Portland, Oregon: A Regional Approach to Sustainability

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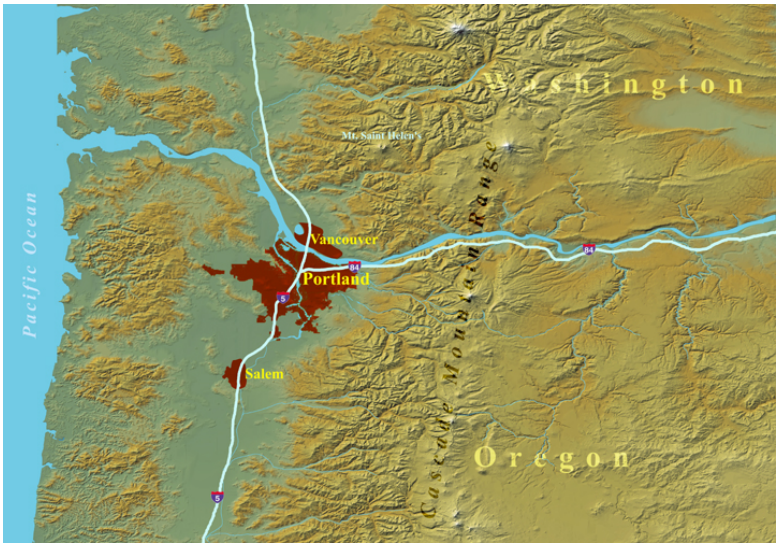
Metro

The Portland Metropolitan Region



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There are over 1 million people in the Portland metro region, and the region is expected to grow by an additional 1 million people by 2020

There are 25 cities and 3 counties in the region. Portland is the largest city in the region and the state.

Metro is a regional government that was created in 1978 by a vote of the people and is the only directly elected regional government in U.S.

Metro works with local governments to achieve a regional transportation and land management strategy that helps Portland and our other cities create compact cities, towns and neighborhoods allowing people to walk and bike more; achieve efficient public transportation systems and bike and walking trails to make biking and walking an option; reduce waste output and increase recycling; reduce green house gases (GHG) from waste disposal; protect air and water quality and fish and wildlife habitat through the protection and restoration of natural areas; support green building practices and “nature friendly” design and construction.

Portland, Oregon

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Portland, Oregon

The Eastbank Esplanade along the Willamette River in downtown Portland

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Sprawling auto-oriented land use patterns have been the dominate growth pattern in the U.S. since the introduction of the auto in the early part of the 20th century.

Oregon and the Portland metropolitan region have made a dedicated effort, studied across the U.S., to change that pattern by containing growth. Preserving forest and farmland, elements essential to a healthy economy and environment, and tying land use and transportation together are imperative to a sustainable future.

The state of Oregon's land use planning system was adopted in 1973.

The region's urban growth boundary (UGB) was created in 1979. Under Oregon law, each city or metropolitan area in the state has an urban growth boundary that separates urban land from rural land. Metro is responsible for managing the Portland metropolitan region's urban growth boundary. Every five years Metro determines whether the UGB needs to expand to provide for a 20 year supply of residential, employment and industrial land.

Urban Growth Boundary (UGB)

