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Portland Metropolitan Region turns a Climate Change Corner

August 2009

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Submitted for publication in ISOCARP Review 05 by the International Society of City and Regional Planners

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PORTLAND METROPOLITAN REGION TURNS A CLIMATE CHANGE CORNER

Between 1990 and 2007, total emissions of greenhouse gasses (GHG) rose 17 percent in the U.S. In Portland and surrounding Multnomah County, during the same period, total GHG emissions dropped to 0.7 percent below the 1990 level. A three percent decline in per capita emissions nationally was overwhelmed by population growth. Meanwhile, Portland and Multnomah County grew faster than the U.S., yet experienced a 17 per cent decline in per capita emissions.

MULTNOMAH COUNTY CARBON EMISSIONS, BY SECTOR
(Metric Tons, CO_2-equivalent)

	1990	1995	2000	2005	2006	2007
Residential Energy Use	1,770,974	1,758,764	2,015,339	1,722,750	1,772,171	1,759,674
Commercial Energy Use	1,885,692	2,036,343	2,380,636	2,086,743	2,142,319	2,132,798
Industrial Energy Use	1,540,295	1,757,799	1,935,596	1,367,695	1,398,802	1,367,204
Transportation Fuel	3,441,087	3,385,929	3,369,741	3,418,793	3,424,911	3,483,801
Waste Disposal	237,691	226,778	147,349	82,954	79,362	66,153
Total (Relative to 1990)	**8,875,739**	**9,165,613 (+3.3%)**	**9,848,661 (+11.0%)**	**8,678,935 (-2.2%)**	**8,817,565 (-0.7%)**	**8,809,630 (-0.7%)**

City of Portland Bureau of Planning and Sustainability

GRAPHIC: Multnomah County Carbon Emissions, by Sector

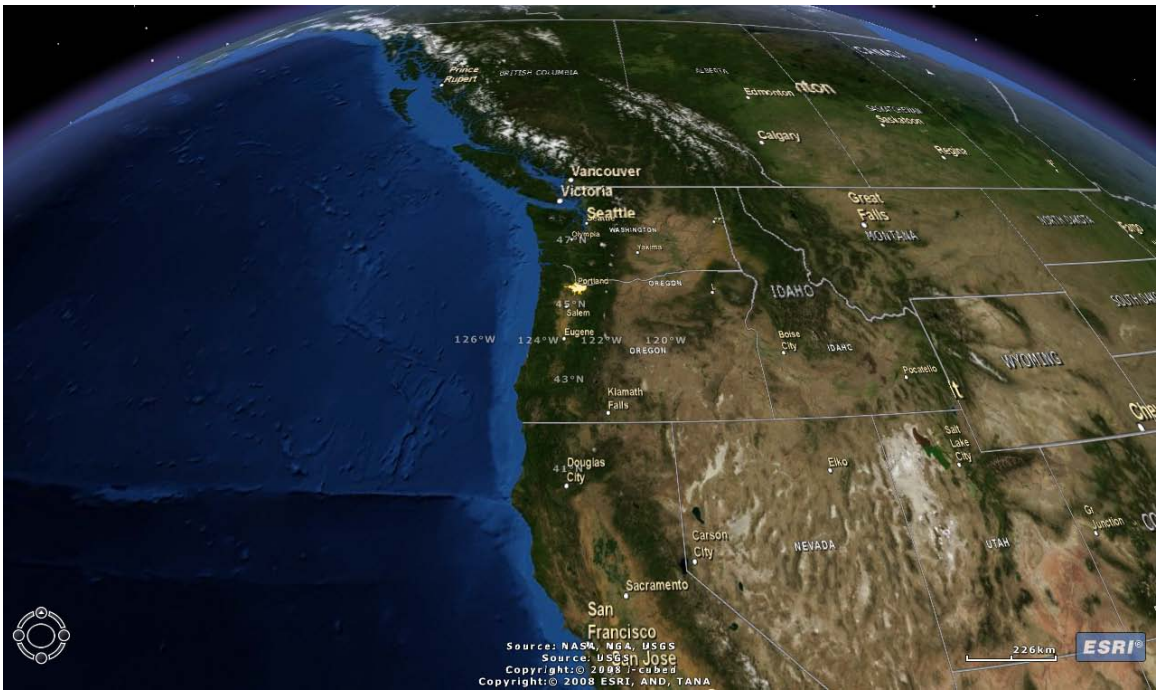
Why has Portland bucked the national trends? Those of a spiritual bent might attribute Portland's success to residents' superior virtue, noting that Portlanders own more hybrid cars per household than residents of other U.S. cities and sport one of the highest recycling rates in the nation (64 per cent in 2007). Descendants of settlers from the puritan Northeast U.S. may believe Portlanders' legendary frugality is responsible, citing the $2.6 billion residents save every year by commuting shorter distances.

Planners of the region take a different view. Citing total and per capita emissions numbers, they contend that people of the region achieved this success by attending countless and long meetings during the cold, wet times of the year (September through June), huddled with their neighbors, contemplating the future. This argument is well received by spiritual leaders and local economists because this odd behavior suggests both higher virtue and lower consumption. The author, having spent more than 30 years in planning, most of it in meetings, endorses the planning theory: the region's growth management – from the statewide planning goals, to Metro's Growth Concept, to city and county comprehensive plans – deserves most of the credit. Growth management is changing the urban form of the region and yielding dramatically lower driving per capita.

