



Greenhouse gas goals adopted by the Oregon Legislature and Governor Kulongoski in HB 3543:

- **Short-term:** by 2010, stop increases in greenhouse gas emissions
- **Medium-term:** by 2020, reduce greenhouse gas emissions to 10 percent below 1990 levels
- **Long-term:** by 2050, reduce greenhouse gas emissions to 75 percent below 1990 levels.

Transportation and climate change

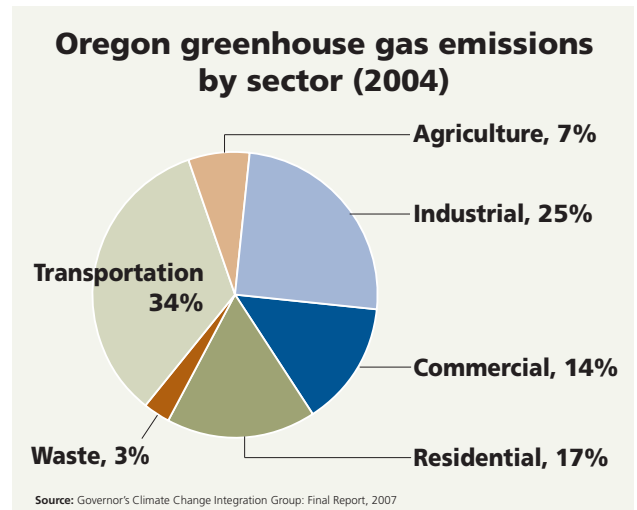
Global climate change poses a growing threat to our environment and our economy, creating uncertainties for the agricultural, forestry and fishing industries, as well as winter recreation. Documented effects include rising temperatures and sea levels, shrinking glaciers, shifting rainfall patterns and changes to growing seasons and the distribution of plants and animals.

Warmer temperatures will affect the service life of transportation infrastructure, and the more severe storms that are predicted will increase the frequency of landslides and flooding. Consequent damage to roads and rail infrastructure will compromise system safety, disrupt mobility and hurt the region's economic competitiveness.

Recognizing the seriousness of the situation and the importance of acting now, the Oregon Legislature passed House Bill 3543 in 2007. This legislation commits the state to reducing greenhouse gas emissions to 10 percent below 1990 levels by 2020, and to 75 percent below 1990 levels by 2050. Achieving these goals will require heightened attention to land use and transportation policies and programs.

In Oregon, transportation sources account for 34 percent of greenhouse gas emissions, largely made up of carbon dioxide (CO₂). With the region expecting substantial growth, we are challenged to develop a transportation system plan to serve that growth and reduce CO₂ emissions. The 2035 RTP includes specific CO₂ reduction policy objectives and actions to:

- reduce the need to drive
- improve the operating efficiency of the transportation system.



Reducing the need to drive

Reducing our need to drive delivers large carbon-reduction benefits. Oregon has so far kept its annual growth in miles driven at 1.3 percent, below the national average of 1.8 percent. But to meet the state's greenhouse-gas reduction goals, the region must *reduce* driving – not just slow its growth.

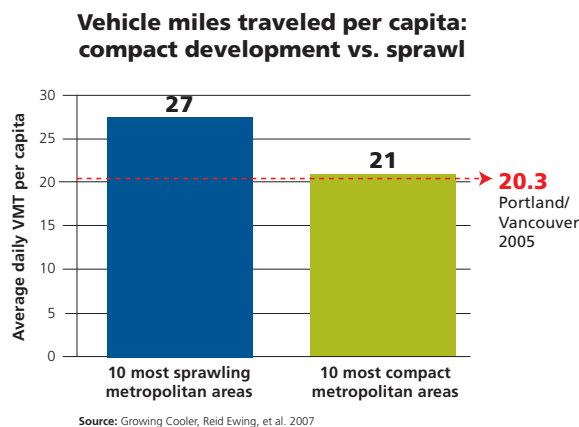


The 2035 Regional Transportation Plan (RTP) aims to reduce driving by:

- developing an efficient, multi-modal transportation system that supports regional land use goals for compact urban form
- expanding non-auto transportation choices
- maximizing the performance of the existing system through cost-effective operations technologies
- reducing demand on the system through innovative demand management programs.

Integrating transportation and land use planning to support compact urban form. In 1995, the Portland metropolitan region adopted the 2040 Growth Concept, a long-range vision for managing growth that directs development to compact urban centers. Compact development results in numerous efficiencies:

- supports walking, bicycling and use of transit
- locates needs and activities of daily living close together, often within walking or biking distance
- reduces the need to expand the urban growth boundary onto farm and forest land
- keeps farms closer to urban markets and leaves forest lands to function as an important part of the environment's carbon bank
- reduces distances for delivery of goods and services
- reduces driving by as much as 33%. (See graph below.)



Enhancing transportation choices. Driving alone in a motor vehicle is the most carbon-intensive transportation choice for individuals. To reduce this source of emissions, other choices—walking, bicycling and mass transit—must be widely available, affordable and convenient. Commercial transporters also need viable choices,

with efficient connections between modes and between distribution centers. The 2035 RTP puts a priority on improving connections among all transportation modes, as well as on expanding transportation options for the movement of people and goods.

Improving system management and operations

The 2035 RTP includes several strategies to improve operations of the existing system. Two key strategies involve regional coordination of Intelligent Transportation Systems (ITS) and travel demand policies and programs.

Intelligent Transportation Systems. ITS systems include applications of communication technologies such as global positioning systems (GPS) and remote video cameras to improve operating efficiencies and travel time reliability. Other operating efficiencies include:

- clearing accidents and breakdowns quickly
- providing real-time traveler information on road conditions
- optimizing traffic flows with ramp meters and coordinated signal timing.

Programs and strategies to reduce demand for travel or promote travel efficiency. Demand management policies and programs can help reduce automobile trips, especially during peak travel times. These strategies include:

- promoting business-based transportation management associations and employer trip-reduction programs
- promoting carpooling, vanpooling and other options to drive-alone travel through collaborative public education efforts like “Drive Less/Save More” and Metro’s Regional Travel Options program
- implementing road-use, lane-use, parking or mileage-based pricing strategies to help manage or distribute demand.

For more information

The 2035 Regional Transportation Plan update, fact sheets and related information

www.oregonmetro.gov/rtp

Vanpooling and carpooling information

www.drivelessavemore.com

Oregon’s Climate Change Integration Group and final report www.oregon.gov/ENERGY/GBLWRM/CCIG.shtml