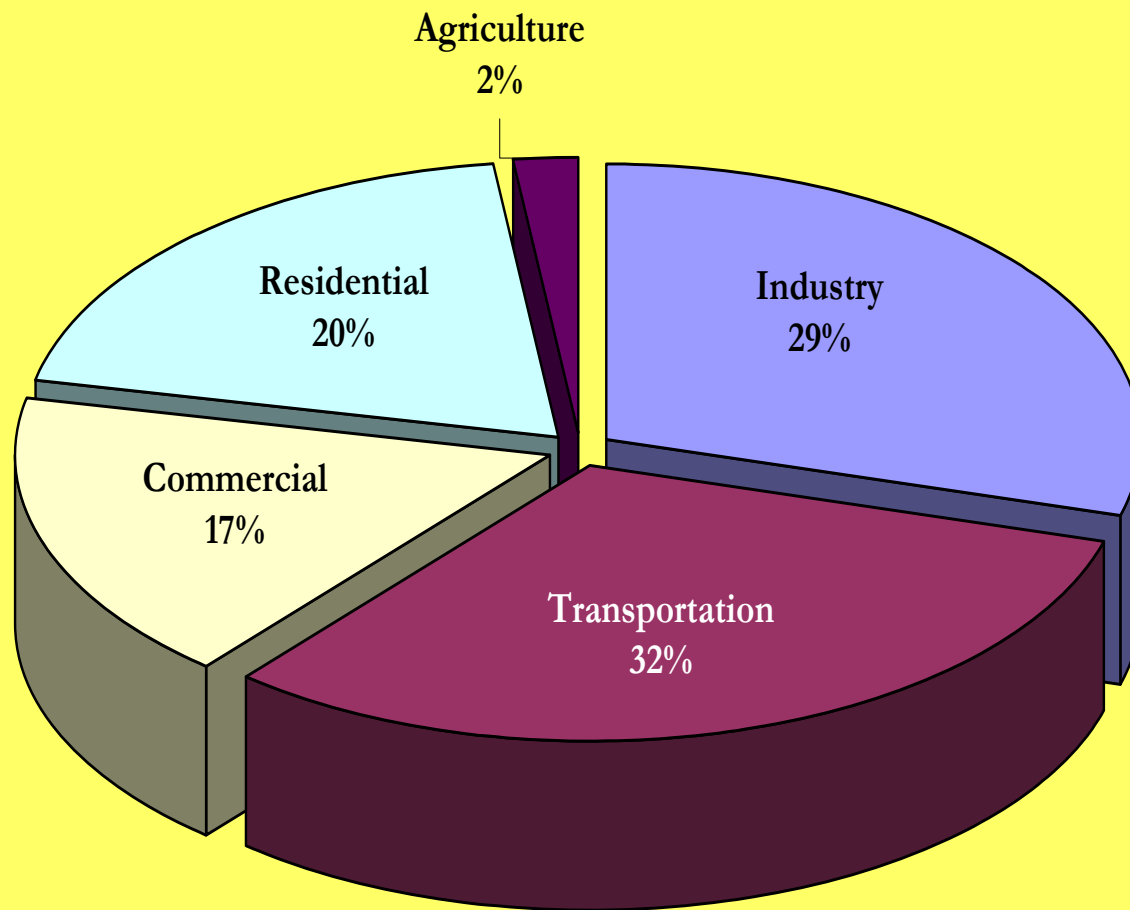


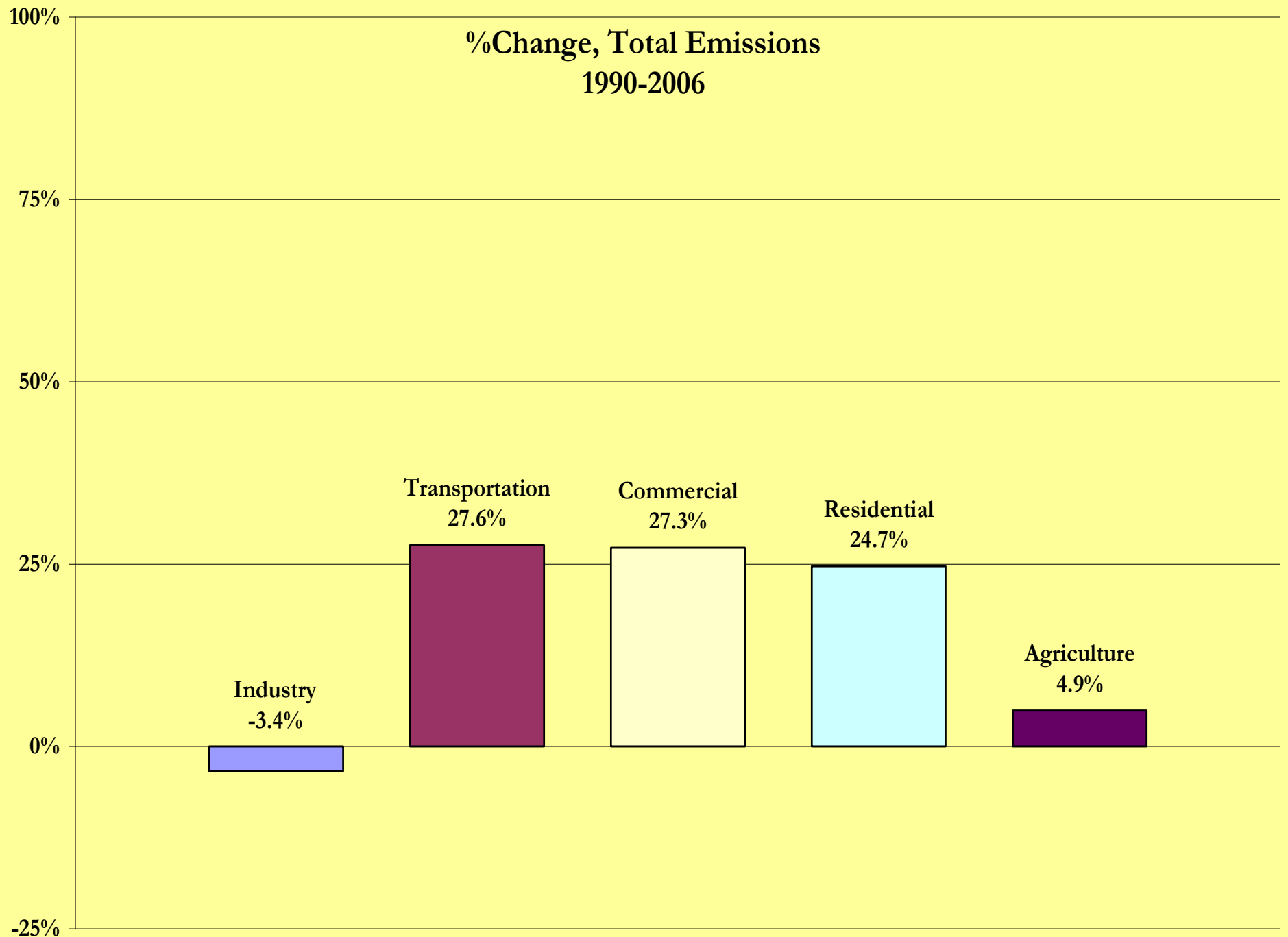
Gail Achterman

Chair, Oregon Transportation Commission
& Director, Institute for Natural Resources,
Oregon State University

(with information provided by Metro Councilors Robert Liberty and Rex Burkholder and
the Oregon Department of Transportation)