Regional Setting

The 1.4 million people of the Portland metropolitan region reside at the confluence of two great rivers of the West, the Columbia and the Willamette. Mount Hood rises to the east, with the

Columbia River Gorge National Scenic Area adjacent to the eastern edge of the urban growth boundary. The Tualatin Mountains on the northwest side constitute a significant wildlife corridor between the region and the Coast Range. The region's natural beauty and bounty have cultivated among residents a fierce devotion to the landscape and the lifestyle it affords them.



GRAPHIC: Map: Metropolitan Region in Pacific Northwest Context

The lush northwest forests in the larger region played a dominant role in the economy and culture of settlers, from the mid-1800s until the 1980s, when over-harvesting led to changes in federal forest policies that reduced harvest levels. The rich soils and abundant rainfall in the valley of the Willamette yield a cornucopia of crops and made agriculture the second pillar of the settler economy (agriculture now leads forestry in economic impact). The landscape and natural resources of the region led settlers to develop trade between Portland and its hinterlands and a system of navigable waterways, railroads, roads, bridges and airports to facilitate international trade. The resulting economy and culture stimulated the emergence of a regional identity that led, in turns, to regional thinking, regional governance and regional growth management.

Political Context

Metro, the nation's only popularly elected regional government, is chartered by voters to protect the region's quality of life. But it is intentionally lodged between state and local governments, in the political middle of an overall framework that is essential to the achievement of the region's vision. In 1973, the Oregon Legislature enacted Senate Bill 100, which set the state on its unique planning course. The law requires every city and county to adopt a comprehensive plan that meets nineteen statewide planning goals (which have the

force of law). These goals address issues ranging from citizen involvement to housing, the economy and protection of farm and forestland.

Upon its founding in 1979, Metro, too, became subject to the statewide planning goals. For Metro, the most important is the Urbanization Goal. It requires every city and urban region to establish an "urban growth boundary" (known as the "UGB") to limit the extent of urbanization. The Urbanization Goal and the statewide goals that protect farm and forest land outside UGBs establish the fundamental growth management strategy for the state and the Portland metropolitan region.

Metro assumed responsibility for the UGB surrounding 25 cities and the urbanized portions of three counties that comprise the urbanized region. As discussed below, Metro's growth concept calls for a compact development form. The "compactness" of the region is measurably improving. It owes much of this success to three critical roles played by the state-required regional UGB: (1) ensuring that cities near the Portland metropolitan area don't sprawl onto rural land between the cities and the metro (they have their own UGBs); (2) strictly limiting ex-urban development on these same rural lands; and (3) allowing Metro and "neighbor cities" expand their UGBs only if they can demonstrate that they have taken all reasonable actions to use land inside their existing UGBs more efficiently.

GRAPHIC: Edge of Urban Growth Boundary, Springville

Formation of Metro

Concern about regional issues in the Portland area reaches back to 1925 with the formation of a legislative committee to study problems of local governments in the metropolitan area. Over the next five decades, regional governance evolved into two agencies, the Metropolitan Service District (MSD) and the Columbia Region Association of Governments (CRAG). Both were created under a typical model for associations of governments. MSD was created to deliver regional services efficiently and assumed responsibility for the zoo and the solid waste disposal system. CRAG was created to coordinate planning for land use, transportation, water quality and criminal justice. Each had a governing body of predominantly local elected officials, with significant crossover between them.

By the mid-1970s Oregon and the Portland area were going through a significant shift in policy direction. The state had established the statewide planning program described above. The City of Portland was aggressively working to reverse the decline of its downtown and retain strong, family-oriented neighborhoods. The region was embroiled in controversy over proposed urban freeway construction that would have had dire effects on neighborhoods. And the nation was beginning to tackle significant environmental issues, particularly air and water pollution.

A "good government" coalition of representatives from government, business and civic organizations called for a new regional governance structure with authority to tackle these issues and be accountable to the public. Assisted by a grant from the National Academy of Public Administration, the Tri-County Local Government Commission drafted a proposal that was adopted largely intact by the 1977 Oregon Legislature.

The new law authorized a regional government to be elected by voters of the three-county region. The law provided for a 12-member council elected by districts and an executive officer elected at-large to manage the organization. It assigned the duties of CRAG and MSD to the new entity and gave it power to tax and ensure local plans are consistent with regional plans. It shrank the boundaries of CRAG and MSD to the area of contiguous urbanization. In May 1978, people of the region voted 55 to 45 percent to create a new regional government, now called Metro. That November voters elected the first Metro Council and Executive Officer. The change in government went into effect in January 1979.