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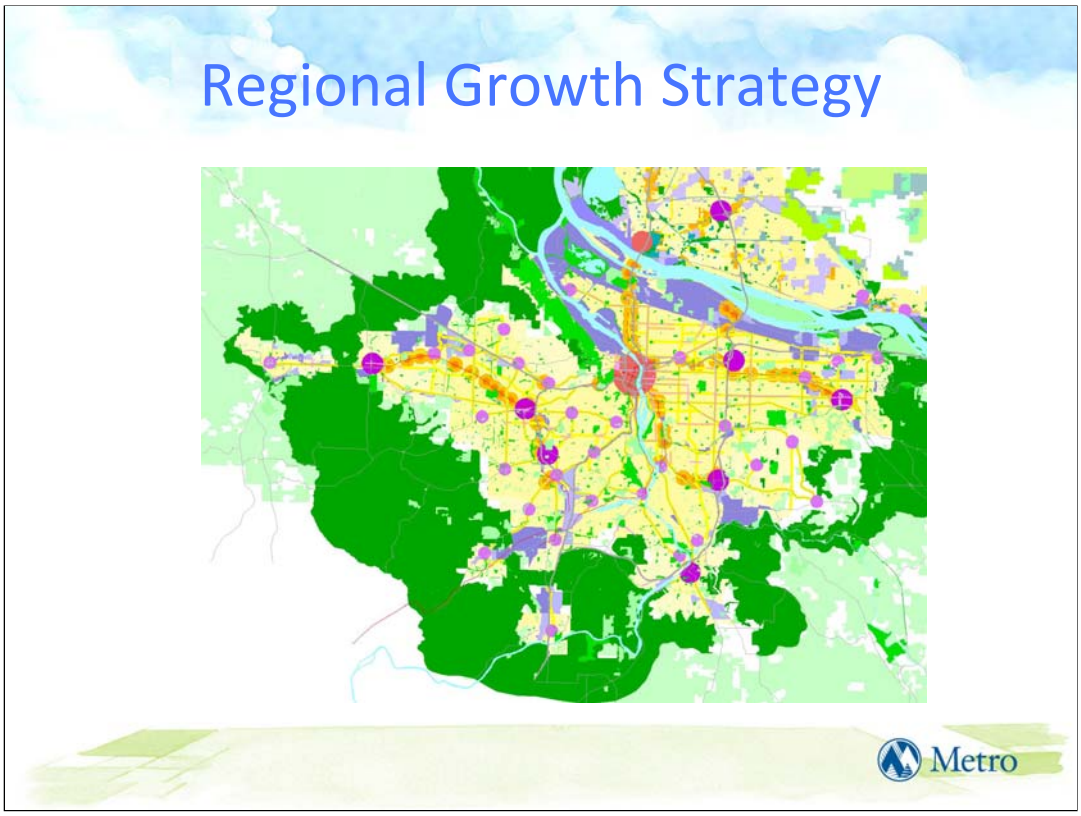

Our regional growth strategy is based upon the following land use and transportation principles:

•Maintain a compact region that utilizes land and resources efficiently

•Develop transit and pedestrian-oriented centers that reduce need for surface parking

•Promote a vital economy

•Design streets for people, not just cars

•Provide interconnected local streets to reduce congestion on major streets

•Make bike travel feasible and safe

•Emphasize freight access to terminals

Grow in town and regional centers, NOT at the edge (limit suburban growth):

•Compact urban centers built to human scale

•Mixed housing and commerce served with good transit

•Focus of civic activities and public services

•Central City, regional and town centers, transit corridors, ribbons of green (parks, trails and natural areas

•Outside the boundary (UGB): farm and forest lands

•Inside the boundary (UGB): compact urban centers

Compact, walkable neighborhoods

Portland's Pearl Neighborhood

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Portland has been successful with some of its "20 minute neighborhoods": Residents can walk to services and amenities such as schools, grocery stores, jobs, and entertainment in 20 minutes or less. The city and region hope to employ this model in more areas.

The region's growth strategy has made progress:

•In the 1990s the region's population grew by 26 percent, while land area only grew by 8 percent

•Between 1999-2000 there was a 2.6 percent increase in total regional population and a 26 percent decrease in residential land consumed

•In 2000, 28 percent of tri-county population was living in areas of at least 12 persons/acre (12 people/48.97 tan)

When growth is focused in town and regional centers, rather than at the edge (suburban development), the result is a travel pattern that results in 5-10 times the transit ridership and 3 times the walking, with half the driving and half the auto ownership.

Transit Oriented Development

Transit Oriented development in the Portland metro region

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The Portland region is one of the ten most compact metropolitan areas in the United States.

Transit oriented development is an integral feature of compact urban form and has been successful in many parts of the region.

•Metro uses federal transportation funding to acquire land for redevelopment adjacent to light rail stations.