CO₂ Emissions by Sector 2006





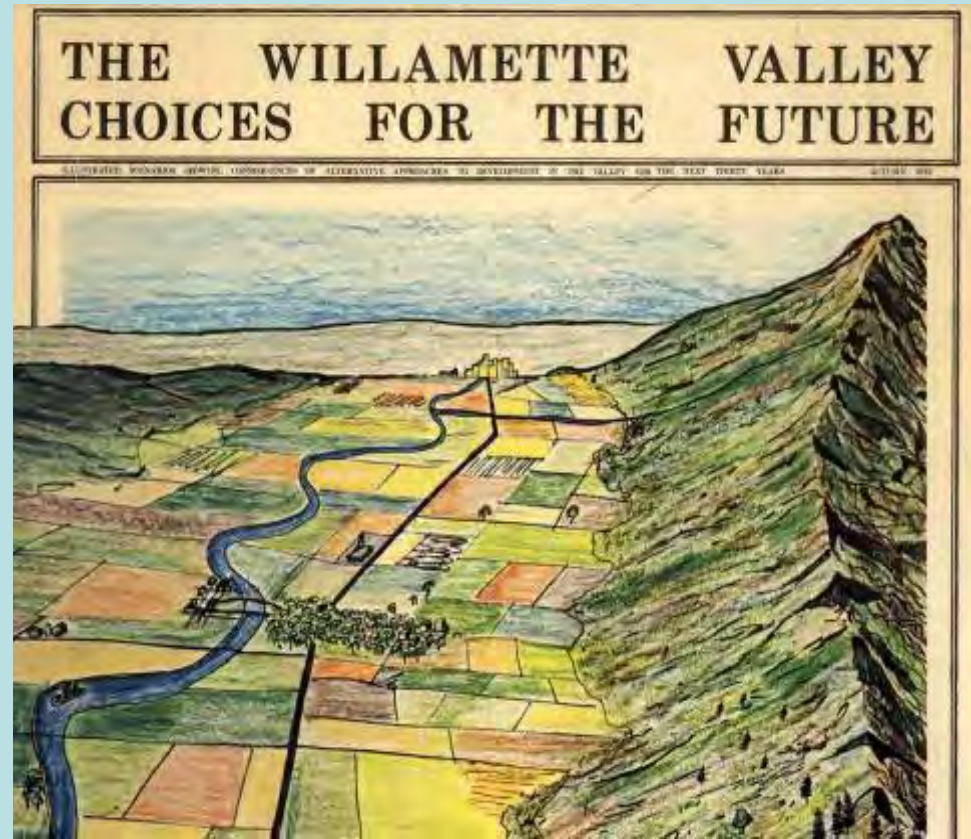
Source: EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2006*, Table 2-14