After a decade of operation, it became apparent that the region needed authority to make governance decisions on its own, without having to seek state legislation for every change. The Oregon Legislature authorized and voters statewide approved a change to the Oregon Constitution allowing Metro a home-rule charter. A commission drafted a charter for consideration by Metro's voters that declared livability of the region to be Metro's primary responsibility. It required Metro to adopt a 50-year "future vision" and a long-range regional framework plan with which city and county comprehensive plans would have to comply. It also called for establishment of the Metro Policy Advisory Committee (MPAC), composed predominantly of local elected officials, to advise the Metro Council on any land use

requirement that would apply to local governments. The region's voters approved the charter in 1992.

2040 Growth Concept: the Region Charts a Course

Metro established the UGB for the region in 1979, surrounding a land area intended to accommodate 20 years of growth (229,000 acres). A recession that ran into the early '80s slowed development inside the UGB. But the region's economy came roaring back in the late '80s and its population grew faster than the rest of the nation. Leaders in the region understood that the UGB would not, by itself, stop sprawling development patterns within the boundary. Metro developed a "base case" scenario in 1992 to show what the region would look like in 2040 under existing zoning in the UGB. Development at low densities would exhaust the remaining supply of land inside the UGB and force expansion onto 120,000 acres, much of it productive farmland. Dependence upon the auto and the length and number of trips would rise. Air quality would decline and infrastructure costs, especially for new roads, would be daunting. In 1992, Metro had neither the knowledge nor the technology to determine the effect of the "base case" on GHG emissions. It was not even a subject of public discussion.

Leaders in the region rejected the base case, as the region's future and called for new policies to "build up, not out." Polling showed a majority of residents would accept slightly higher densities in their neighborhoods if necessary to avoid expansion onto farmland. After unprecedented public involvement, Metro composed the "2040 Growth Concept," a long-range regional plan adopted by the Council in 1995. The plan relied upon a "tight" UGB to encourage more efficient use of land, and for new policies in city and county comprehensive plans to allow higher densities in focus areas. Despite opposition from development interests whose principal market was land close to the edge of the UGB, cities and counties of the region embraced the Growth Concept and began to implement it.

The 2040 Growth Concept merges land use planning and transportation planning to reinforce the objectives of both. It concentrates mixed-use and higher-density development in 38 "centers"; 33 "light rail station communities"; and 400 miles of "corridors" that connect many of the centers. The Growth Concept then plans high-capacity transit (principally light rail) to connect the "central city" (Portland) and seven "regional centers (Hillsboro, Gresham and Beaverton among them)." Bus service, often with 10-minute headways, connects 30 "town centers" with the central city and regional centers.

The Growth Concept builds upon this fundamental land use and transportation superstructure. The central city serves as the hub of business and cultural activity in the region. The regional centers provide commercial and civic services in a market of hundreds of thousands of people. Town centers offer localized services for tens of thousands within a three- to five- mile radius. At a finer grain, the Concept recognizes the importance of "Main Streets" as traditional neighborhood commercial hubs within walking distance of surrounding residential districts. The Growth Concept has brought infill and a mix of uses to some residential areas, mostly in centers

and along Main Streets and corridors. But an estimated 80 percent of traditional residential areas have not been significantly affected by these changes.

To bring the Growth Concept to life, the Metro Council relies upon traditional land use and transportation strategies and new tools developed with cities and counties in the region. These strategies and tools are collected in Metro's over-arching Regional Framework Plan (RFP), adopted in 1997. The Council adopted an Urban Growth Management Functional Plan to implement land use strategies in the RFP through city and county comprehensive plans and zoning ordinances. The Council adopted a Regional Transportation Plan to implement transportation strategies and build the multi-modal transportation system called for in the Growth Concept. The Council also adopted a Metropolitan Greenspaces Master Plan to guide investments in parks and greenspaces. Each of these implementation plans is part of, and must be consistent with, the framework plan. Recognizing that plans and regulations alone do not, themselves, build better communities, the Council aligned its transportation and other investments to encourage development in centers, corridors and Main Streets.

Regional Transportation Planning

The mid-70s also brought a shift in regional transportation policy. The initial segments of a regional freeway system had been built, but there were dueling visions for expansion of the region's transportation system. The pre-Metro regional planning organization, CRAG, had adopted a major freeway expansion plan developed by the state highway department. Three new segments of the interstate system were mired in controversy. Meanwhile, TriMet, the newly created public transit agency, called for significant transit expansion.

To overcome a stalemate, a Governor's Task Force on Transportation was formed to sort out the region's policy direction. The overall freeway expansion plan was cancelled. Policies were re-directed toward a multi-modal transportation system. The role of Metro staff and elected levels was strengthened.

Since this shift, regional collaboration on multi-modal transportation issues has been centered at Metro. A dual decision-making structure was established to meet the federal requirements for a metropolitan planning organization: a Joint Policy Advisory Committee on Transportation (JPACT), composed of elected officials representing cities, counties and Metro, and representatives of transportation agencies; and the elected Metro Council. A professional staff at Metro carries out regional transportation planning, light-rail project development, travel-demand forecasting, land use planning, economic and demographic forecasting and, more recently, transit-oriented development and demand management.