•Metro provides financial incentives and uses public/private partnerships to enhance the economic feasibility of higher density mixed-use projects served by transit.

The transportation sector, is responsible for 39 percent of the greenhouse gas (GHG) emissions in the Portland metropolitan area. The primary source is auto emissions.

The region's transportation plans focus on reducing the need to drive and maintaining an efficient and well maintained transportation network.

•Develop an efficient, multi-modal transportation system that supports a compact urban form.

•Rail Transportation was reintroduced to the region in 1986. In 25 years we have built 50 miles (80 km) of light rail lines, at an investment of nearly $3 billion. More than 90 miles (145 km) will be completed by 2015 ($5 billion). We have built over 300 miles (483 km) of walking and biking trails and will complete over 900 miles (1,1448 km) in the next 20 years.

•Maximize the performance of the current auto dominated system through the use of cost effective operations technologies, such as: quick responses to accidents to keep roads clear; provide real-time traveler information on road conditions; optimize traffic flow.

•Use demand management to reduce the demand on the transportation system, such as: employer incentives to reduce commutes, promoting carpooling, using road-use, lane-use, parking or mileage-based pricing strategies to distribute demand.

Integration of Land Use and Transportation

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Our transportation/ land use strategies are working:

•From 1990-2005 the population grew 29%, and daily vehicle miles traveled (VMT) grew 51percent, but overall level of vehicle travel per capita has declined on a steady basis for the past seven to nine years. The region is at 20.3 VMT/ person and shrinking, while the average for US cities is at 24 VMT and growing.

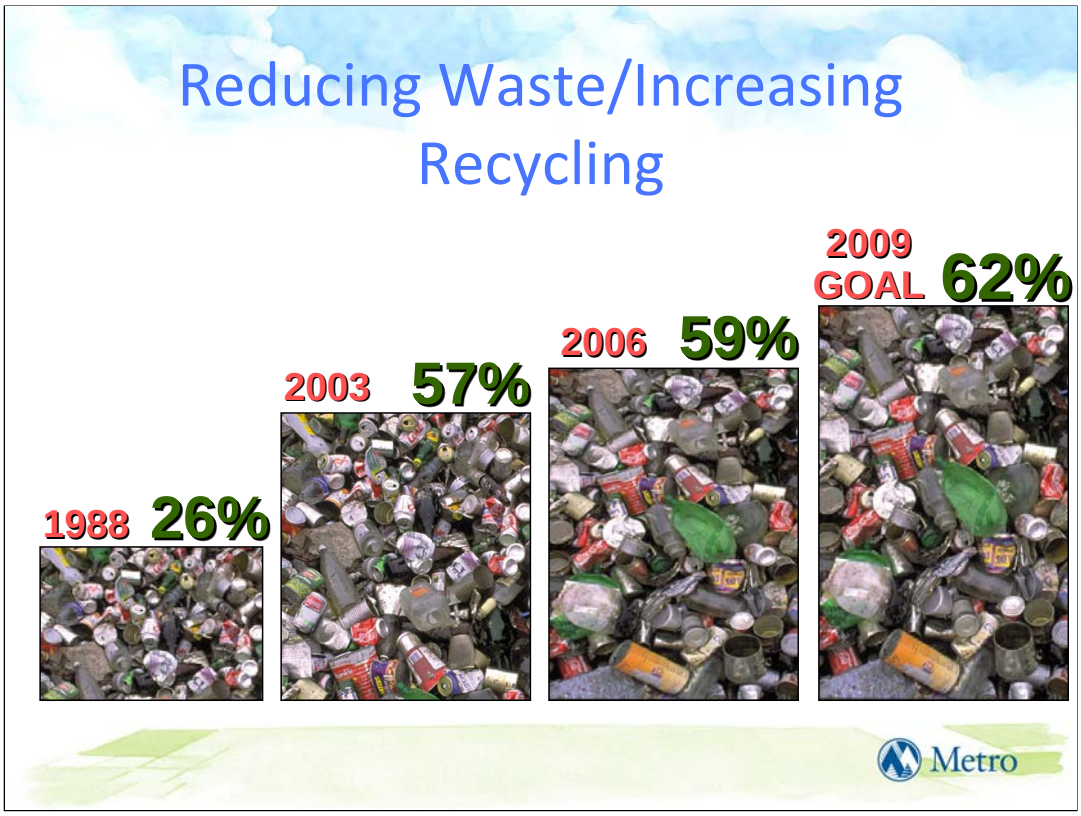
•A compact urban form can reduce driving by as much as 33 percent.