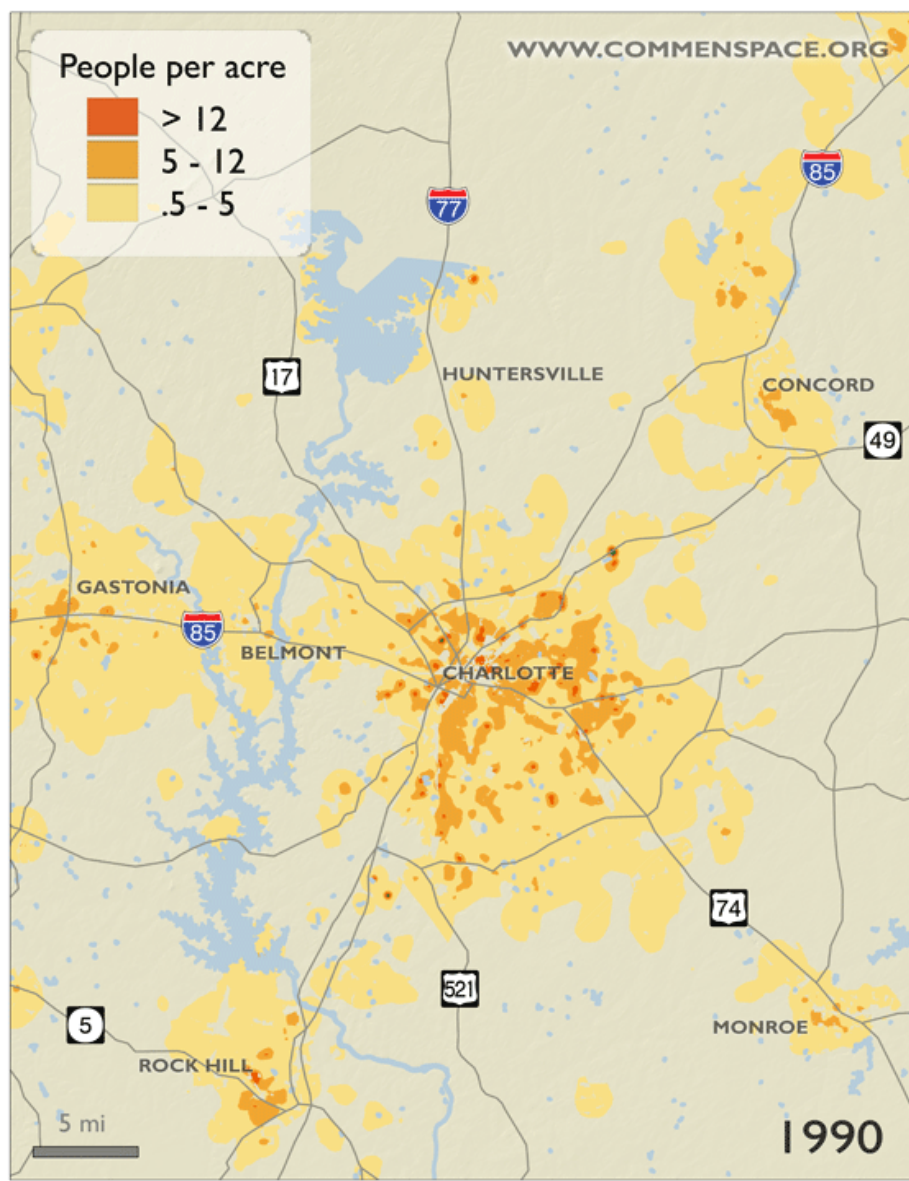