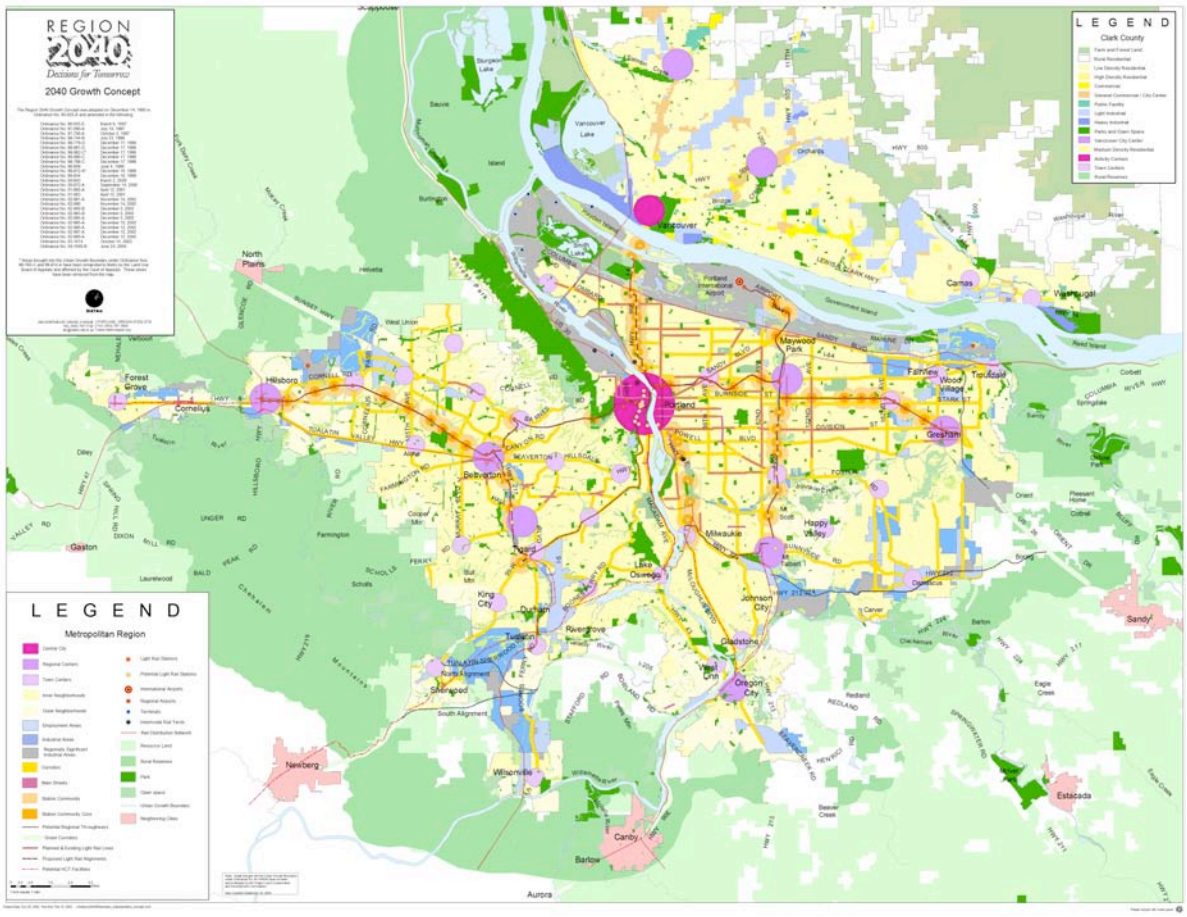
A critical Metro/JPACT responsibility is to allocate flexible transportation funds. Throughout the late '70s and '80s most of these funds came from the transfer of federal funds from the canceled freeways to other projects. After 1991, they flowed from new flexible funds provided by federal transportation legislation.

GRAPHIC: Eastside Light Rail, Gresham

For a sustained 30+ year period, Metro and its regional partners have aggressively developed a regional light rail and streetcar system, numerous smaller projects to support a more compact urban development pattern and an expanding system of bus, bike, pedestrian and trail projects.

Building a Compact Urban Form

The fundamental growth management strategy in the 2040 Growth Concept is to develop a compact urban form, using lands inside the UGB as efficiently as possible. Maintaining a tight UGB has generally succeeded in channeling market forces from a sprawling edge to the designated centers. State law requires Metro to review the capacity of the UGB every five years to ensure it provides a 20-year land supply. But the law directs Metro to seek needed capacity from more efficient use of existing urbanized land before expanding the UGB. This requirement reinforces the 2040 Growth Concept, which stresses redevelopment and infill (dubbed "refill" locally). Metro has developed a detailed and sophisticated land-monitoring process to inventory vacant land and track the rate of refill. Metro's most recent process provided a 20-year development capacity (2002-2022) by relying upon refill at the rate of 29 percent for residential, 45 percent for industrial and 52 percent for commercial, plus a modest expansion of the UGB (20,000 acres, 8.7 percent). This means Metro expects the region will accommodate 29 percent of new households, 45 percent of new industrial jobs and 52 percent of new commercial jobs through refill.