•Public transportation ridership grew 80 percent. Bike commuting has doubled since 1993. Six percent of Portland's population commutes by bike.

•TriMet, the region's transit agency, service area ranks 29th in population, but 13th in ridership.

•TriMet carries more people than any other transit system its size.

•The Metro region met air quality standards ahead of the federal mandate and has stayed in attainment despite significant regional growth.



Waste in landfills contributes to greenhouse gas emissions and environmental problems. Metro is tackling reducing waste and increasing recycling with new programs, education, and outreach.

Metro reduces the toxicity and amount of solid waste in our region through a four pronged approach: as a service provider, through regulation, through waste reduction programs and through our role as an environmental steward.

The Portland metro region is a national leader in the recycling movement.

•Region's waste recovery rate is at 59 percent, up from 26 percent in 1988, the second highest rate n the U.S. (San Francisco is first).

•Using innovative waste disposal practices, green house gases from landfills have been reduced by 75 percent since 1990.

•Oregon introduced the first bottle bill in 1971.

Increasing Recycling Rates

Residential curbside recycling services

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Metro coordinates and supports waste reduction programs, and provides a wide range of educational and informational services. Metro also develops and administers the Regional Solid Waste Management Plan, which includes regional direction for meeting the 2009 waste reduction goals (62 percent) and strategies for preventing the generation of hazardous waste.

- Education
- Curb service
- Business recycling requirements
- Recovery of residential and commercial construction debris
- Two Fixed Facilities
- 35 Weekend Neighborhood Events
- 1.4 million kilograms per year
- 80% Recovery or Reuse
- Latex Paint Processing Facility
- 400,000 Liters per Year
- Served 33,300 Households

Enhance Natural Areas

Smith and Bybee Lakes, Portland

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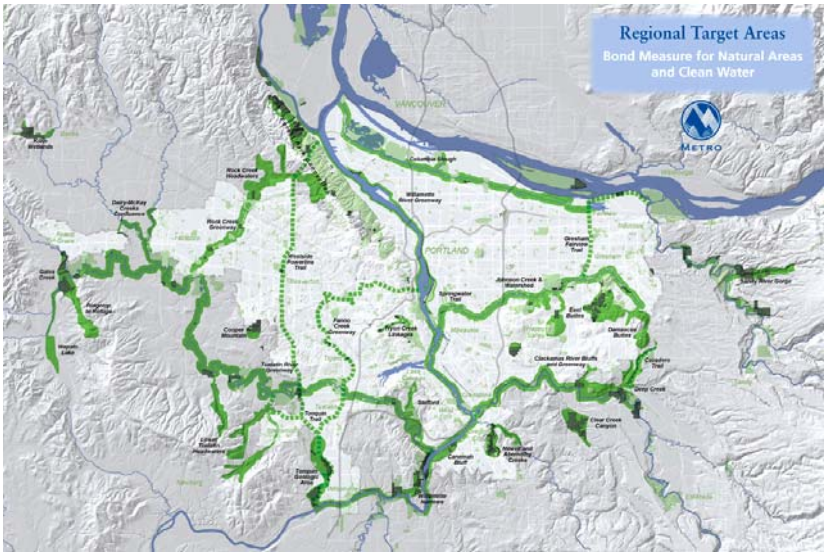
Protecting and restoring natural areas is an essential element of sustainable cities.

To address concerns about disappearing fish and wildlife habitat, diminishing air and water quality, and anxiety about new development, voters in the region approved two bond measures totaling $363 million dollars.