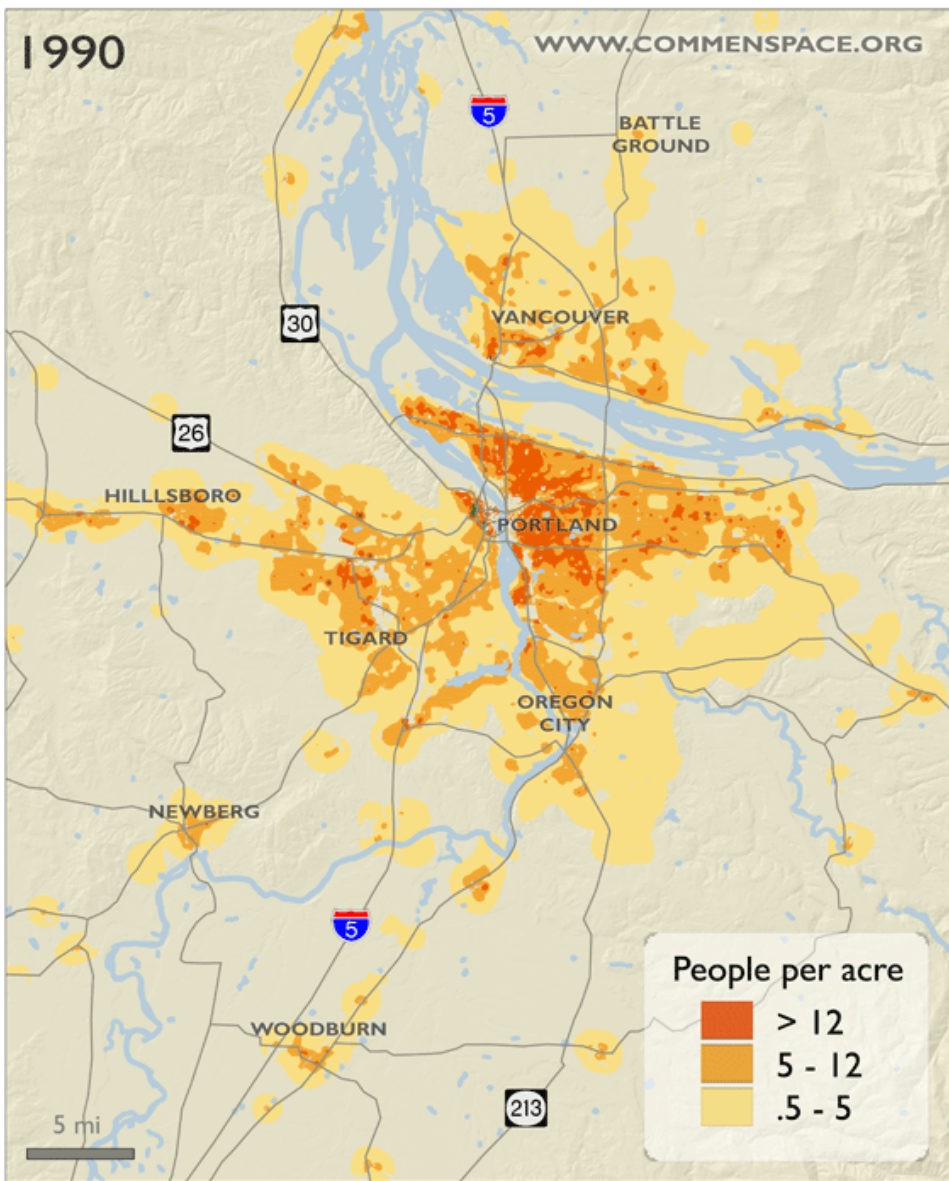
Key Strategies