GRAPHIC: Map: 2040 Growth Concept

The UGB is only one tool available to Metro and its partner local governments. The region employs a wide array of regulatory, incentive and investment tools, and constantly seeks new tools. The first Metro action after adoption of the 2040 Growth Concept in 1995 was, with the urging of MPAC, to call for removal of zoning barriers to higher densities in centers. City and county elected officials at the MPAC table negotiated a series of household and employment growth targets, with regional equity in mind. The targets evolved into Metro requirements: each city and county undertook a re-zoning process to provide the targeted capacity. Cities and counties can distribute and re-distribute residential capacity as they choose, but they cannot reduce zoned capacity below the targets. To help concentrate development in centers and corridors, Metro also set housing unit and employment targets for them and ratios for city and county minimum and maximum parking standards.

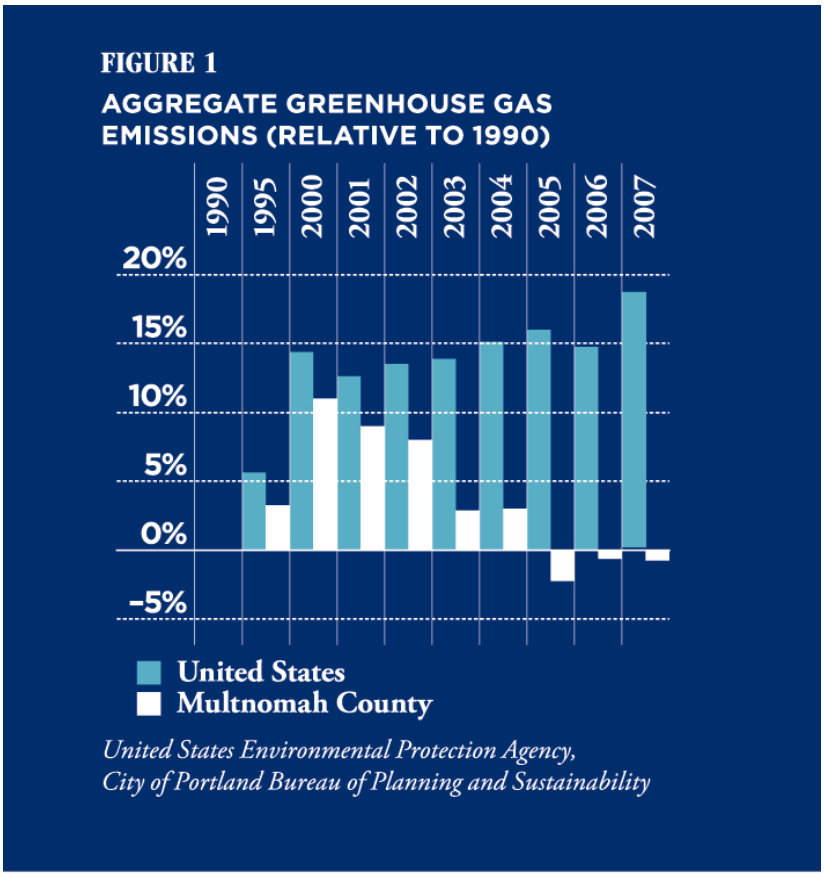
This widespread re-zoning generated opposition. In 2002, an anti-planning group gathered sufficient signatures to place a measure on the regional ballot that would have repealed Metro's authority to require up-zoning. The measure was voted down by the region's voters, but only after the Metro Council placed an alternative measure on the ballot – which passed – limiting its own authority to require cities and counties to increase density in certain single-family neighborhoods. Because the 2040 Growth Concept focuses high density in nodal centers rather

than single-family neighborhoods, passage of the measure has not impeded progress toward compactness.

Metro encourages cities and counties to use non-regulatory tools to encourage development in centers and corridors, such as prioritization of transportation improvements to support development in those areas. Foremost has been the steady expansion of the regional light rail system. The goal is to connect the central city and all regional center by light rail and make the area around every station a high-density "Station Community." Recently, the expansion of the system has been supplemented by a central city streetcar system that provides local circulation and leverage for high-density residential and mixed-use development.

The region also places a priority on allocating certain categories of federal highway funds to projects that leverage development in centers and corridors. The result has been more than a decade of improvements to downtown Main Streets, sidewalks, bike paths and trails, bus stops and accessibility in centers and corridors. Of particular note is the conversion of flexible federal highway funds to federal transit dollars to help fund transit-oriented development through the Federal Transit Administration's Joint Development regulations. The most common use of this tool has been land value "write-downs" for developments that include higher density and mixed-use beyond what the market would support.

Although the region's long-range vision emphasizes "refill" in centers and corridors, action has been taken to affect the broader landscape. When the Growth Concept was adopted in 1995, 7,500 square feet was the smallest single-family lot zoning allowed in the urban areas around Portland. Re-zoning to meet the statewide planning goal on housing and Metro housing targets yielded a large supply of 3,500-5,000 square foot lots, which the market quickly absorbed. Metro also requires cities and counties to allow accessory dwellings in their single-family zones. These provide an affordable housing opportunity with minimal effects on neighborhoods. To ensure efficient use of industrial land and protect freight transport facilities, Metro requires cities and counties to prohibit large-scale retail and certain types of offices in the region's most important industrial areas.