Protecting Natural Areas



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Bond measure funds have been used to:

•Purchase 9,000 acres (3,673 cho) of natural areas for permanent protection

•Protect over 75 miles (121 km) of river and stream frontage

•Fund local park projects

•Funds will also be used to build eight new regional biking and walking trails.

More than 50,000 acres (20,400 cho) of land in the region are ecologically degraded. Multiple parties (governments, non-profits) are working independently and without a concerted and united effort.

Over 50 percent of parkland is deforested.

Four in ten of our region's residents do not have a neighborhood park within walking distance.

Over 700 miles (1,127 km) of trails in the regional trail network plan have yet to be built.

To address these challenges, Metro has started an initiative called "Connecting Green" to create one of the world's greatest systems of parks, trails and natural areas.

Connecting Green is creating a coalition of individuals, businesses, institutions and organizations to leverage funding and advocate for the initiative. The "Connecting Green" initiative has made a conscious effort to bring the travel, health and tourism industries directly into the discussions. Historically, these industries have not been associated with enhancing and protecting natural areas, but their role is becoming increasingly important as the connections between environmental, human, economic, and community health are emphasized.

Nature Friendly Development

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Nature Friendly Development reduces the impact of development on the natural environment. The Portland region gains 500 new households a week. A growing population will require new housing buildings. Metro is taking steps to incentivize developers and builders to build with nature in mind.

Nature-friendly practices conserve the natural systems and hydrologic functions of a site. Successful nature-friendly site planning and development:

•preserves natural areas and minimizes land disturbance

•protects and incorporates natural systems (wetlands, streams/wildlife corridors, mature forests, native vegetation) into site plans

•designs landscape elements to catch and absorb rainwater on site

•reduces impervious surfaces that increase stormwater runoff

•uses bioretention, pervious pavement and other small-scale stormwater controls

•retains on-site native soil, plants and vegetation

•minimizes soil compaction

•retains buffers along streams and rivers

•builds houses and other structures on a site in patterns that preserve valuable habitat and wildlife corridors and allow stormwater to follow more natural drainage patterns

Portland has the most LEED-certified (Leadership in Energy and Environmental) buildings per capita in the U.S.

The Oregon Convention Center is the first convention center in the U.S. to receive the U.S. Green Building Council's LEED-EB (existing building) certification. The Convention center has a "Rain Garden" that collects storm water from the facility's roof and filters it through an attractive system of rock terraces, pools, and soil, helping to prevent environmental pollutants from reaching the adjacent Willamette River. The Convention Center is also certified "Salmon Safe."

Other projects in Portland include:

The Doubletree Hotel has a Green Seal GS-33 Lodging Sustainability certification. The 476-room Doubletree is the first lodging property in Oregon and the largest hotel west of the Mississippi to receive this green hotel designation.

Ecotrust's Jean Vollum Natural Capital Center is the first gold-level LEED-certified building in Oregon and the first gold-level LEED-certified historic restoration in the nation.

The historic Portland Armory was renovated into a performance space earned Portland the distinction of having the only building on the National Register of Historic Places to achieve a LEED Platinum rating. The $36.1 million renovation of the castle-like Romanesque Revival structure, located in the Pearl District, was completed in 2006.

The Casey is a $60 million, 61-unit building, and the first LEED platinum multifamily high rise in the world.

Addressing Climate Change

Portland, looking East over the Willamette River

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The Portland metropolitan region's land use and transportation systems impact our ability to affect climate change. The Portland region has taken steps to acknowledge the policy choices that need to be made to impact climate change.