1. Use Low-Carbon Fuels
2. Use Cleaner and More Efficient Vehicles
3. Reduce Vehicle Miles Traveled/Switch Modes
4. Optimize System Operations/ Reduce Congestion



For 35 years Oregon's state land use laws have expressly and implicitly addressed VMT growth.







Oregon Statewide Land Use Planning Goal 12

To provide and encourage a safe,
convenient, and economical transportation
system.

Transportation Planning Rule

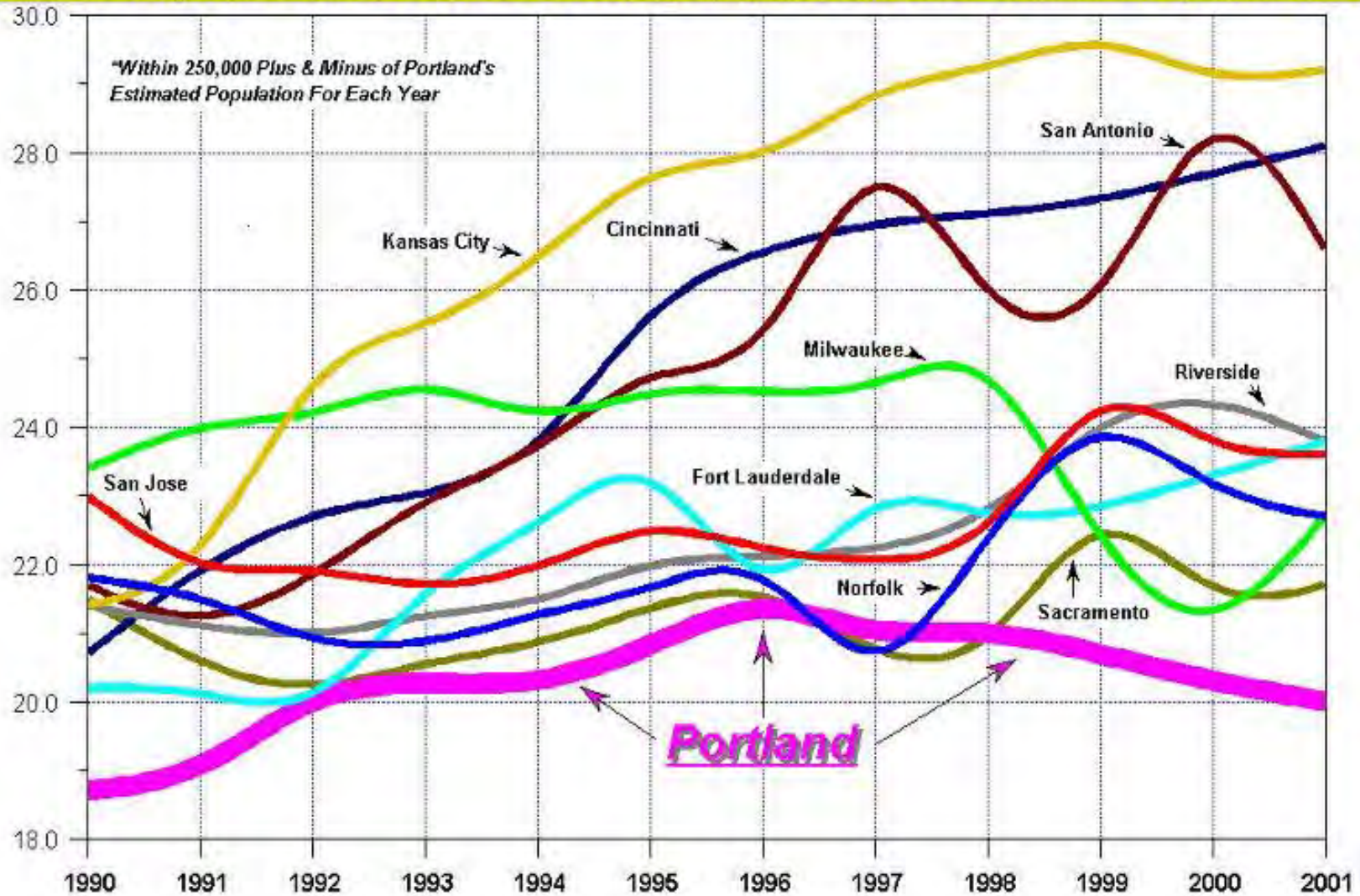
Increase funding for other options – light rail, buses, streetcars, commuter rail, walking, bikes.

Reform land uses to work better with transit – types, locations and intensity of uses & connectivity.

Adopt multi-pronged approach to congestion.