GRAPHIC: Aggregate Greenhouse Gas Emissions (Relative to 1990)

When Metro and the cities and counties of the region committed to more efficient use of land in centers and corridors, they recognized that more intensive development must be matched with better access to parks and open space. Learning to think of the region's floodplains, wetlands, streams and riparian areas as "greenfrastructure," the region developed complementary greenspaces strategies using land acquisition, regulation, and a broad program of public engagement and incentives. In 1995 and 2006, voters passed measures sponsored by Metro and a coalition of local governments, businesses and conservation organizations to authorize a combined total of $364 million in general obligation bonds to purchase land for parks and greenspaces. A portion - $69 million – is allocated to cities, counties and park districts to protect water quality and habitat and park and open space improvements. Metro has acquired over 8,000 acres across the region and expects to add another 3,500 to 4,500 acres to the region's parks, trails, greenspaces and natural areas.

Region Becomes More Compact; Emissions Drop

It was not a stated objective of the 2040 Growth Concept (1995) to reduce greenhouse gas emissions. In the years leading to its adoption, air quality, costs of public infrastructure, protection of farmland outside the UGB and re-vitalization or downtowns of the region were uppermost in the minds of regional leaders. But cities and counties, especially Portland and Multnomah County, began to address emissions reduction on a track that paralleled development of the Growth Concept. The city led the way by adopting the nation's first carbon dioxide reduction strategy in 1993. Eight years later, the county joined the city in a joint Local Action Plan on Global Warming (2001), setting a CO2 reduction target of ten percent below the 1990 level by 2010. Each of these efforts identified the links among development patterns, vehicle miles traveled (VMT) and GHG emissions. Each called for more compact development as a principal strategy to reduce VMT and emissions. These efforts not only complemented and reinforced implementation of the 2040 Growth Concept, they also added a compelling new reason to "build" the Growth Concept. New people and new organizations have enlisted in the drive toward compact, mixed-use, walkable communities and investments in transit, bicycle and pedestrian infrastructure.

From the beginning of implementation of the Growth Concept, Metro and many observers outside the state - from the U.S. Census Bureau to university researchers and the Brookings Institution - have been measuring the results of the region's growth management efforts. The data show that the city of Portland, surrounding Multnomah County and the entire region are all becoming more compact. Between 1982 and 1997, the amount of land consumed nationally for urban development increased by 47 percent while the nation's population grew only 17 percent. From 1990 to 1996, Portland spread just 13 percent, the same as its growth rate. Each new person moving into the Washington, D.C metropolitan area used 480 yards of space in 2000. Each person moving into the Portland metro area used 120 yards. Between 1990 and 2000 population density in the region (including Clark County, Washington, with less rigorous growth management) increased by 13 percent. In contrast with most metropolitan regions in the U.S., the center of this region (city of Portland) grew as fast as its suburbs - about 43 percent – from 1980 to 2000. In the same period, Seattle grew 14 percent while its suburbs grew 46%; for Denver it was 12 percent to 47 percent. Between 1990 and 2000, 88 percent of the Portland region's growth (again, including Clark County, Washington's growth) occurred in high-density urban areas, compared to 7-63 percent for four other metropolitan statistical areas of comparable size (Charlotte, Columbus, Orlando, and San Antonio).

Table 1: Population Growth in Portland and MSAs with Similar Populations

	Charlotte	Columbus	Orlando	San Antonio	Portland
Urban	7%	31%	64%	63%	88%
Suburban	50%	45%	23%	8%	9%
Exurban	45%	18%	12%	12%	1%
Rural	-1%	7%	2%	17%	3%

Source: Nelson and Sanchez, 2003

GRAPHIC: Population Growth in Portland and MSAs with Similar Populations

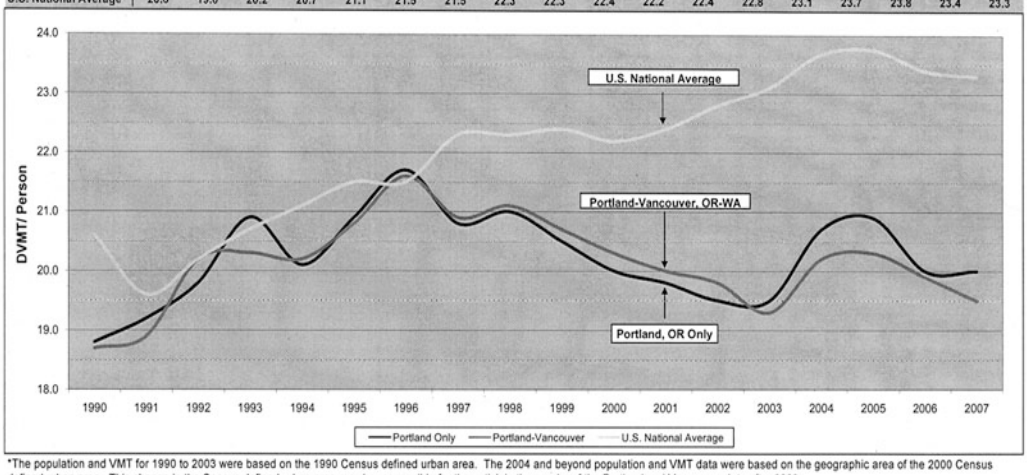
The region's trend toward greater "compactness", complemented by investments in non-auto modes, appears to be reducing vehicle miles traveled (VMT). The Federal Highway Administration's Highway Performance Monitoring System (HPMS) shows the Portland metropolitan area's average daily vehicle miles traveled per capita is lower than the national average for urbanized areas and declining while the national trend continues upward. Average U.S. VMT is increasing by 1.8 percent per year, 2.5 times the rate of population growth. Residents of the ten most-sprawling communities in the U.S. drove an average of 27 VMT/capita/day. Residents of the ten least-sprawling communities average 21 VMT/capita/day. In the Portland-Vancouver region it was 19.5 in 2007.