Climate Change History

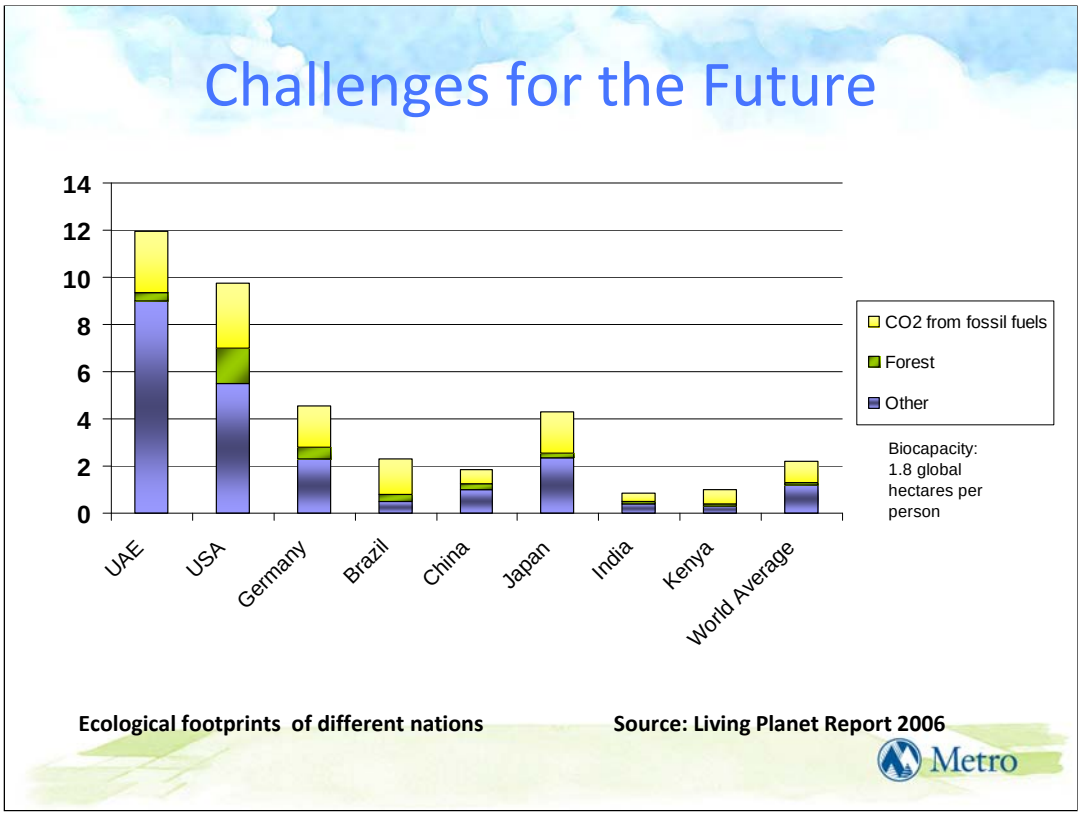
•1993 – Portland first city in U.S. to adopt climate change initiative

•2001 – Multnomah Co. joined with City to create Local Action Plan on Global Warming (reduce GHG to 10% below 1990 levels by 2010)

•2004 – The State Green House Gas reduction strategy and global warming commission adopted the goals: 10% below 1990 by 2020; 75% below 1990 by 2050

•2007 – Western Climate Initiative signed by 7 states (including Oregon) and 4 Canadian provinces.

•2008 – Metro begins work on regional climate change action plan, documenting steps taken to date and actions needed for the future. The current focus is on building political will and partnerships, setting regional GHG targets, and identifying specific actions to seriously impact climate change at the regional level.



We need to do much better than we have in the past.

When compared to other parts of the U.S., the Portland metropolitan region has achieved many advances towards a more sustainable future. However, we have many lessons to learn from places like Japan, Sweden and Germany.

The ecological footprint is the total area required to produce food and materials consumed, absorb waste from energy consumption, and provide space for infrastructure. The planet can sustain consumption per person at 4.5 global acres. The U.S. footprint is approximately 24 acres per person. This means we would need 5 planet Earths to sustain our current patterns of consumption and waste.

Learning from Other Countries

Japanese bullet train

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In the future the U.S. is going to be a much better global citizen. We will look to the energy and transportation policies of other countries and learn from them.

Opportunities such as the International Seminar on Eco-Model Cities foster the spread of vital new technologies and policies that are needed if we are going to live sustainably and reduce carbon outputs. The Portland delegation is thankful for the opportunity to learn first hand about the innovations taking place in Japan and to hear from the cities of Malmo and Freiburg.

THANK YOU

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