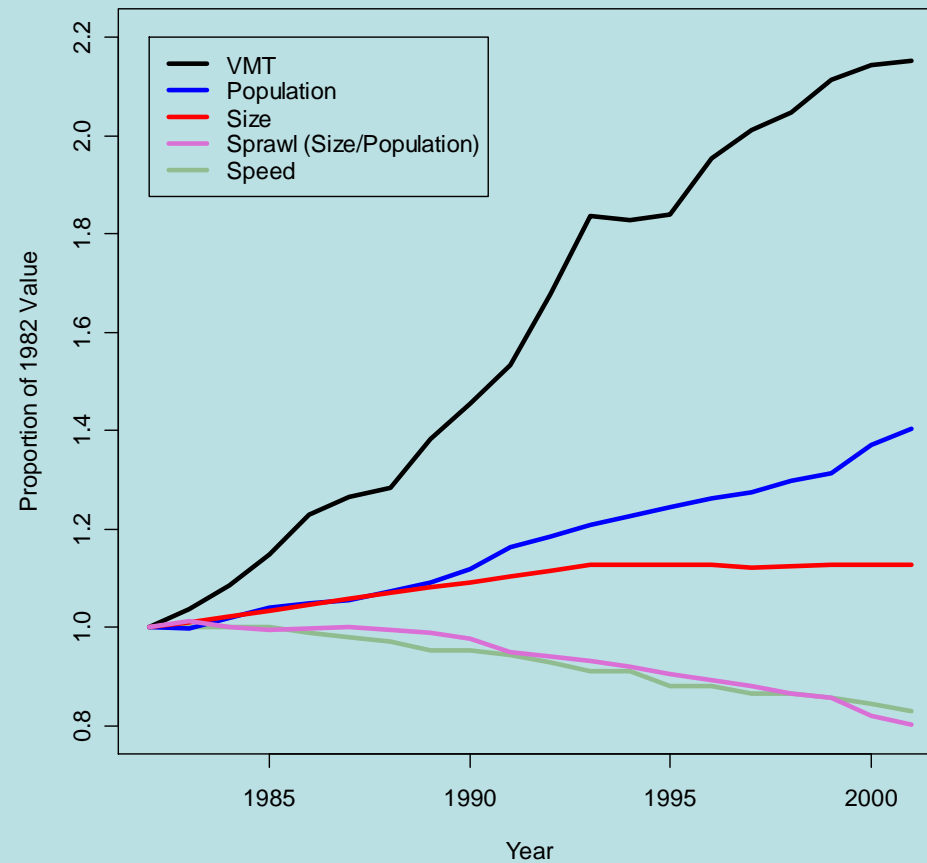



Portland Daily Vehicle Miles Traveled Per Person, Compared With Cities Of Similar* Population Size



Something more than sprawl has affected VMT growth

Travel and Land Use Trends in the Portland Area
1982 - 2002





Drive less. Save more.

We're Committed To One Less Trip A Week.