Trips by transit, on foot and by bike are replacing and shortening auto trips. Transit ridership in the region (excluding Clark County, Washington) rose from 58 million in FY 1995 to 96.9 million in FY 2007. According to the Federal Transit Administration, the Portland metropolitan area ranks 23rd in population while TriMet ranks 10th in overall annual ridership and 8th highest in annual ridership per capita. Transit ridership and mode share continue to increase. Only six of the nation's 41 metropolitan statistical areas (MSAs) saw in increase in trips per revenue mile, including the Portland MSA.

Daily VMT (Vehicle Miles of Travel) Per Person - 1990 To 2007
Portland, OR Only, Portland-Vancouver OR-WA, And The U.S. National Average Data

(Revised 5-21-09)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Portland Only	18.8	19.2	19.8	20.9	20.1	20.9	21.7	20.8	21.0	20.5	20.0	19.8	19.5	19.5	20.7	20.9	20.0	20.0
Portland-Vancouver	18.7	18.9	20.2	20.3	20.2	20.8	21.6	20.9	21.1	20.7	20.3	20.0	19.8	19.3	20.2	20.3	19.9	19.5
U.S. National Average	20.6	19.6	20.2	20.7	21.1	21.5	21.5	22.3	22.3	22.4	22.2	22.4	22.8	23.1	23.7	23.8	23.4	23.3



*The population and VMT for 1990 to 2003 were based on the 1990 Census defined urban area. The 2004 and beyond population and VMT data were based on the geographic area of the 2000 Census defined urban area. This change in the Census defined urban area may be responsible for the uptick in the graphs of the Portland and Vancouver data after 2003.

Urban Area Sources: 1990-2007 data are from the FHWA in Washington, D.C.
DVMT/ Person data can be located in the FHWA webpage; '2007 Highway Statistics'; 4.4.5. Urbanized Area Summaries, Section 4.4.5.2, Selected Characteristics , Table HM-72.
The internet website location of the 'Highway Statistics' series (as of Feb 12, 2009) is: http://www.fhwa.dot.gov/policyinformation/statistics/2007/

National Average Source: The National Average of DVMT/ Person is calculated from 'Total DVMT,' for all Federal-Aid Urban Areas, divided by total 'Estimated Population,' as it appears on Sheet 9, of Table HM-72; which lists all the Federal-Aid Urbanized Areas in the U.S. The 1990-2007 data is located in the above cited website.

"Federal-Aid Urbanized Area is an area with 50,000 or more persons that, at a minimum, encompasses the land area delineated as the urbanized area by the Bureau of the Census" (from Sheet 9 Table HM-72). Portland-Vancouver, OR-WA is a Federal-Aid Urbanized Area.

If you have any questions, contact David Horowitz: David.Horowitz@oregonmetro.gov or phone, 503-797-1769.

GRAPHIC: Daily VMT (Vehicle Miles of Travel) Per Person – 1990 To 2007

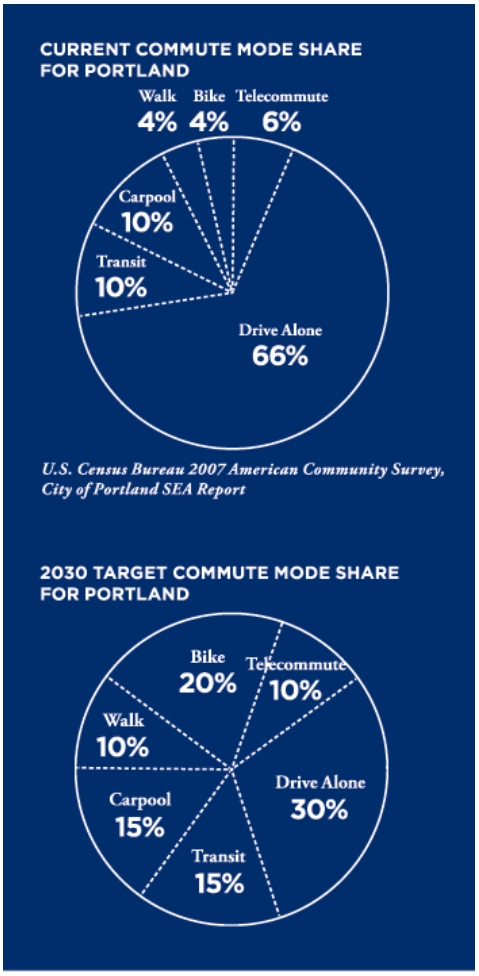
Data show a modest increase in walking work trips within the city. Planners attribute the increase to infill housing in the central city. The Brookings Institution (2007) rated metropolitan areas for walkability and found the Portland metro area to be the 5th most walkable region in the country.

Most impressive, however, has been the remarkable growth in bicycle trips. The number of summer-day trips on the four principal bridges across the Willamette River to downtown Portland from the east side rose from 2,855 in 1991 to 16,700 in 2008, a 584 percent increase. The number of auto trips across the bridges did not increase over that same period. Bike trips now comprise 13 percent of all trips across the bridges. Of all trips in the U.S., 0.4 percent are by bicycle. In 2005, Portland had a bicycle commute mode share of 3.5 percent. As evidenced by the bridge counts, the bicycle share continues to growth. CAP36: increase commute mode share from four percent to 20 percent by 2030.

Emerging data also indicate that the region is experiencing some of the hoped-for benefits of its planning efforts. The shift from auto travel is saving people of the region a considerable amount of money. Because commutes in the Portland area are four miles shorter than the national average (20.3 miles/day v. 24.3 miles/day), households in the region spent seven percent less on

transportation in 2004 than households in other western metropolitan statistical areas. A report for CEOs for Cities estimates that the region's residents save $2.6 billion per year, $800 million of which would otherwise leave the state.

The CEOs for cities report cites data showing that people "trade" housing costs for transportation costs, suggesting a new dimension of the land use-transportation connection: compact development encourages walking, biking and transit use, thereby saving travel dollars, thereby freeing household income for mortgage or rent payments. The combination of household income for housing and transportation (the two highest costs typically faced by a household) shows the Portland region to be among the lowest of all regions studied.



GRAPHIC: Current Commute Mode Share for Portland; 2030 Target Commute Mode Share for Portland

Conclusion

Be it residents' superior virtue, their historic frugality, or their dedication to planning, the region has corrected its greenhouse gas emissions course. But this success has drawn attention to how far the region must yet come. The city will not reach the goal set in its 1993 CO2 reduction strategy (20 percent below the 1988 level). Despite efforts to re-develop into a compact, mixed-use pattern, fewer than 25 percent of Portland neighborhoods receive a "Walkscore" of 80 points or higher (Sightline Institute indicator of walkable neighborhoods). Fully 69 percent of the city's population lives in neighborhoods that do not have the characteristics of "20-Minute Neighborhoods", a goal of the city's overhaul of its comprehensive plan. The region is becoming more compact. But it faces the same challenge nearly all U.S. cities face: reversing 60 years of auto-oriented development by refitting suburban land use patterns.

BUDGET FOR A LOW-CARBON FUTURE

	1990	2007	2030	Percent change from 2007	2050	Percent change from 2007
Total carbon emissions (metric tons)	8,875,739	8,809,630	5,283,000	-40%	1,756,000	-80%
Population	584,000	702,000	967,000	+38%	1,276,000	+82%
Per person carbon emissions (metric tons)	15.2	12.	5.5	-56%	1.4	-89%
Passenger miles per day per person	17.4	18.5	13.2	-29%	6.7	-64%
Electricity (kWh per person)	13,046	12,300	8,319	-32%	4,146	-66%
Natural gas (Therms per person)	391	383	320	-16%	104	-73%

GRAPHIC: Budget for a Low-Carbon Future (Multnomah County)

Nonetheless, success has whetted the region's appetite for further reductions. The draft City of Portland and Multnomah County Climate Action Plan 2009 proposes a 2050 reduction goal of 80 percent and an interim 2030 goal of 40 percent, with 64 actions to be taken by 2012. In the category of Land Use and Mobility the Plan sets two 2030 objectives:

• 90 percent of city residents and 80 percent of county residents can easily walk or bicycle to meet all basic daily, non-work needs.

• Reduce per capita daily vehicle miles traveled by 50 percent from 2008 levels.

Legislation passed by the Oregon Legislature (House Bill 2001) directs Metro to use its sophisticated modeling capabilities to develop a growth management scenario that would meet state emissions reduction goals (similar to Climate Action Plan goals). This work will provide residents of the region ample opportunity for their much-loved winter pastime – huddling in countless, long meetings peering into the future.

About Metro

Clean air and clean water do not stop at city limits or county lines. Neither does the need for jobs, a thriving economy and good transportation choices for people and businesses in our region. Voters have asked Metro to help with the challenges that cross those lines and affect the 25 cities and three counties in the Portland metropolitan area.

A regional approach simply makes sense when it comes to protecting open space, caring for parks, planning for the best use of land, managing garbage disposal and increasing recycling. Metro oversees world-class facilities such as the Oregon Zoo, which contributes to conservation and education, and the Oregon Convention Center, which benefits the region's economy

Metro representatives

Metro Council President – David Bragdon

Metro Councilors – Rod Park, District 1; Carlotta Collette, District 2; Carl Hosticka, District 3; Kathryn Harrington, District 4; Rex Burkholder, District 5; Robert Liberty, District 6.

Auditor – Suzanne Flynn

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