Exp. Auto Store

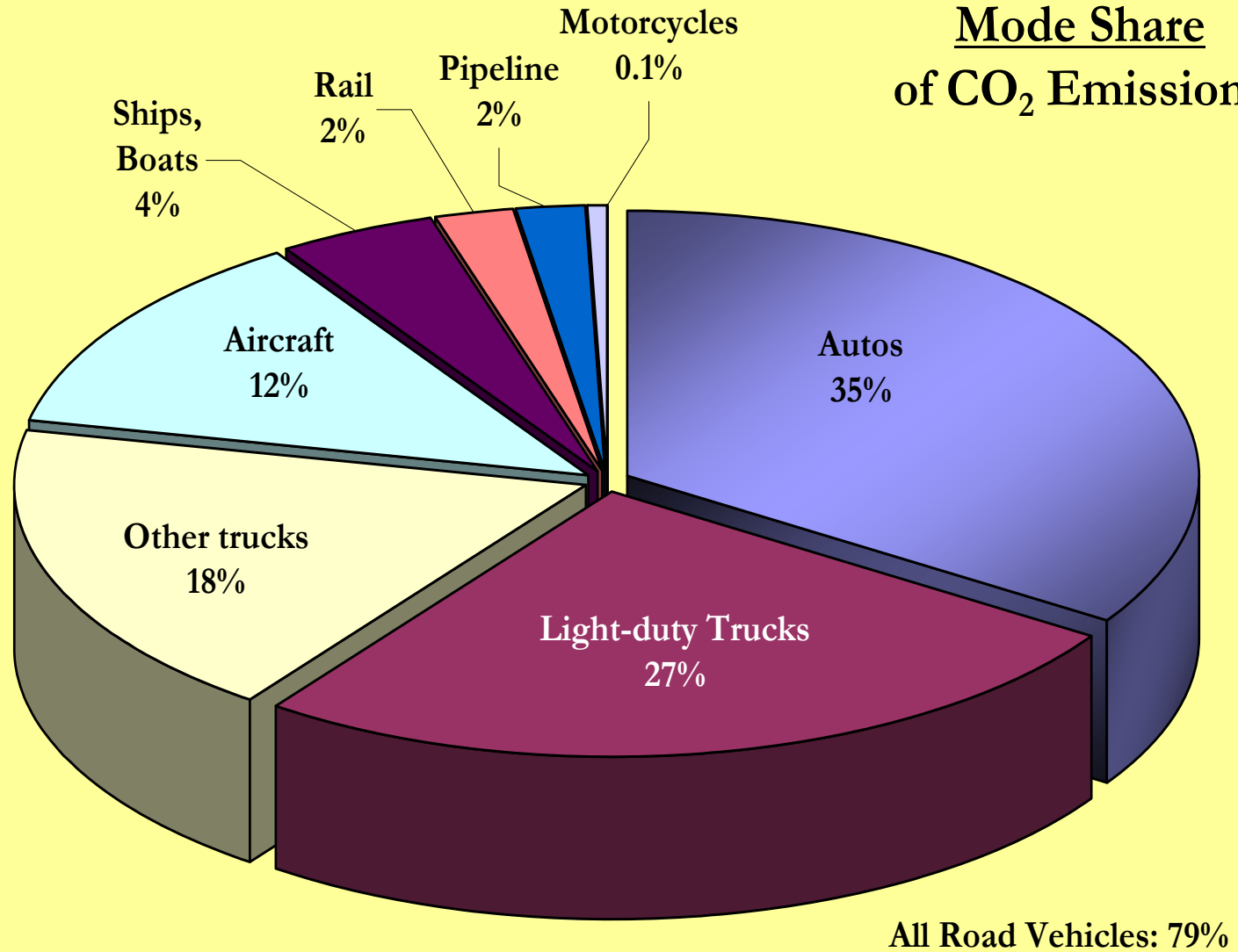
**Drive less.
Save more.**

Highway



The challenge is to balance community access with the need for through traffic flow

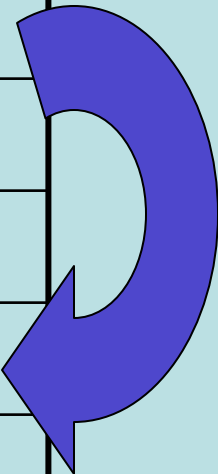
Mode Share of CO₂ Emissions



Source: *"Potential Impacts of Climate Change on U.S. Transportati*

Differences in Energy Intensity Will Drive Freight Mode Shifts

Mode	Energy Intensity (BTU/ton-mile)
Truck	3,337
Air	28,000
Ship	471
Barge	368
Rail	345



Source: Profile of the Regional Freight Transportation System in the Portland-Vancouver Metropolitan Region, David Evans & Associates and Sorin Garber Consulting for METRO, January 2007





Systems Optimization/Congestion Relief



Oregon Transportation Plan

Key Initiatives

- Maintain the existing transportation system to maximize the value of the assets.
- Optimize system capacity and safety through information technology and other methods.
- Integrate transportation, land use, economic development and the environment.



Key Initiatives (continued)

- Integrate the transportation system across jurisdictions, ownerships and modes.
- Create a sustainable funding plan for Oregon transportation.
- Invest strategically in capacity enhancements.



H.B. 2001

Jobs and Transportation Act

- New Funding
- STIP Criteria and Least Cost Planning
- Investment in New Facilities
- Land Use, Transportation and Climate Change

H.B. 2001 Key Climate Change Provisions

March 1, 2011 GHG Projections to LCDC

June 1, 2011 LCDC Rules setting targets

January 2012 Metro GHG Scenarios

February 2012 Report to Legislature

January 2013 LCDC planning rules for GHG

July 2013 Central Lane Scenarios

H.B. 2186

MPO GHG Task Force

- DEQ Low Carbon Fuel Standard
- Develop Statewide Strategic Framework First with Standard Assumptions
- Test Scenario Planning at Metro First
- Build a Toolkit for MPOs to Use
- Flexibility is Important
- Analysis Cannot be Done without Funds and that New Funds are Needed for Solutions
- Scenarios for All MPOs